

CHAPTER 4

Vision for 2045

Goals and Policies

The Santa Cruz County Regional Transportation Plan (2045 RTP), through its goals and policies, sets forth a foundation for expanding options for residents and visitors to access their daily needs in a way that is safe, equitable, protects the environment and promotes investment in the local economy. This is advanced by designing and implementing a transportation system that serves our diverse travel needs and embraces the principle that transportation is intertwined with environmental, economic and social concerns.

As discussed in Chapter 1, driven by financial limitations, environmental concern, and demographic trends, the RTC voluntarily has adopted a sustainability framework for the RTP that is based on the triple bottom line definition of sustainability. The triple bottom line concept of sustainability can be seen in every aspect of the 2045 Regional Transportation Plan starting with the goals (Figure 4.1) and policies (Figure 4.2). Systematically integrating sustainable principles into the 2045 RTP allows the RTC and the public to evaluate how well the long-term plan upholds and maintains progress towards generating safe, equitable, and cost-effective access to daily needs, while at the same time generating economic benefits and protecting the environment.



The 2045 RTP focuses on maximizing benefits to people, the planet, and prosperity.

Why Do Policies Matter?

Success in advancing goals relies upon policies that provide direction to the public and decision makers about what course of action will be required to realize the greatest benefit by 2045. The policies established for the 2045 RTP support outcomes, rather than specific projects or modes. The policies (Figure 4.2) are designed to focus future investments on the best-performing strategies which generate the desired results and work within financial constraints. They are broad enough to adapt to changing conditions and take advantage of new opportunities and are not too specific to confine investments to one project or project type.

Sustainable Transportation Analysis Rating System

The RTC utilizes a rating system called the Sustainable Transportation Analysis Rating System (STARS) to support development of the RTP. Developed by the North American Sustainable Transportation Council (STC), the STARS framework provides an integrated set of sustainability performance measures and serves as a model for the RTC to better align RTP policies with desired community outcomes. A key component of the STARS system is identifying primary performance measures that achieve many sustainability objectives. These measures are referred to as “heavy-lifters” and often address multiple aspects of the Triple Bottom Line (people, planet, prosperity). The STARS framework for sustainability was first introduced in the 2014 RTP and subsequent 2040 RTP. The goals, policies and targets included in the 2045 Regional Transportation Plan are based on the 2040 RTP and have been updated based on new information. These goals and polices identified in the following sections are consistent with state and federal transportation planning policies, guidelines, and requirements including the SB 375-required Sustainable Communities Strategy, California Transportation Plan 2040 (CTP 2040), Complete Streets, and Smart Mobility Framework developed by Caltrans.

<p>Goal #1 Establish livable communities that improve people’s access to jobs, schools, recreation, healthy lifestyles, and other regular needs in ways that improve health, reduce pollution, and retain money in the local economy.</p>	<p>There is a strong relationship between meeting targets and achieving access, health, economic benefit, and climate and energy goals. For example, providing more carpool, transit, and bicycle trips reduce fuel consumption, retains money in the local economy, and reduces congestion.</p>
<p>Goal #2 Reduce transportation related fatalities and injuries for all transportation modes.</p>	<p>Safety is a fundamental outcome from transportation investments and operations. Across the United States, pedestrians and bicyclists (vulnerable users) are killed and injured at a significantly higher rate than the percentage of trips they take.</p>
<p>Goal #3 Deliver access and safety improvements cost effectively, within available revenues, equitably and responsive to the needs of all users of the transportation system, and beneficially for the natural environment.</p>	<p>The manner in which access and safety outcomes referenced in Goal #1 and Goal #2 are delivered can impact cost-effectiveness, distribution of benefits amongst population groups, and ecological function.</p>

