

California Transportation Plan 2035 Draft Strategies

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CALIFORNIA TRANSPORTATION PLAN 2035 DRAFT STRATEGIES

The following is a compilation of strategies, arrayed by the existing CTP policy framework of goals and policies, taken from:

- 1) California Transportation Plan 2025
- 2) Strategies gathered during recent CTP forums and related efforts for consideration by the CTP 2035 Policy Advisory Committee (PAC)
- 3) New strategies proposed by PAC members

Legend:

- ~~Strikeouts~~ – PAC suggested deletions.
- *Italics (blue text)*: Revisions, comments, and new strategies. Where more than one PAC member has suggested alternate wording, all versions are displayed for consideration (e.g., see #17).

Goal 1. Improve Mobility and Accessibility

1) Policy: Manage and operate an efficient intermodal transportation system

1. Improve the operating efficiency, system management, and connectivity of the State's transportation system by using advanced transportation applications.
 - a. Integrate standardized services and technologies statewide so that: transportation services are seamless; consumer devices (such as collision avoidance, navigation and mayday systems) function regardless of location; and market size reaches levels needed for low-cost mass production.
 - b. Provide State leadership by promoting and negotiating cross-jurisdictional coordination to bring about improved efficiencies and connectivity, including those at ports-of-entry, for the movement of people, goods, services, and information.
 - c. Embed the necessary hardware for advanced technologies during new road construction or reconstruction.
 - d. Continue upgrading traffic transportation management centers and traffic management devices, as innovations are proven effective.
2. Continue to support and expand freeway service patrols to rapidly respond to incidents and restore traffic flow.
3. Maximize transportation investments through a coordinated approach to capacity and operational improvements, such as providing express bus service on High Occupancy Vehicle (HOV) lanes.
 - a. Coordinate with regional transit providers to maximize the use of HOV lanes and park and ride facilities.
4. Enhance connectivity between transportation modes.
 - a. Integrate and interconnect transit service among transit providers and with other modes; and collaborate with private transportation providers to improve and coordinate service.
 - b. Deploy cross-jurisdictional advanced transit-transportation systems to improve safety, provide traveler information, and coordinate transit service schedule and fare purchases.
 - c. Collaborate with private sector and transportation providers to develop and implement a statewide electronic payment system for such things as transit fares, toll collection, parking fees, and bicycle lockers.

Goal 1 Improve Mobility and Accessibility, Policy 1: Manage and Operate an Efficient Intermodal System (con't)

- d. Enhance system connectivity and convenience between motorized and non-motorized transportation modes.
- e. Include infrastructure to support non-motorized modes during the planning and design phases of project development.
5. Support systems for comprehensive multimodal planning and system performance analysis that incorporate all transportation modes.
 - a. Accelerate deployment of data collection technologies and communications.
 - b. Improve analytical methods for assessing performance data.
6. Enable travelers to better manage their individual trips.
 - a. Continue development of a statewide traveler information website that effectively integrates local, regional, and interregional public services with private for-profit services.
 - b. Continue deployment of statewide “511” traveler information telephone service that effectively integrates existing and planned telephone-based systems.
 - *Comment - need to be ADA compliant*
7. *Provide safe, convenient, and continuous routes for pedestrians and bicyclists of all types that interface with and complement a multimodal transportation system.*
8. *Consider people mobility rather than vehicle throughput in transportation planning and decision-making.*
9. *Enhance mobility within and between metropolitan areas by managing demand (including shifting trips to transit, bicycle and pedestrian modes) before expanding physical capacity of roadways.*
10. *Use a comprehensive, multimodal and innovative funding approach (see Mobility Pyramid) that invests in multiple strategies to yield the highest results.*
11. *Measure results by monitoring and evaluating transportation system performance.*
12. *Integrate and coordinate all travel modes through corridor system management planning to increase transportation options and improve travel times.*
13. *Focus on cost-effective strategies, such as intelligent transportation systems, that employ proven methods and technology to improve performance.*
14. *Identify multimodal funding that invests in multiple strategies (see Mobility Pyramid) to yield the highest results and cost-effective strategies, such as intelligent transportation systems, that employ proven methods and technology to improve performance.*
15. *Implement travel demand management: pricing measures, parking policies, travel demand management programs, mileage based insurance, traffic calming, complete streets policies, and telework.*
16. *Implement programs to reduce vehicle trips while preserving personal mobility, such as employee transit incentives, telework programs, car sharing, parking policies, public education programs and other strategies that enhance and complement land use and transit strategies.*

2) Policy: Increase system capacity of all efficiency and the integration of multi-modal transportation modes

17. Expand repair, and upgrade existing and ~~develop additional~~ roadways to increase access for walking, bicycling and public transit use.

Goal 1 Improve Mobility and Accessibility, Policy 2: Increase system capacity of all transportation modes (con't)

- *Expand existing and develop additional roadways, only when other transportation demand management strategies are infeasible.*
- *Improve the efficiency of the transportation system by expanding existing and developing additional roadways.*
 - a. Add lanes and roads where feasible and determined to be the best alternative among the suite of other transportation alternatives.
 - b. Redesign and modernize interchanges to reduce or eliminate bottlenecks or restraints to smooth traffic flow, and to reflect current traffic-flow patterns.
 - c. Increase the capacity on major arterial streets through improved design, grade separation, signal timing, and other innovative solutions.
 - d. Complete the HOV network and supporting facilities.
- 18. Expand and improve transit services.
 - a. Expand dedicated guideway, bus rapid transit service and facilities, smart shuttles and shared car programs where proven effective.
 - b. Improve multimodal ground access to airports, including intercity bus service connecting small urban and rural communities to passenger air service.
 - c. Facilitate the expansion and improvement of inter- and intra-regional transit connectivity.*
 - d. Establish new dedicated funding sources for Public Transportation Account.*
- 19. Provide State leadership, in cooperation with local, regional and federal agencies and Native American Tribal Governments, to develop an efficient cargo and passenger aviation system and mitigate their impacts.
- 20. Continue incremental improvements to the State's intercity rail system and passenger rail services, while providing for connectivity to a future high-speed rail network, and local transit networks.
 - *Note: Need system to be user-friendly to older adults and adults with disabilities.*
- 21. Incorporate safe pedestrian and bicycle facilities in roadway capacity improvement and rehabilitation projects.
 - *Note: Design must be user-friendly to older adults and adults with disabilities.*
 - *Note: Governor's Office of Planning and Research (OPR) is developing "Complete Street" guidance in their General Plan Guidelines (AB 1358)*
- 22. Use technology to make vehicles "smarter."
 - a. Allow more vehicles to safely share the road through advanced vehicle control and guidance systems.
 - b. Improve bus design and fare systems in order to more quickly move people in and out of vehicles for increased efficiency.
- 23. Create more opportunities for bicycling and walking to both improve public health and reduce our carbon footprint*

