



COUNTYWIDE ACTIVE TRANSPORTATION PLAN



1

VISION & PRIORITIES

June 2019

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1 | Introduction

This chapter provides an overview of the Plan's purpose and need, how it was developed, and how it can be used by cities and Alameda CTC's partner agencies.

1.1 Plan Purpose and Need

Safe and convenient places for walking and biking are critical for vibrant, sustainable, and livable communities. Everyone walks, bikes, or uses a mobility device, such as a walker or wheelchair, each day to visit friends, get to and from work or school, or run errands. Together, biking and walking allow for sustainable and affordable travel, and improve access to employment, recreation, school and other opportunities. Biking and walking also create important connections to transit and viable options for traveling shorter distances without reliance on cars. Walking and biking with frequency is associated with personal health benefits. The current pace of global warming and sea level rise has the potential to make active transportation less comfortable, impact the available inhabitable land, and dramatically increase the cost of building and maintaining transportation infrastructure. The recommendations of the Plan, and the promotion of active transportation, will play an important role in reversing these trends by promoting a reduction in greenhouse gas emissions from the transportation sector.



Previous Alameda Countywide Plans addressed walking and biking separately under a Countywide Pedestrian Plan and a Countywide Bicycle Plan, respectively. Those plans were last updated in 2012 and were built off of the first Pedestrian and Bicycle Plans adopted by Alameda CTC in 2001. The two have been combined under a single Countywide Active Transportation Plan (Plan) because, while different, the two modes share several commonalities, including:

- Overlapping funding sources
- Integrated complete street policies and design
- Data collection
- Sensitivity to similar roadway characteristics (e.g., road speeds and separation from cars)
- Similar benefits to communities (e.g., walking and biking for shorter trips improve local economies and create more connected, vibrant, affordable, and sustainable communities)

The purpose of the Plan is to guide Alameda CTC in coordinating and facilitating implementation of pedestrian and bicycle facilities and programs of countywide significance throughout Alameda County and its four planning areas.

This Plan considers changes since 2012.

- Development of the Countywide Multimodal Arterial Plan
- Advancements in the fields of pedestrian and bicycle planning and design
- Advancements in the planning and construction of local jurisdiction bicycle and pedestrian networks, and their policies and programs
- New funding opportunities

This plan aids Alameda CTC.

- Documents local and regional existing conditions and best practices
- Identifies a continuous and connected bikeway and trail network to access major activity centers and transit nodes for cyclists and walkers of all ages and abilities
- Identifies projects of regional significance, including regional trails, major barriers, and gaps in cross-jurisdictional connectivity
- Recommends programs and policies which complement infrastructure recommendations, encourage use of active transportation modes, and are consistent with state and regional goals
- Develops performance measures to track progress over time (e.g., mode shift, increased biking/walking activity, safety, connectivity, etc.)
- Creates cost estimates for different facility and improvement types and identifies range of potential revenue sources
- Guides funding decisions
- Guides capital project implementation and Alameda CTC's internal work plan