Figure 4.1 – Goals of the 2045 Regional Transportation Plan

Source: Santa Cruz County Regional Transportation Commission

2045 RTP Policies	Outcomes Advanced							
	People			Prosperity			Planet	
	Access & Mobility	Health	Safety	Equity	Economic Benefit	Cost Effectiveness	Climate & Energy	Ecological Function
Transportation System Management: Implement Transportation System Management (TSM) programs and projects on major roadways across Santa Cruz County that increase the efficiency of the existing transportation system.	✓				✓	✓	✓	
Transportation Demand Management: Expand demand management programs that decrease the number of vehicle miles traveled and result in mode shift.	✓	✓			✓		✓	
Transportation Infrastructure:								
Improve multimodal access to and within key destinations for all ages and abilities.	✓	✓	✓	✓	✓		✓	
Ensure network connectivity by closing gaps in the bicycle, pedestrian, and transit networks.	✓	✓	✓		✓		✓	
Develop dedicated transit facilities that will improve transit access and travel time and promote smart growth and transit oriented development.	✓	✓		✓	✓		✓	
Land Use: Support land use decisions that locate new facilities close to existing services, particularly those that service transportation disadvantaged populations.	✓			✓		✓		✓
Goods Movement: Enhance the local economy through improving freight mobility, reliability, efficiency, and competitiveness.	✓				✓	✓	✓	
Safety:								
Prioritize funding for safety projects and programs that will reduce fatal or injury collisions.			✓					
Encourage projects that improve safety for youth, vulnerable users, and transportation disadvantaged.			✓	✓				
Emergency Services: Support projects that provide access to emergency services.	✓		✓		✓			
System Design: Reduce the potential for conflict between bicyclists, pedestrians, and vehicles.	✓	✓	✓	✓	✓		✓	

2045 RTP Policies	Outcomes Advanced							
	People			Prosperity			Planet	
	Access & Mobility	Health	Safety	Equity	Economic Benefit	Cost Effectiveness	Climate & Energy	Ecological Function
Security: Incorporate transportation system security and emergency preparedness into transportation planning and project/program implementation.		✓	✓	✓				✓
Cost Effectiveness & System Maintenance: Maintain and operate the existing transportation system cost-effectively and in a manner that adapts the current transportation system to maximize existing investments.	✓		✓			✓		
Coordination: Improve coordination between agencies in a manner that improves efficiencies, and reduces duplication (e.g., paratransit and transit; road repairs; signal synchronization; TDM programs).						✓		
System Financing: Support new or increased taxes and fees that reflect the cost to operate and maintain the transportation system.						✓		
Equity: Demonstrate that planned investments will reduce disparities in safety and access for transportation disadvantaged populations.	✓		✓	✓				
Ecological Function: Deliver transportation investments in a way that increases tree canopy, where appropriate, improves habitat and water quality and enhances sensitive areas.								✓
Climate Resiliency: Adapt the transportation system to reduce impacts from climate change.							✓	
Public Engagement: Solicit broad public input on all aspects of regional and local transportation plans, projects, and funding actions.				✓				

Figure 4.2 – Policies of the 2045 Regional Transportation Plan and Outcomes they Advance

Source: Santa Cruz County Regional Transportation Commission

Key Considerations

Senate Bill 375

One of the key considerations in developing the 2045 RTP goals, policies and targets was to address greenhouse gas emissions. The California Sustainable Communities and Climate Protection Act of 2008 (SB 375) requires each of the state’s 18 metropolitan areas to reduce per capita greenhouse gas emissions from cars and light trucks. AMBAG is responsible for developing a Sustainable Communities Strategy (SCS) as part of the Metropolitan Transportation Plan (MTP) that coordinates land use and transportation planning to reach the greenhouse gas (GHG) reduction target established for the tri-county region. The goals, policies and targets that were developed for the 2045 Santa Cruz County Regional Transportation Plan strive to reduce GHG emissions from transportation and are consistent with the 2045 MTP-SCS and goals of Senate Bill 375.

Senate Bill 32

The California Global Warming Solutions Act of 2016, or Senate Bill 32, expands upon Assembly Bill 32 to reduce greenhouse gas emissions. SB 32 requires California to reduce greenhouse gas emissions statewide to 40% below the 1990 levels by 2030. The achievement of these targets requires emissions reductions across all sectors of the economy at the state and local levels. The percent reduction from the transportation sector can come from a reduction in vehicle miles traveled as well as improvements in vehicle technology including electric and hybrid vehicles and improvements in fuel standards that reduce carbon levels in fuel.

Senate Bill 391

Senate Bill 391 (2009) required the California Department of Transportation to develop a California Transportation Plan (CTP) to demonstrate how California can reduce transportation sector greenhouse gas emissions to 80 percent below 1990 levels by 2050. The CTP is updated every 5 years and the current plan, CTP 2050, identifies the statewide integrated transportation system needed to achieve GHG reductions and demonstrates how major metropolitan areas, rural areas, and state agencies can coordinate planning efforts to achieve critical statewide goals. The 2045 Regional Transportation Plan is consistent with the California Transportation Plan 2050.