3) Policy: Provide viable transportation choices

24. Support the California High-Speed Rail Authority's activities in planning for a comprehensive high-speed rail system that is integrated with the existing conventional intercity rail system.
 - *Consider vehicle miles traveled (VMT) impact on rural communities adjacent to rail line.*
25. Provide greater access to information, products and services without the need for physical travel.

Goal 1 Improve Mobility and Accessibility, Policy 3: Provide Viable Transportation Choices (con't)

- a. Increase use of telecommuting, video conferencing, web casts, e-commerce, and e-government services.
 - *Note: Governor's California Broadband Task Force Report*
- 26. Expand on-call, alternative door-to-door paratransit services, to improve mobility for persons with disabilities and elder Californians.
- 27. Facilitate use of advanced transportation systems to flexible transit service operators, such as vehicle location, dispatch and scheduling software, safety and security systems.
 - a. Share best practices and guidance with other transportation entities.
 - b. Gain insight and guidance from other entities regarding solutions to common problems.
- 28. Support the goals and further the efforts initiated by the California Blueprint for Bicycling and Walking.
 - a. Integrate bicycling into mainstream transportation models and modeling, including cost benefit analysis of bicycle facilities, and other factors including injury reduction, reduced asthma and other disease rates.
 - b. Remove barriers to walking and bicycling,
 - c. Educate California's youth and people of all ages on the cost of driving and benefits of health and air quality benefits of making trips by bicycle or foot and use of public transit.
 - d. *Provide linkage and access to public transit, trails, and*
 - e. *Provide incentives to walk, bike, or use public transit.*
- 29. Promote use of technology to increase accessibility and reduce need for physical travel.
 - a. *Provide information in a manner useful to older adults and adults with disabilities.*
- 30. *Integrate the needs of those traveling by active modes into transportation projects using a "complete streets" approach.*
- 31. *Enable cities and counties to plan for Neighborhood Electric Vehicles (NEVs) as an alternative transportation mode on local arterials.*
- 32. *Support implementation of high-speed rail system.*
- 33. *Provide people the freedom to choose how they get around by designing streets that are safe and inviting for pedestrians, cyclists, and transit users.*

4) Policy: Support research to advance safe and environmentally responsible mobility and accessibility

- 34. Test geospatial, digital, and other advanced imaging systems to evaluate environmental and social and health impact data related to infrastructure projects and to minimize project costs.
 - *Use geospatial, digital, and other advanced imaging systems to evaluate environmental and social data related to infrastructure projects and to minimize project costs.*
- 35. Develop new materials to extend the life and performance of the transportation system.
- 36. Research methods and technologies to better operate, manage, and maintain the transportation system, and to improve system safety and security.
 - *Comment - This is too broad and general elements are covered more specifically in others.*
- 37. Research successful models (*specify*) in other states and countries and determine their value if implemented in California.
- 38. Explore alternatives, opportunities, and challenges for new ideas and solutions.

Goal 1 Improve Mobility and Accessibility, Policy 4: Support Research to advance safe and environmentally responsible mobility and accessibility (con't)

- *Comment - Be more specific e.g., transit services, transportation in general, highway safety, managing the transportation/highway system, etc.?*
- 39. Collaborate with federal and State agencies, universities, and other states to explore alternative fuels and fuel infrastructure.
- 40. Expand the existing research and knowledge about older adult traffic safety.
 - *Promote demonstration and pilot testing of various strategies such as annual testing, provisional or restricted driver's licenses.*
- 41. Pursue research and public education to ensure that drivers are not distracted by and know how to use in-vehicle technologies.
- 42. ~~Continue to enhance the~~ Implement better understanding of road ecology, a field of study that seeks to explain the relationship between roads and the natural environment.
 - *Comment – This needs further explanation.*
 - *Comment - Need to look at stormwater drainage from roadways and its treatment and reuse/recycling.*
 - *Comment - Move to Goal 6 – Enhance the Environment?*
- 43. ~~Continue to place a high priority on preserving~~ Preserve the existing transportation system and ~~protecting the public's multi-billion dollar investment.~~
 - *Comment - Need to address sustainability of components of system*

Goal 2. Preserve the Transportation System

5) Policy: Preserve and maintain the transportation system

- 44. Use technology, innovative techniques, and new materials to enhance the life of the transportation system, provide safer work sites, enhance productivity, and reduce traveler inconvenience.
 - a. Provide real-time construction and maintenance information, including anticipated delays, to enable travelers to plan their trips and avoid work zones.
 - b. Support research and development of improved construction and maintenance techniques and materials.
 - c. *Work with transit providers to provide free transit during construction on related routes.*
- 45. Increase private sector participation and coordinate transportation maintenance and rehabilitation projects with other transportation agencies, and with public utility projects, to minimize costs and traveler disruption.
 - *Leverage public-private partnerships developed for transportation for water and resource planning.*
- 46. Establish and enforce standards for proper vehicle maintenance to increase safety and reduce emissions.
- 47. Increase the use of diagnostic systems that detect problems and monitor routine maintenance on public transit and privately owned vehicles.
- 48. Support training programs that provide the necessary skill sets to operate and maintain technologically advanced transportation systems.
- 49. *Rebuild and maintain transportation infrastructure in a good state of repair.*