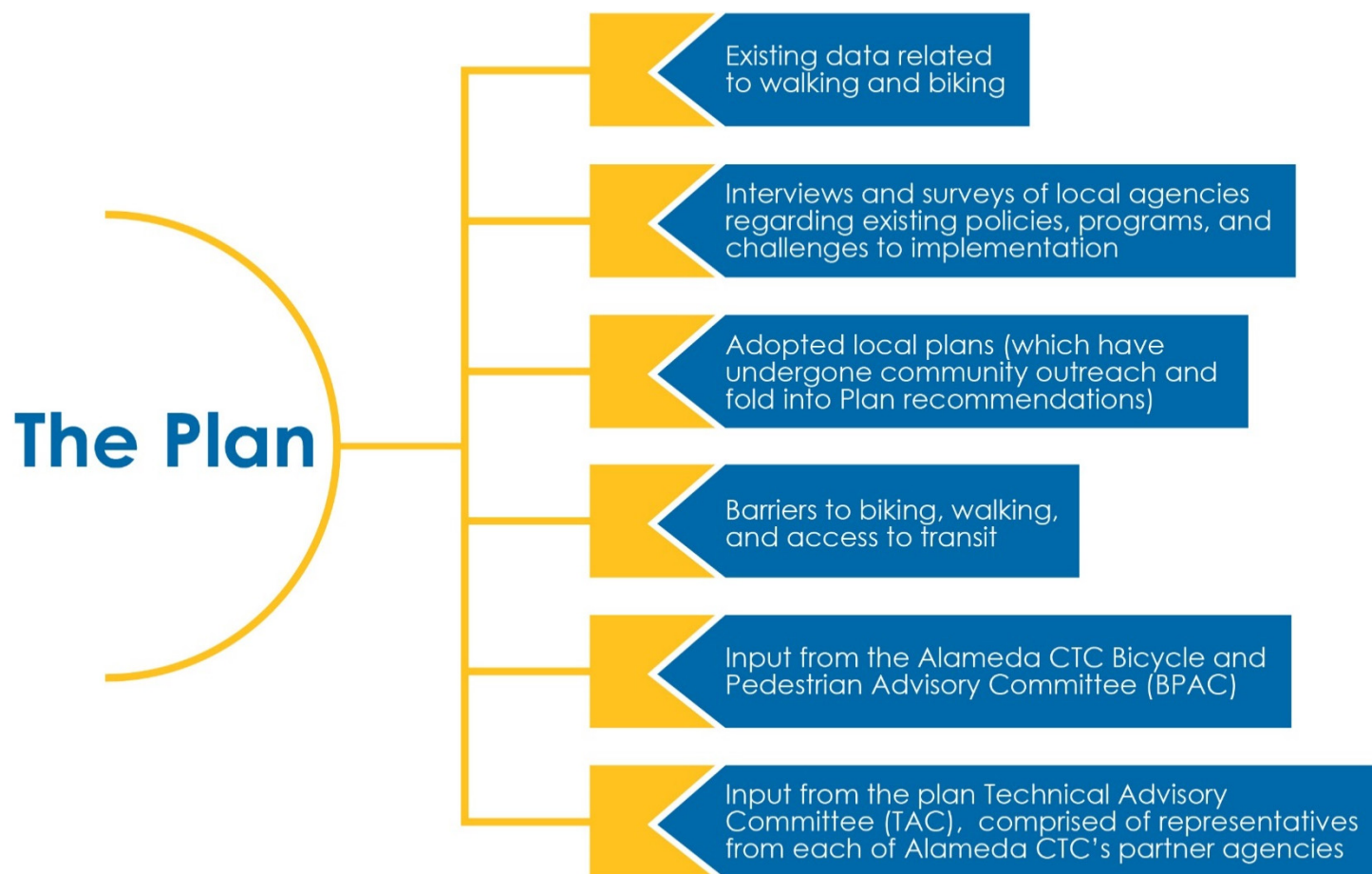
This Plan is a resource to local agencies.

- Identifies local, regional, and national best practices for active transportation planning and design
- Emphasizes planning walking and bicycling networks and improvements with a focus on connections to transit
- Recommends policies and programs for implementation at multiple levels of government
- Summarizes local, state, and regional policies which affect active transportation planning at the local jurisdiction level
- Provides clarity on funding priorities for Alameda CTC
- Presents level of traffic stress assessment and high-injury network analysis

1.2 Plan Development Process

The Plan was developed with the intention of serving as a resource for: (1) local agencies in their planning and implementation of walking and biking improvements, and (2) Alameda CTC for prioritizing and implementing improvements that are of countywide significance.

The content and recommendations in the Plan were informed by several inputs:



1.3 How to Use the Plan

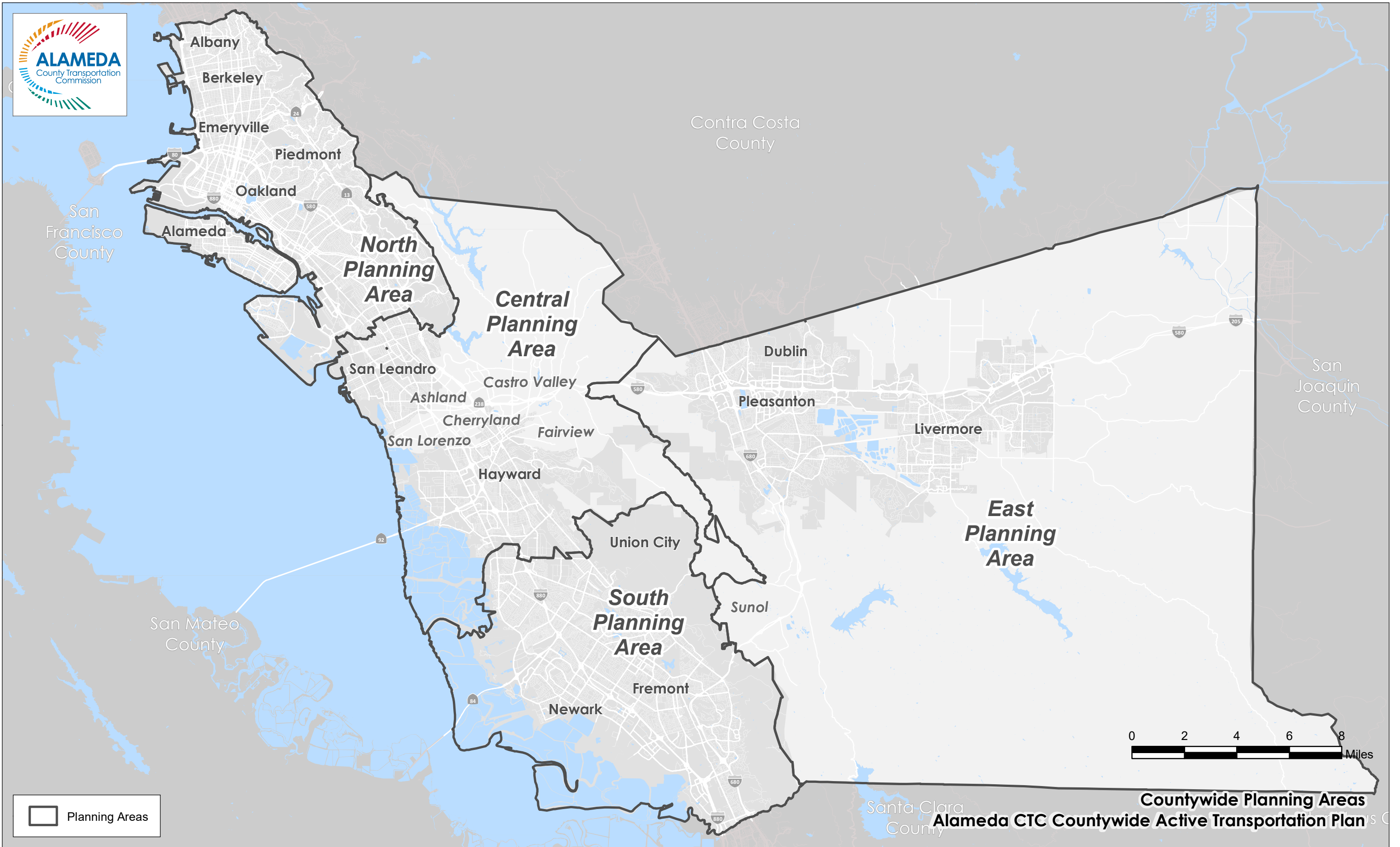
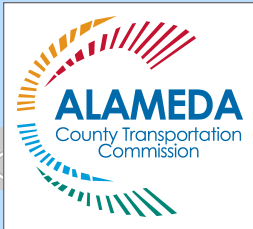
This Plan was developed to provide an instrument for regional and local planners to advance active transportation projects and programs in Alameda County. At the countywide level, the Plan will provide an active transportation framework to help guide funding decision-making processes and work programs at Alameda CTC. At the local level, the Plan will help advance projects included in local active transportation plans to provide complete, safe, and connected networks, including better connection to the regional transit network. Though the project prioritization process, Alameda CTC staff could use the Plan as a resource. Following this introduction is a chapter summarizing the Plan's primary recommendations and implementation actions. For detailed information forming the basis for these recommendations and actions, see the following:

- **Book 1: Countywide Vision and Priorities** – Presents the Plan vision and goals as well as the recommendations related to capital project investment, programs, policies, and plans, including priority implementation actions and performance measures for tracking the Plan's progress.