In addition to SB 391, notable California climate legislation includes Executive Order (EO) B-55-18 requiring carbon-neutrality by 2045, SB 100 requiring 100 percent clean energy by 2045, EO N-19-19 requiring California to redouble efforts to reduce GHG emissions, and EO N-79-20 requiring new auto sales to be 100% zero-emission vehicles (ZEV) by 2035.¹

National Transportation Performance Measures

In 2012, the national transportation reauthorization bill, Moving Ahead for Progress in the 21st Century (MAP-21) was signed into law. MAP-21 requires the Federal Highway Administration (FHWA) to establish transportation performance measures that make progress toward the following national goals:

- **Safety**—to achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- **Infrastructure condition**—to maintain the highway infrastructure asset system in a state of good repair.

- **Congestion reduction**—to achieve a significant reduction in congestion on the National Highway System (NHS).
- **System reliability**—to improve the efficiency of the surface transportation system.
- **Freight movement and economic vitality**—to improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
- **Environmental sustainability**—to enhance the performance of the transportation system while protecting and enhancing the natural environment.
- **Reduced project delivery delays**—to reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

MAP-21 also requires each State and Metropolitan Planning Organizations (MPO) to set performance targets for these measures. The 2015 Fixing America's Surface Transportation (FAST) Act, the successor federal act, continues MAP-21's performance management approach, within which states invest resources in projects that collectively will make progress toward national goals. The goals, policies, targets, and project list established for the 2045 RTP are consistent with national performance measures.

Safety was the first national goal to go into effect under MAP-21 and includes five performance measures: number of fatalities, number of serious injuries, rate of fatalities per 100 million vehicle miles traveled, rate of serious injuries per 100 million vehicle miles traveled, and number of non-motorized fatalities and serious injuries. Caltrans coordinates with the Office of Traffic Safety to establish annual statewide performance management targets (SPMT).² MPOs can decide to use the same safety targets as the state or establish their own. Additional performance measure targets that the State will be required to meet will be established in the near future.

The FAST Act requires that if the State has failed to meet (or to make significant progress toward meeting) its performance targets, the State must describe in its next performance report to FHWA the actions it will take to achieve these targets. State DOTs and MPOs will be expected to use the information and data generated as a result of the performance management regulations to inform their transportation planning and programming decisions.

Complete Streets

Complete streets planning is a key policy consideration in the 2045 Regional Transportation Plan. The California Complete Streets Act of 2008, and renewed in 2014, requires cities and counties to identify how the needs of all users of the transportation system will be accommodated in the circulation element of their general plan. This includes pedestrians, transit riders, bicyclists, and motorists, regardless of ages and abilities. Figure 4.3 illustrates this concept of complete streets for all users. Complete Streets are equitable, healthy, cost-effective, good for environment, and improve access to goods and services. Complete Streets principles are incorporated into the 2045 RTP.

The RTC, in collaboration with AMBAG, TAMC, and SBCOG, published a Monterey Bay Area Complete Streets Guidebook in 2013.³ The guidebook provides resources to local jurisdictions for developing streets

in the Monterey Bay Area that meet the needs of all users, including non-drivers of all ages and abilities, and help reduce greenhouse gas emissions by encouraging bicycle, pedestrian and transit usage. Items from the checklist that is included in the guidebook are integrated into RTC grant applications as a means to assist local agencies in integrating complete streets components into projects.



Figure 4.3 – Complete Streets for All Users

Complete Streets are designed and operated to enable safe use and support mobility for all users

Source: Calbike.org

Threading complete streets throughout the goals and policies creates a shift in planning primarily for cars to increasing focus on the movement of people using all modes. One way of looking at it is: if people are the lifeblood of a community, then streets are its veins and arteries. From the complete streets perspective, streets not only serve the traditional role of connecting people to important destinations quickly, but they can serve as destination themselves, as places to walk with friends, ride a bicycle, view public art or enjoy social interactions.

Health and Assembly Bill 441

Health and health equity concerns have also been incorporated into the goals, policies and targets of the 2045 Regional Transportation Plan. Assembly Bill 441 (AB 441), championed by local Assemblyman Bill Monning and signed by Governor Brown in September 2012, acknowledges that California and the nation are facing unprecedented levels of chronic disease, which now accounts for approximately 73 percent of all deaths in California⁴ and 75 percent of all United States health care expenditures⁵.