Goal 2 Preserve the Transportation System, Policy 5: Preserve and maintain the transportation system (con't)

50. *Develop a climate adaptation decision matrix to identify options for protecting transportation infrastructure investments that also support a greening technology.*
51. *Inventory transportation infrastructure that is vulnerable to sea level rise and develop mitigation strategies.*

Goal 3. Support the Economy

6) Policy: Enhance goods movement mobility, reliability, and system efficiency

52. Give goods movement needs and impacts full consideration in the development of a multimodal transportation system, in partnership with other governmental entities, community organizations, shippers and carriers, and other interested parties.
 - a. *Mitigate impacts to air quality, natural resources, and public health.*
 - *Comment - Reliance on expensive movement by trucks for high-density commodities should be discouraged where more efficient movement (especially by rail) is feasible. Trains are 2 to 4 times more fuel efficient compared to trucks and contribute less to emissions that damage health and spur the asthma epidemic. It is especially critical to actively engage food/agriculture sector, which accounts for the largest share of*
53. Establish a statewide coalition to promote the full consideration of goods movement projects in federal, State, and regional transportation planning and programming.
 - *Establish goods movement, as a national economic priority.*
 - *Comment - Need to incorporate health impact (e.g, asthma/injury rates), climate change impact, and sustainability. Additionally, need to engage sectors such as food/agriculture, construction, manufacturing, etc to improve overall sustainability of production, distribution and consumption practices*
54. Focus statewide system investments on corridors and gateways that handle the highest volumes of freight traffic and/or have the most significant transportation problems.
55. Promote flexibility to fund solutions to transportation problems that have significant public benefits, regardless of facility type, mode or ownership.
 - *Comment – Needs further explanation.*
 - *Comment - Yes, but consider guaranteed minimums for modes, so there is stable funding source to implement projects.*
56. Provide State leadership by promoting and negotiating cross-jurisdictional coordination to bring about improved efficiencies and connectivity, including at ports-of-entry for the movement of people, goods, services, and information.
57. Research, develop, demonstrate, and deploy cost-effective technologies and operational strategies to expedite goods movement, improve safety, and to reduce congestion, *and environmental impacts.*
58. Gather, develop, and refine data, tools, and techniques needed for assessing goods movement, system performance, and for evaluating project alternatives.
 - *Leverage analytical methods and tools for integrated resource planning.*
59. ~~Ensure that~~ *Identify* environmental, community, and land use impacts of goods movement activities ~~are identified~~ early in the planning and project development process and *include* resources ~~are included~~ to help mitigate these impacts.

Goal 3: Support the Economy, Policy 6: Enhance goods movement, reliability, and system efficiency (con't)

- *Identify, avoid, minimize, and mitigate unavoidable environmental, community, and land use impacts of goods movement activities early in the planning and project development process.*
- 60. *Assess economic benefits of implementing elements of Goods Movement Action Plan that support future State and federal funding for goods movement in a global economy.*
- 61. *Provide for increased program capacity to support the safe and efficient movement of goods in corridors that are crucial to national security and economic vitality.*

7) Policy: Provide additional and more flexible transportation financing

- 62. Study the reliability and viability of future *alternative* transportation financing stream scenarios.
 - a. Evaluate *existing and* past transportation financing initiatives.
 - b. Learn from other states' and countries' efforts to move toward a user-based fee structure.
 - c. Evaluate the impact on transportation revenues of shifting to alternative fuels.
 - d. *Consider financial incentive/disincentives that are aligned with the full cost of transportation choices.*
- 63. Develop statewide framework for developing long-range financing forecasts required for the regional transportation plans.
- 64. Increase private sector investment in transportation.
 - a. Implement a process to monitor and incorporate private sector mobility services and investments within transportation planning and programming.
 - b. Facilitate making private instruments, such as the Location Efficient Mortgage Program, more widely available.
 - c. Seek opportunities with State funds to leverage and complement other public and private investments in goods movement facilities to the maximum extent possible.
- 65. Support the following *California?* Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users reauthorization strategies:
 - a. Ensure that California receives an increased share of highway funding based on its contributions to the Highway Trust Fund and preeminent role in the national economy.
 - b. Increase funding levels by raising annual obligation limits and spending down the unobligated balances in the Highway Trust Fund.
 - c. Remove barriers to funding projects and programs that improve efficient operation of the existing transportation system.'
 - d. Advocate for stable and adequate operating and capital funding for Amtrak.
 - e. Promote a stronger commitment of resources to public/private partnerships.
 - f. Advocate for flexibility to use federal funds to address highway safety and congestion problems caused by goods movement-related congestion.
 - g. Provide for increased program capacity to support the safe and efficient movement of goods in corridors that are crucial to national economic security and vitality, and provide for the mitigation of their congestion and environmental effects.
 - h. Support California's Native American Tribal Governments in their effort to obtain an equitable return from Native American transportation programs.

Goal 3: Support the Economy, Policy 7: Provide additional and more flexible transportation financing (con't)

- i. Work to incorporate climate change and energy efficiency measures in the criteria for federal transportation funding.
 - *Comment - Need to reflect principles developed for stimulus financing, including health and environment impact considerations.*
- 66. Increase flexibility in jet fuel tax, airport, and passenger facility charge revenues for use on projects, such as cargo and ground access and security needs.
- 67. *Develop multiple-objective investing criteria addressing 3Es (economy, equity, environment).*
 - *Comment - Need more specifics; clarify*
- 68. *Ensure the financial integrity of the Highway and Transit Trust Funds.*
- 69. *Educate the public on transportation's major role as an economic stimulus that supports a prosperous economy.*
- 70. *Identify mobility improvements that support a vibrant economy, and give priority to low income, disadvantaged communities and support sustainable businesses.*
- 71. *Ensure the financial integrity of the Highway and Transit Trust Funds while pursuing innovative financing to ensure continued transportation investments.*
- 72. *Evaluate the impact on transportation revenues of shifting to alternative fuels.*
- 73. *Identify and educate the public on the benefits of pursuing innovative financing measures to ensure stable funding source for transportation investments.*
- 74. *Determine public support for public-private partnerships (P3) initiatives that support a stable funding source for transportation investments.*
- 75. *Determine public support for congestion pricing and other user fee initiatives that support a stable funding source for transportation investments, such as mileage-based user fees.*
- 76. *Determine public support for innovative financing strategies tied to greening including a green user fee on the price of gas at the pump.*
- 77. *Conduct studies on states' and countries' efforts to move toward a user-based fee structure.*
- 78. *Ensure economic development efforts include investments in low-income communities to share equally in the benefits of economic growth and prosperity as the more affluent communities.*
- 79. *Identify measures to accelerate transportation bond programs in order to stimulate the economy.*

Goal 4. Enhance Public Safety and Security

8) Policy: Improve system and user safety

- 80. Increase education and outreach programs that address safe transportation behavior, including drivers training, awareness of pedestrian and bicyclists, safe biking practices, and truck driver training.
 - a. Continue to work with Office of Traffic Safety to promote safety through education and outreach.
 - b. Continue to promote Operation Lifesaver, a rail safety program to encourage safe behavior both vehicle and pedestrian at railroad grade crossings.
 - c. Continue to improve at-grade railroad crossing safety devices, or close unprotected crossings, as appropriate.
 - d. Include safe pedestrian and bicycle facilities in the design of new or upgraded roadways.

Goal 4: Enhance Public Safety and Security, Policy 8: Improve system and user safety (con't)

- e. Reduce the response time to motor vehicle, bicycle, and pedestrian incidents, and the rate of fatalities, injuries, and property damage on the transportation system.
 - f. *Promote bicycling and walking and reducing injuries through programs such as Safe Routes to School, bicycle education/helmet distribution, and assuring child passenger safety laws comply with national/federal standards.*
81. Continue to deploy and promote the use of advanced systems that enhance transportation safety.
- a. Deploy infrastructure-based detection and warning safety systems, as appropriate, such as fog, dust, ice, and curve speed-warning systems.
 - b. Provide incentives to vehicle manufacturers to deploy vehicle-based safety systems, for instance, mayday, vision enhancement, and collision avoidance systems.
 - c. Expand the use of in-vehicle and passenger-facility transit safety systems, such as surveillance and monitoring devices, and vehicle location and distress notification systems.
82. Increase patrols to enforce speed restrictions, minimize aggressive driver behavior and driving under the influence of alcohol or other drugs, and provide greater security at airports, transit facilities, and on public transit vehicles.
- *Comment - Need to address street/highway design (complete streets), reduced speed limits.*
83. Improve transportation system safety for older Californians.
- a. Promote mature driver education programs specifically matched to participant's functional needs.
 - b. Institutionalize effective and equitable driver assessment and licensing practices within the California Department of Motor Vehicles, such as the 3-Tier Assessment System currently being evaluated.
 - c. Facilitate risk identification and reduction practices.
 - d. Establish roadway infrastructure and land use practices that promote safety.
 - e. Promote safer motor vehicle design, including using crash test "dummies" designed to more closely simulate the reactions and physical limitations of older drivers and equipping vehicles with crash avoidance systems, night vision windshields, and easily read displays.
 - f. *Promote safer transit vehicle design, including at-grade boarding.*
 - *Comment - Seniors prefer to substitute walking/transit use for auto trips as their driving abilities decline; however their neighborhoods/sidewalks are not conducive. Need to add strategies that address street/community design and transit oriented housing.*
84. *Improve safety for travelers of all ages and abilities.*
85. *Reduce likelihood and severity of transportation-related injuries, to bicyclists and pedestrians by reducing vehicle speeds in certain settings (similar to what is done in school zones).*

9) Policy: Provide for system security

86. Work closely with federal agencies, including TSA, Customs, and the Coast Guard to ensure the security of California's borders, seaports, and airports, while minimizing the impedance of people and goods, and balancing personal privacy and security needs.

Goal 4: Enhance Public Safety and Security, Policy 9: Provide for system security (con't)

87. Work with State and federal agencies to ensure that emergency response services are rapidly deployed in the event of an emergency.
88. Develop a transportation system security plan, including risk assessment, monitoring methods, pre- and post-incident preparedness, response and recovery, crisis management and evacuation plans, and viable transportation alternatives.
 - a. Coordinate with FTA Technical Assistance Teams.
 - b. Analyze best practices identified by FTA and those of countries that have experienced and responded to security threats.
 - c. Evaluate design of transportation facilities for security risks.
 - d. Develop security guidelines for all modes and facilities, including goods movement facilities.
 - e. Coordinate with emergency response agencies, such as law enforcement, medical services, and media.
 - f. Train personnel in emergency procedures and develop testing programs. Continue to invest in advanced technologies, such as explosive, biohazard, and chemical trace detection, surveillance, and cargo tracking systems to help increase transportation system security.

Goal 5. Reflect Community Values

10) Policy: ~~Expand opportunities for~~ *Initiate* early and ongoing collaboration in transportation planning and decision-making

89. Develop and implement ongoing public information and involvement programs, including research regarding the public's expectations and preferences.
 - *In accordance with SAFETEA-LU, ensure that the public has access and adequate time to review and comment on land use and transportation planning documents.*
 - *Comment - Need to continue to focus on including low income and disadvantaged communities.*
90. Consult and coordinate with local, regional, *non-governmental organizations*, and Native American Tribal Governments, *and the public* during development of their general plans and other long-term planning efforts.
 - *Comment - Leverage this networking for water and other resource planning and management.*
91. Involve businesses, communities, community-based organizations, and institutions early in the transportation planning and decision-making process.
 - a. Develop a collaborative approach to resolve transportation issues and to develop performance criteria and indicators.
 - b. Develop, implement, and advertise web-based and other easily accessed public participation systems, consisting of informational and educational materials, online surveys and focus groups, and online voting, to enhance decision-making.
 - c. Design and implement public participation strategies to include those traditionally underrepresented in the public planning and decision-making process.
 - d. Develop techniques to effectively convey information to the public
92. Assess and provide the full benefits and costs (direct, indirect, societal, environmental, governmental, and personal) of transportation by mode.