Active transportation projects can improve public health through increased physical activity

The health of California's population is largely determined by the environments in which people live. These environments, including the transportation infrastructure, shape the choices that people make every day. AB 441 requires the California Transportation Commission (CTC) to promote health and health equity as part of the Regional Transportation Plan guidelines. In the 2017 revision of the RTP guidelines, the CTC provided a summary of the policies, practices, or projects that have been employed by metropolitan planning organizations that promote health and health equity.

Social Equity and Environmental Justice

Social equity refers to the equitable distribution of impacts (benefits, disadvantages and costs) regardless of income status or race and ethnicity.⁶ Including a comprehensive range of community interests guides the RTP development process and is required by both federal regulation and state law. Providing more transportation and mobility choices such as increased transit, bicycle, and pedestrian facilities, benefits all segments of the population at all income levels. Title VI of the federal Civil Rights Act of 1964, Section 11135 of the California Government Code, and Executive Order 12898 on Environmental Justice require planning agencies to be sensitive to how all residents, particularly low-income communities and communities of color, may be impacted by possible transportation and land use changes identified in the RTP. Caltrans, as part of the CTP 2050 transportation plan, also includes a goal about social equity to “eliminate transportation burdens for low-income communities, communities of color, people with disabilities, and other disadvantaged groups.” Social equity factors considered in development of the 2045 RTP include transportation affordability and access to transportation.

Existing federal regulations require the RTC ensure that any planned regional transportation improvements do not have a disproportionate adverse impact on low income or other under-represented groups, and that low-income and minority populations receive equal benefits, on an equally timely basis, as other populations. The 2045 RTP has been developed to address the transportation needs of the entire community and attempts to ensure that no one community bears more of the benefits or burdens of transportation investments than any other. RTP sustainability policies and targets include specific measures focused on the needs of people who are “transportation disadvantaged”⁷ due to income, age, race, disability or of limited English proficiency. In accordance with Title 23 CFR Part 450.316(a)(1)(vii) the RTC has worked with the Association of Monterey Bay Area Governments (AMBAG) to develop a public participation plan⁸ which describes explicit procedures, strategies, and desired outcomes for seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as low-income and minority households, who may face challenges accessing employment and other services.

Targets

The Santa Cruz County Regional Transportation Plan identified measurable outcomes, called targets, for the first time in the 2014 RTP. Voluntarily establishing targets, each linked to a sustainability goal, utilizes performance-based planning to inform investment priorities to create the desired future. Striving to reach specific and measurable outcomes is consistent with the STARS recommended approach of backcasting.

Backcasting is a planning method that defines a desired future outcome, and then works back to identify policies that can be implemented in the present that will promote the defined outcome. Backcasting allows communities to collectively focus on what they want to see happen, then select, evaluate, and implement projects and programs that move the community toward these agreed upon outcomes.