Goal 5: Reflect Community Values, Policy 10: Expand opportunities for early collaboration in transportation planning and decisionmaking (con't)

- a. Evaluate and provide cumulative environmental costs, including mitigation costs, such as habitat conservation programs, and land use impacts on a programmatic basis.
- b. Analyze and provide life cycle, social, health, and environmental costs for reasonable alternatives, including modal alternatives.
93. *Develop set of integrated planning principles for California.*
 - *Comment - Incorporate Strategic Growth Council State Planning Principles (coming soon)*
 - *Comment - Need to include principles responsive to older adults and adults with disabilities, and involving the local Area Agencies on Aging.*
94. *Coordinate State infrastructure planning.*
95. *Institute statewide collaborative interagency planning.*
 - *Comment - Strategic Growth Council multi-agency initiatives (coming soon)*
96. *Integrate State level and regional plans and identify shared goals and policies beyond traditional silos (e.g., California Water Plan, Climate Action Plan, Wildlife Action Plan, etc.)*
 - *Support integration of other state goals and strategies and coordinate state planning in a collaborative way.*
 - *Comment – Address how this will be done and initiate some of this cross-collaboration in the 2035 plan.*
97. *Improve transportation decision-making by considering lifecycle cost of assets.*
98. *Establish mechanisms for the ongoing participation of stakeholders from the aging and disability communities in transportation and land use decision-making and planning.*
99. *Consider environmental justice issues when making transportation planning decisions.*
100. *Balance community values and transportation needs to create solutions that are sensitive to their context.*

11) Policy: Manage Growth

101. Provide incentives to promote sustainable land use decisions that integrate land use, housing, and transportation through General Plans, regional transportation plans, and interregional cooperation.
 - a. ~~Increase densities and mix of land-uses to support transit service, walking, and bicycling designs strategically to facilitate effective transit service, including encouraging transit-oriented development within major transit corridors and providing the ability to conveniently walk to destinations.~~
 - b. Promote street and urban design to encourage walking, and bicycling, and transit ridership.
 - c. Provide information, technical assistance, and best practices on transit-oriented development.
 - d. Facilitate the sale of State-owned “excess” or underutilized land near major transit stations for transit-oriented development.
 - e. Encourage localities to foster “smart growth” development in areas where transportation infrastructure can readily support it.
 - f. Encourage efficient land use through clean up and re-use of contaminated lands (brownfields).

Goal 5: Reflect Community Values, Policy 11, Manage Growth (con't)

Goal 5: Reflect Community Values, Policy 10: Manage growth (con't)

- g. Encourage lending institutions to offer Location Efficient Mortgages Program to promote housing near transit.
- h. Promote the revision of zoning ordinances to provide for mixed-use development.
- i. *Encourage natural resource open space designation to distinguish natural resource open space with anticipated human influenced or park space.*
 - *Comment - Need to include AB 32 (Greenhouse Gas Reduction), SB 375 (Sustainable Communities Strategies – connecting greenhouse gas reduction and land use planning), SB 732 (Strategic Growth Council), and other growth and climate change management plans and strategies.*
 - *Comment - Revise to reflect goals of State Wildlife Action Plan and other overarching conservation goals.*
- 102. Incorporate community values and support context sensitive solutions for all transportation facilities and infrastructure.
 - *Comment - Define “community values”? (e.g., What local public opinion wants?)*
- 103. Investigate reforms to the local fiscal/land use relationship to provide incentives for communities to make better long-term land use decisions.
 - a. ~~Strengthen link between~~ *Provide incentives to minimize new transportation infrastructure and implement compact growth land use decisions and transportation planning.*
 - b. Explore innovative options, such as exchanging State-share property tax for local-share sales tax.
 - c. *Explore ways to make shared-tax base agreements more attractive to localities.*
- 104. Provide incentives for collaborative, integrated regional and sub-regional planning initiatives linked to sustainable development criteria and State General Plan guidelines.
 - a. Encourage revenue and facility sharing, promote collaborative approaches to assessing housing and employment needs, and reduce fiscal competition between cities and counties.
 - b. *Ensure cities and counties general plans and zoning ordinances support regional blue print plans.*
 - c. *Provide incentives for land use projects, transit alternatives and transportation projects included in regional blue print plans that support the State's environmental priorities.*
 - *Comment - Find ways to integrate/combine the Regional Blueprints with Integrated Regional Water Management and other regional resource planning/management.*
- 105. Ensure compatibility between airports and surrounding land use.
 - a. Promote awareness and adherence to the Department's California Airport Land Use Compatibility Handbook.
 - *Ensure compatibility between neighboring land uses by considering compatibility early in the transportation planning and land use decision-making process.*
 - a. *For example, promote compatibility between airports and surrounding land uses by adhering to the Department's “Airport Land Use Compatibility Handbook” and evaluate and minimize air pollution impacts of new projects and proposed land uses by following CARB's “Air Quality and Land Use Handbook.”*
 - b. Promote awareness and adherence to the Department's California Airport Land Use Compatibility Handbook.

Goal 5: Reflect Community Values, Policy 11: Manage growth (con't)

106. *Reward better planning through taxes, funding and streamlining*
 - a. *Tax breaks for employers who support transportation demand management strategies (e.g., carpooling, flextime, bike fleets)*
 - b. *Tax structures that reward employers that locate near transit or housing; developers that build housing near employment centers*
 - c. *Streamlined regulatory review for projects that prioritize smart land use*
 - d. *Prioritize projects consistent with Regional Blueprint Plans/SCS/APS*
 - *Comment - There is a need to provide incentives to social and health service providers and developers of supportive and retirement housing to locate near transit.*
 - *Comment - Consider “provide incentives” rather than “reward.”*
107. *Streamlined environmental review of location-efficient development with impact fees and mitigations sensitive to smart mobility benefits.*
 - *Comment - Define terms (e.g., location-efficient, impact fees, smart mobility benefits)*
108. *Adoption of smart land development regulations including zoning and subdivision codes, urban design and street design standards, and airport land use compatibility plans.*
109. *Provide incentives for the most efficient use of land while being sensitive to regional differences*
 - *Comment - Describe types of incentives and who will benefit.*
110. *Encourage the role of the State as a data, information, and education provider for more efficient, consistent, and seamless local planning.*
111. *Create Statewide centralized information and data sets.*
 - *Provide a centralized location for MPOs to submit GIS data layers used in regional planning so that cross-regional planning can occur more easily.*
 - *Identify data standards for all regional transportation plans to use across the state to facilitate data-sharing and collaboration between regions.*
 - *Comment - Role of Strategic Growth Council is to “provide, fund, and distribute data to local governments and regional agencies to meet SGC goals.”*
112. *Revise Regional Transportation Plan Guidelines and procedures consistent with AB 32 and SB 375.*
113. *Integration of context sensitive solutions and complete streets policies through adoption of related transect based (subdivision of community plans into zones ranging from rural to urbanized settings) standards.*
114. *Update City and County general plan guidelines consistent with AB 32, SB 375, and AB 1358 (Complete Streets.)*
 - *Comment - Governor’s Office of Planning Research Climate Change Addendum to general plan guidelines*
115. *Develop models that integrate land use, transportation and environmental issues.*
 - *Comment - Continue to expand regional efforts, i.e., Regional Blueprint, and implement SB 375.*
116. *Funding criteria that reward agencies making land use decisions that promote compact development with pedestrian- and transit-friendly urban design features.*

Goal 5: Reflect Community Values, Policy 11: Manage growth (con't)

- *Comment - Develop funding criteria that reward agencies for making transportation and land use decisions with demonstrated avoidance of environmental resource impacts during the decision-making process. Specifically, these funding rewards would apply to agencies that can clearly describe how land-use and transportation networks were planned 1) to avoid specific land-based sensitive resources (wetlands, species habitat, vernal pools, wildlife connectivity, etc.) and 2) to improve air quality.*
- 117. *“Smart Mobility” performance measures (defined as part of the Smart Mobility Framework; see brochure) consistently applied in transportation decision making and programming activities.*
- 118. *Identify sustainability indicators to enhance current transportation system performance measures.*
 - *Comment - Consider adding a public health definition of sustainable community--A community’s overall health depends on multiple factors, including the environment they live in. A healthier living environment reduces health risks and promotes better lifestyle choices. It creates a sustainable community. Key determinants of a healthy living environment are:*
 - Access to recreation and open space*
 - Access to healthy foods*
 - Access to medical services*
 - Access to public transit and safe active transportation*
 - Access to quality affordable housing*
 - Access to economic opportunities*
 - Completeness of neighborhoods*
 - Safe neighborhoods and public spaces*
 - Environmental quality*
 - Green and sustainable development and practices*
- 119. *Support long-range community visions for sustainable and efficient land use development.*
- 120. *Promote housing development in association with transit.*
- 121. *Provide incentives to encourage local jurisdictions to grow their communities in ways that support mobility options (walking, bicycling, and transit) and reduce the need to drive.*
- 122. *Provide incentives to local governments for well-designed land-use planning and infrastructure projects that lead to shorten commutes and encourage walking, bicycling, and the use of public transit.*
- 123. *Take advantage of opportunities for discussion and consensus on efficient land use and transportation planning supported by the State’s Regional Blueprint Planning program and directed by recent legislation.*
- 124. *Participate in the Strategic Growth Council—the Governor’s effort for State agencies to coordinate activities in the planning and development of sustainable communities.*
- 125. *Encourage interaction with local jurisdictions through a context sensitive solutions process.*
- 126. *Identify sustainability indicators (such as access to public transit, safe active transportation, recreation, economic opportunities, and medical services) to enhance current transportation system performance measures.*

Goal 6. Enhance the Environment

12) Policy: Conserve natural resources

127. ~~Develop or amend transportation planning tools to include land use impacts, demand management, efficient use of energy, and modal alternative analysis.~~ *Recommend as sub-strategy "c" to new strategy as follows:*
- *Link Transportation Planning Decisions with Resources and Environmental Planning to enhance and preserve the environment.*
 - a. *Consider critical environmental issues and mitigation measures prior to making transportation decisions.*
 - b. *Incorporate mitigation measures into transportation plans and projects early in the process.*
 - c. *Develop and amend transportation planning tools to include land use and natural resource impacts, demand management, efficient use of energy and modal alternative analysis.*
 - *Comment - Include water, water quality, and stormwater factors.*
128. ~~Promote partnerships to address conservation and environmental issues early in the project planning phase.~~
- *Develop and share planning and natural resource data to ensure informed transportation decisions that protect and conserve California's natural resources.*
 - a. *Develop data that is easily accessed, shared and used by planning and natural resource staff.*
 - b. *Promote regional planning that includes state and federal natural resource priorities and policies in regional plans.*
 - c. *Develop accurate and complete scenarios using planning and natural resource data that reflects state and federal priorities.*
 - d. *Make planning and natural resource data and information easily accessible to local, state, federal, tribal and other public entities.*
 - e. *Develop data that is consistent throughout the State and can be used for statewide assessments.*
129. ~~Continue to~~ Avoid and minimize *natural resource and ecological system* impacts to the greatest extent possible.
130. ~~Continue building~~ *Develop* conservation banking partnerships to protect ecosystems and preserve large contiguous and viable tracts of habitat to offset adverse impacts, and determine the most valuable land for banking.
- a. Preserve wildlife corridors and implement other strategies to reduce the conflict between development and the natural environment.
 - b. Promote a greater understanding of the relationship between the natural environment and transportation.
 - c. Develop better tools to model cumulative impacts to the environment, *agricultural lands, open space* and wildlife.
131. ~~Minimize impermeable surfaces and install facilities to capture stormwater runoff.~~
- *Design projects that minimize impacts to the environment, wildlife, agricultural and open space lands.*
 - a. *Minimize impermeable surfaces and install facilities to capture stormwater runoff.*
 - b. *Include design elements that facilitate the movement of wildlife, water quality, water conservation, etc.*