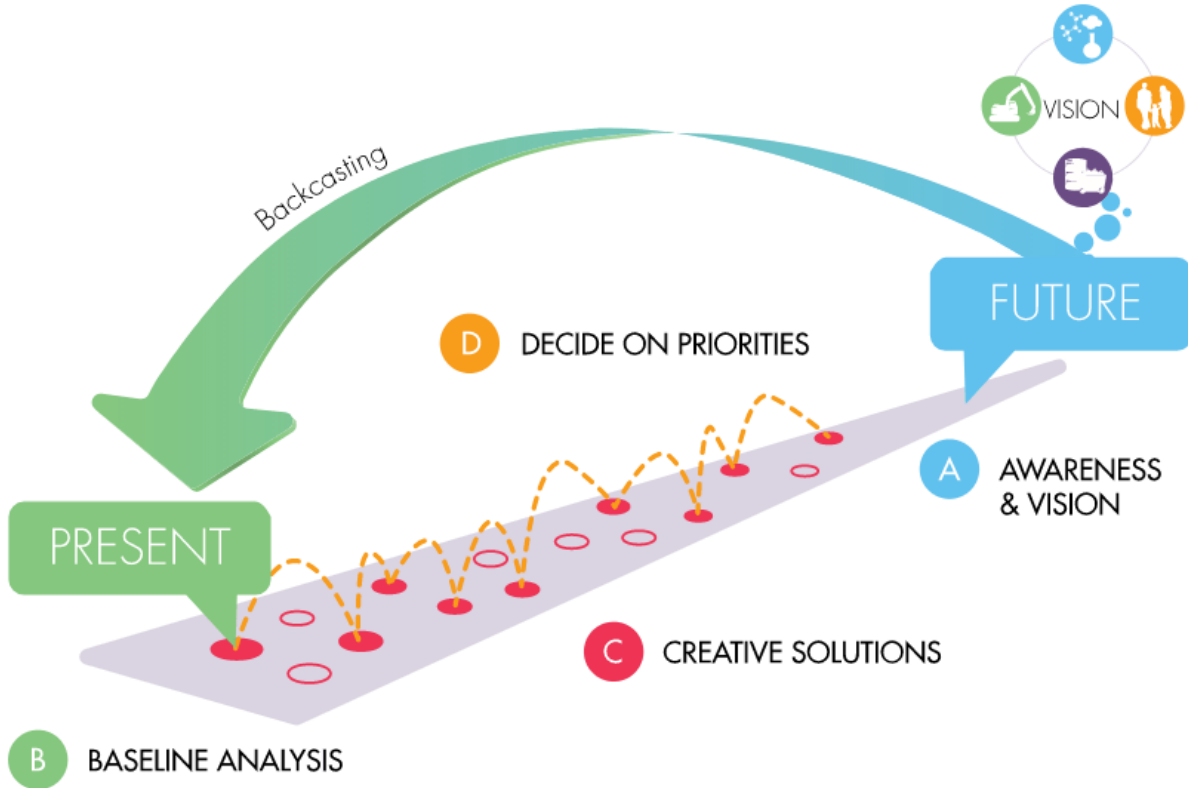


Figure 4.4 – Backcasting Planning Process

Backcasting is a planning method that starts with defining a desirable future and then works backwards to identify policies and programs that will connect that specified future to the present.

The targets have been updated for the 2045 RTP and are shown in Figure 4.3. The adopted targets are intended to be aggressive, but reasonably obtainable. Unlike more broadly scoped community plans, the adopted targets focus on areas that transportation policies can affect. The targets reflect community input received (Appendix A). They were carefully crafted to be consistent with state and federal goals, and to work with available data and travel demand model outputs.

The adopted goals, policies, and targets were used to prioritize projects for funding in the transportation investment program portion of the 2045 RTP. Incorporating targets into the goals and policies enables the Regional Transportation Commission to assess how well the long-range plan will perform over time. Details on monitoring performance of the transportation system in advancing the targets are discussed in Chapter 7 – System Performance. The complete list of goals, policies, and targets for the 2045 RTP can be found in Appendix C.

	Outcomes Advanced							
	People			Prosperity			Planet	
	Access & Mobility	Health	Safety	Equity	Economic Resilience	Cost Effectiveness	Climate & Energy	Ecological Function
2045 Sustainability Targets								
Goal #1: Establish livable communities that improve people's access to jobs, schools, recreation, healthy lifestyles, and other regular needs in ways that improve health, reduce pollution, and retain money in the local economy.								
Target 1.A.1 – Increase the length of urban bikeway miles relative to total urban arterial and collector roadway miles to 85 percent by 2030 and to 100 percent by 2045.	✓	✓	✓	✓	✓	✓	✓	
Target 1.A.2 – Increase the transit vehicle revenue miles by 8 percent by 2030 and 20 percent by 2045 (compared to 2020).	✓			✓	✓	✓	✓	
Target 1.B.1 – Reduce <u>per capita</u> vehicle miles traveled by 4 percent by 2030 and by 10 percent by 2045 (compared to 2005).		✓			✓		✓	
Target 1.B.2 – Reduce <u>per capita</u> greenhouse gas emissions by 50 percent by 2030 and by 78 percent by 2045 and <u>total</u> greenhouse gas emissions from transportation by 40 percent by 2030 and 70 percent by 2045 (compared to 2005) through electric vehicle use, clean fuels, and other emerging technologies, reduction in vehicle miles traveled and improved speed consistency.		✓			✓		✓	
Target 1.B.3 – Re-invest in the local economy \$8.5 million/year by 2030 and \$14 million/year by 2045 (compared to 2005) from savings resulting from lower fuel consumption due to a reduction in vehicle miles traveled.	✓				✓	✓	✓	
Target 1.C.1 – Improve percentage of reliable person miles traveled by 3 percent by 2030 and by 8 percent by 2045 (compared to 2020).	✓				✓		✓	
Target 1.C.2 – Improve multimodal network quality for walk and bicycle trips to and within key destinations by increasing the percentage of buffered/separated bicycle and multiuse facilities to 42 percent of bikeway miles by 2030 and to 64 percent by 2045.	✓	✓	✓	✓	✓	✓	✓	