Goal 6: Enhance the Environment, Policy 12: Conserve natural resources (con't)

- *Comment - Need to capture, treat, convey, and reuse/recycle stormwater.*
 - *Incorporate low impact development and green infrastructure techniques to design facilities for most effective and environmentally beneficial storm water runoff management.*
132. ~~Recycle and provide incentives to~~ *Increase the use of recycled materials and promote zero waste policy on all projects the use of recycled materials.*
- a. *Partner with private sector to increase use of recycled materials.*
 - b. *Develop best practices and implement zero waste programs.*
133. ~~Encourage processes or practices that integrate conservation and infrastructure planning at large regional scales (such as Regional Blueprint Planning, watershed planning, integrated planning models, and Natural Community Conservation Plans) in a way that institutionalizes landscape scale impacts addressed through off-site mitigation and partnering in planning: 1) consideration of environmental impacts and mitigation at the landscape scale, and 2) partnering in planning.~~
134. ~~Promote for~~ *conservation and infrastructure at a scale large enough to address identify the cumulative effects on regional resources such as water, air, and habitat connectivity, as well as quality of life and use the information gained through early planning to avoid, minimize, and mitigate unavoidable impacts.*
135. *Identification of high-valued resources for protection through early collaborative interagency planning.*
- *Engage in early, collaborative interagency planning to identify high-value resources that should be protected and avoided. If certain high-value resources cannot be avoided, this early engagement should focus on ways to then minimize and mitigate impacts.*
136. *Explore creative programs, such as Transnet in San Diego, to promote advanced mitigation and habitat protection.*
137. *Educate public and stakeholders on multiple benefits of sustainable infrastructure planning that includes our “green” infrastructure.*
138. *Cooperatively develop new policies and legislation that promote earlier, large-scale mitigation.*
139. *Develop a system to provide real-cost valuation of environmental resources (in terms of ecosystem services) and public health in order to determine the actual benefit-cost of these resources for transportation decision-making.*
- *Comment - Revise to say “ Integrate principles that provide real-cost...”*
140. *Pool mitigation funding for multiple projects to encourage integrated, large-scale mitigation.*
- *Streamline permitting.*
 - *Comment - Depends for what... highway expansion or transit/rail projects.*
 - *Define*
141. *Avoid, to the maximum extent feasible, fragmenting or impairing intact ecological systems, and mitigate for damage to ecological systems.*
142. *Revise RTP guidelines to incorporate inter-regional ecological issues such as wildlife movement and the delivery of ecosystem services.*
143. *Support the development of policies that maintain the ability of natural systems to adapt to climate change when impacted by transportation facilities.*

Goal 6: Enhance the Environment, Policy 12: Conserve natural resources (con't)

144. Support the development of a statewide map and online resource depicting important natural resource areas (including high conservation priority species, communities and ecological systems) with planned and programmed transportation facilities as an early tool for transportation planners and engineers.
145. Provide incentives for transportation facilities to be retrofitted to restore natural systems and improve ecological connectivity
146. Establish a multi-agency consultation process as required by SAFETEA-LU that minimizes impacts to natural resources and ecological systems.
 - a. Conduct early, frequent and on-going consultations with state, federal, tribal and other resource entities responsible for natural resources, environmental protection, conservation, and historic and cultural preservation.
 - b. Compare transportation plans, maps and data with those of federal state, tribal, and resource agencies responsible for conservation, environmental, cultural and resources systems.
147.
 - c. Include context sensitive solutions by using inclusive approaches that integrate environmental and community values into transportation decision-making.
 - d. Discuss, identify and incorporate mitigation measures to address adverse impacts in the following priority order: enhance, avoid, minimize, rectify, reduce and compensate.
148. G6, P12 - Develop and share planning and natural resource data to ensure informed transportation decisions that protect and conserve California's natural resources.
149.
 - a. Develop data that is easily accessed, shared and used by planning and natural resource staff.
 - b. Promote regional planning that includes state and federal natural resource priorities and policies in regional plans.
 - c. Develop accurate and complete scenarios using planning and natural resource data that reflects state and federal priorities.
 - d. Make planning and natural resource data and information easily accessible to local, state, federal, tribal and other public entities.
 - e. Develop data that is consistent throughout the State and can be used for statewide assessments.
150. Identify and promote opportunities to retrofit or adapt facility designs to further enhance, minimize, reduce the impact to the environment in the following ways:
 - Reduce fragmentation for fish and wildlife species
 - Reduce wildlife and vehicle collisions
 - Reduce effects to water quality and other adjacent habitats
 - Reduce the spread of invasive species
 - Reduce the effects of climate change on facilities and natural ecosystems.
 - Minimize impermeable surfaces and install facilities to capture stormwater runoff.
151. Provide incentives to contractors that incorporate recycling and innovative ways to reduce impacts to the environment or waste associated with construction activities.
152. Provide for a better connection between the environmental evaluation, planning, and funding of transportation planning and project delivery of transportation improvements.