2045 Sustainability Targets	Outcomes Advanced							
	People			Prosperity			Planet	
	Access & Mobility	Health	Safety	Equity	Economic Resilience	Cost Effectiveness	Climate & Energy	Ecological Function
Target 1.D.1 – Decrease single occupancy commute trip mode share by 6.5 percent by 2030 and by 10 percent by 2045 (compared to 2020).	✓	✓	✓	✓	✓	✓	✓	
Target 1.D.2 – Increase the number of active commute trips to 16 percent of total commute trips by 2030 and to 24 percent of total commute trips by 2045.	✓	✓	✓	✓	✓	✓	✓	
Goal #2 – Reduce transportation related fatalities and injuries for all modes.								
Target 2.A – Vision Zero: Eliminate traffic fatalities and serious injuries by 2045 for all modes. By 2030, reduce fatal and serious injuries by 50 percent (compared to 2020).		✓	✓	✓	✓			
Goal #3 – Deliver access and safety improvements cost effectively, within available revenues, equitably and responsive to the needs of all users of the transportation system, and beneficially for the natural environment.								
Target 3.A.1 – Increase the percentage of pavement in good condition to 50 percent by 2030 and 80 percent by 2045.			✓		✓	✓		
Target 3.A.2 – Reduce the number of transit vehicles in “distressed” condition to 20 percent by 2030 and to 10 percent by 2045.						✓	✓	
Target 3.B.1 – Improve travel options for people who are transportation disadvantaged due to income, age, race, disability or limited English proficiency by increasing transit vehicle revenue miles (see Target 1.A.2.) and reducing transit travel times by 15 percent by 2030 and by 30 percent by 2045 (compared to 2020).	✓			✓	✓	✓	✓	

2045 Sustainability Targets	Outcomes Advanced							
	People			Prosperity			Planet	
	Access & Mobility	Health	Safety	Equity	Economic Resilience	Cost Effectiveness	Climate & Energy	Ecological Function
Target 3.B.2 – Ensure that transportation benefits are equitably distributed and that transportation burdens do not disproportionately affect transportation-disadvantaged populations.			✓	✓	✓	✓		
Target 3.C.1 – Maximize participation from diverse members of the public in RTC planning and project implementation activities.	✓	✓	✓	✓	✓		✓	
Target 3.D.1 – Increase the amount of transportation funding by 20 percent by 2030 (compared to 2020) from a combination of local, state and federal funds.	✓	✓	✓	✓	✓	✓		

Figure 4.5 – 2045 Regional Transportation Plan Performance Targets and Relationship to Triple Bottom Line

Source: Santa Cruz County Regional Transportation Commission

Notes for Chapter 4

- ¹ “California Transportation Plan 2050,” Caltrans. (February 2021). <https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/ctp-2050-v3-a11y.pdf>
- ² “Safety Performance Management Targets for 2021,” Caltrans. (2021). <https://dot.ca.gov/-/media/dot-media/programs/federal-liaison/documents/2021-spmt-a11y.pdf>
- ³ “Monterey Bay Area Complete Streets Guidebook,” SCCRTC. (August 2013). <http://sccrtc.org/projects/multi-modal/santa-cruz-county-complete-streets/monterey-bay-area-complete-streets-guidebook/>
- ⁴ “The Burden of Chronic Disease and Injury – California, 2013,” California Department of Public Health (2013), <http://www.cdph.ca.gov/programs/Documents/BurdenReportOnline%2004-04-13.pdf>.
- ⁵ “Chronic Disease Prevention and Health Promotion,” Centers for Disease Control and Prevention, accessed December 2013, <http://www.cdc.gov/chronicdisease>.
- ⁶ Litman, Todd. “A New Social Equity Agenda for Sustainable Transportation,” Victoria Transport Policy Institute. (March 2012). <https://www.vtpi.org/equityagenda.pdf>
- ⁷ Transportation disadvantaged communities are defined as Low Income Areas: any Census tract in which 33 percent or more of residing families in an area earned less than 200% of the federal poverty level annually. Minority Areas: any Census tract in which 65 percent or more of the total population residing in an area are non-White.
- ⁸ “2019 Public Participation Plan,” AMBAG. (October 2019). https://sccrtc.org/wp-content/uploads/2019/10/Final_2019_PPP_with_Appendices.pdf