Goal 6: Enhance the Environment, Policy 12: Conserve natural resources (con't)

- 153. *Support and evaluate the following Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users reauthorization requirements under Section 6001.*
 - *Identify guidance and tools to meet requirements to consult, coordinate plans, and evaluate environmental resources in the planning process and development of Regional Transportation Plans.*
 - *Identify adequate strategies for the evaluation and integration of other datasets into Regional Transportation Plans.*
 - *Promote the identification of funding for resource agency participation in Blueprint planning grants or internal agency budgets.*
 - *Support State Planning and Research projects that help integrate natural resource planning into Transportation and Land Use planning.*
 - *Provide support for developing the necessary data to fully evaluate natural resources in models and Regional Transportation Plan development.*
- 154. *Support advanced mitigation strategies by partnering with regulatory agencies and other infrastructure agencies.*
- 155. *Develop a statewide climate change action plan that is supported by and includes all applicable state and local agencies (including RTPAs)*
- 156. *Encourage partnerships to develop adaptation strategies that address sea level rise.*
- 157. *Integrate planning principles that provide real-cost valuation of environmental resources (in terms of ecosystem services) in order to determine the actual benefit-cost of these resources for transportation decision-making.*
- 158. *Educate public and stakeholders on economic benefits of sustainable infrastructure planning that includes consideration of “green” (natural) infrastructure.*

13) Policy: Commit to a clean and energy efficient system

- 159. Expand market share of cleaner vehicles and supporting fuel infrastructure.
 - a. Expand use of clean fuel transit vehicles.
 - b. Encourage public entities to continue investing in alternative fuel vehicles to increase market share and encourage increased production.
- 160. Enhance education, planning tools, and performance standards on energy efficiency, air quality, and climate implications of transportation decision-making.
 - a. Analyze the cost-effectiveness of transportation options that improve energy efficiency and reduce emissions of GHGs and criteria air pollutants.
 - b. Develop tools that improve data collection, analysis, and modeling capabilities for State and local development planning and projects.
- 161. Solicit institutional support for clean and energy efficient transportation.
 - a. Seek legislative, regulatory, and policy support to advance clean and efficient transportation, including low-emission vehicles and the necessary fueling infrastructure.
 - b. Establish stable and secure funding sources with innovative and effective financing mechanisms for transportation energy programs.
 - c. Reduce the costs of product development, testing, and market introduction of advanced transportation and communication technologies.

Goal 6: Enhance the Environment, Policy 13: Commit to a clean and efficient energy system (con't)

- d. Mainstream energy efficiency and conservation measures into State, regional, and local transportation planning, programming and project development.
- 162. Implement measures to lower emissions of GHGs and air pollutants ~~in~~ *from* transportation options.
 - a. Provide incentives for mass transit use, transportation demand and supply management, and “smart growth” land use policies.
 - *Comment - Incentives such as CEQA relief under SB 375.*
 - b. Encourage local governments to incorporate considerations of transportation air emissions and energy efficiency into general plans.
 - *Comment - Incentives such as Proposition 84 funding under SB 732.*
 - c. Fund programs to support the purchase and use of low-emission vehicles, including the “greening” of State and local government fleets.
 - d. Reduce emissions from the transport of freight and reduce costs through implementation of efficiency measures.
 - e. Change some of the fixed costs that travelers face to variable costs, as a means of encouraging decisions that result in cleaner and more energy efficient transportation. For example, base auto insurance and vehicle license fees on miles driven rather than a flat annual rate.
 - f. Participate in the Western Governors’ Global Warming Initiative to reduce GHGs through strategies that foster economic development.
 - g. *Comment - Assist MPOs by ??? (define how) as they develop sustainable communities strategies.*
- 163. Continue collaborating with the California Energy Commission, California Air Resources Board, and State and Consumer Services Agency to research and develop strategies to reduce demand for petroleum fuels and emissions of GHGs, and to increase transportation energy efficiency.
 - a. Research and develop clean transportation alternative fuels and initiate a plan for deploying appropriate alternative fuel infrastructure.
 - b. Collaborate on a marketing program to provide information on transportation energy efficiency and alternative fuel vehicles, including the location of fueling facilities.
 - c. *Collaborate on a marketing program and provide information on the costs of driving and benefits of walking, bicycling and transit.*
- 164. *Reduce greenhouse gas emissions contributed by transportation.*
- 165. *Reduce/prevent climate change-related impacts/injuries to human health, including designing facilities and surfaces to minimize heat absorption and off-gassing to help make cities safer during heat waves).*
- 166. *Educate the public on green technology innovations that can lead to the creation of healthier environments to work, live, and learn.*
- 167. *Support the development of a California cap-and-trade program.*
- 168. *Collaborate with government and private sector parties in the development of an integrated hydrogen solution that links facilities and vehicle assets into support for the State’s Hydrogen Highway and Climate Change efforts.*
- 169. *Promote the development and improvement of alternative and renewable low-carbon fuels.*

Rural Issues (Separate section of CTP 2025 pgs. 66 – 69 with specific strategies)

170. Ensure rural areas have adequate funds to provide for the operation, maintenance, and rehabilitation of the rural and interregional transportation system.
 - a. Provide for roadway safety improvements and efficiencies.
 - b. Provide flexible funding for fund matching opportunities with other programs.
 - c. Consider interregional traffic, including goods movement and tourism, and weather impacts when allocating resources to rural entities.
 - d. Ensure critical transportation facilities, such as general aviation airports, are adequately funded to provide lifeline services.
 - *Ensure critical transit route services are adequately funded.*
171. Upgrade communication, including emergency response entities in the early planning stages, to enable deployment of advanced transportation systems to improve safety, incident response, and traveler information.
172. Advocate coordinated public transportation services with social service agencies to optimize resources and services.
 - a. Consult with Native American Tribal Governments to coordinate improved public transportation access to and through tribal lands.
 - b. Initiate effort with full participation of federal, State, regional, and local governments to explore funding options and opportunities and to address potential barriers.
 - c. Identify best practices including advanced public transportation technologies to improve and coordinate services.
 - *Comment: Add explicit mention of coordination with local Area Agencies on Aging.*
173. Consider the “main street” characteristics of transportation corridors and incorporate community values and context sensitive solutions.
 - *Explore alternatives to moving goods especially through rural areas to mitigate impacts on infrastructure and air quality.*
 - *Comment - Define main street.*
 - *Comment – Clarify: does this mean not moving goods through rural areas? Moving goods by rail instead of truck?*
174. Protect rural airports from incompatible land use encroachment.

Note: “Opportunity areas” identified in the 2030 Addendum to the California Transportation Plan 2025 for SAFETEA-LU compliance addressed in strategies #93, 94, 109, 110 and 134.