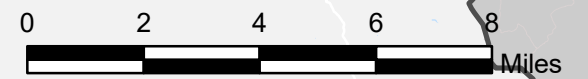
- **Book 2: The State of Biking and Walking in the County** – Discusses the “what, where, and who” of walking and biking in Alameda County. Also presents analysis results for comfort, connectivity, and safety of biking and walking facilities under current conditions. Discusses barriers such as waterways, rail tracks, and freeways that create gaps and sever connections in the pedestrian and bicycle networks in the county.
- **Book 3: Community Profiles** – Discusses biking and walking at the community level (cities and unincorporated communities). Provides an overview of local high injury networks. Presents planned jurisdiction bikeway networks and bicycle and pedestrian comfort and connectivity at the local level. Also discusses the countywide trail network and desired countywide walking conditions.
- **Book 4: Taking Action** – Presents a summary of existing and recommended plans, programs, and policies related to walking and biking across Alameda County and unit cost information to help estimate, at a planning level, potential capital and maintenance costs associated with a range of walking and biking improvements. Also presents potential revenue sources available to help fund walking and biking improvements.

Local agencies or other partner agencies intending to:

- Update local plans, policies or programs are encouraged to consider the recommendations described in Chapter 2 of this book.
- Develop specific capital projects are encouraged to consider the countywide biking and trail networks in Book 2, countywide desired walking conditions, also in Book 2, and the cost and revenue information in Book 4.
- Apply for funding from Alameda CTC for specific capital projects are encouraged to consider the priority criteria for capital investment in Chapter 2 of this book.



□ Planning Areas



Countywide Planning Areas
Alameda CTC Countywide Active Transportation Plan

2 | Countywide Vision and Priorities

This chapter presents the vision and goals developed to guide Alameda CTC investments improving active transportation. It also discusses how Alameda CTC will determine countywide priorities for capital projects as well as the complementary programs and policies. The chapter closes by summarizing priority implementation actions and performance measures Alameda CTC will use to track the progress of the Plan's implementation.

2.1 Plan Vision and Goals

The Plan's vision and goals directly inform recommendations and embody Alameda CTC's role as a coordinating agency that provides technical assistance and funding for active transportation projects.

2.1.1 Vision

The Alameda County transportation system should inspire people of all ages and abilities to walk and bike for everyday transportation, recreation, and health, by providing a safe, comfortable, and interconnected network that links to transit and major activity centers and by supporting programs and policies that encourage biking and walking.

2.1.2 Goals

The goals below were used to form the priority criteria for capital investment (discussed further in section 2.2) and to shape the program and policy recommendations. It is through these goals and the corresponding priority criteria for capital investment that Alameda CTC will fulfill its role of investing in and facilitating walking and biking in the county.



2.2 Countywide Priorities

Alameda CTC identified countywide priorities organized around capital investments, programs, policies, and plans. A key overarching consideration across the priorities identified is the ability to implement changes of countywide significance that advance walking and biking.

Priority projects must either improve safety; overcome major barriers; improve connections to transit, trails or between jurisdictions; or serve disadvantaged populations.

2.2.1 Priority Criteria for Capital Investment

Alameda CTC will use the criteria to evaluate and prioritize active transportation projects. Priority projects must either improve safety; overcome major barriers; improve connections to transit, trails, or between jurisdictions; or serve disadvantaged populations. Projects which meet multiple criteria will receive the highest priority. The criteria below align with Alameda CTC's ultimate priority, which is to promote projects of countywide significance. There are primary and secondary criteria to account for the diversity of conditions throughout Alameda County and the importance of access to safe bicycling and walking conditions for many different purposes. The priority criteria will be used to evaluate discretionary grants given by Alameda CTC, where Alameda CTC is the lead agency.

Criteria		Goals			
		Safety	Multimodal Connectivity	Encouragement	Impactful Investment
Primary	Countywide High Injury Network	●			
	Major Barriers (including barriers to accessing transit, countywide trails, and interjurisdictional barriers)	●	●	●	
	Communities of Concern				●
Secondary	Local High Injury Network	●			
	Access to Major Activity Centers		●	●	●

2.2.1.1 Primary Criteria

The Plan prioritizes projects that meet the following criteria, presented as primary criteria and secondary criteria (which supplement the priorities but provide less weight in priority than the primary criteria). These criteria would then be used along with common programming criteria, including project readiness, for example.

- **Countywide High Injury Network** – Projects that are located on or provide direct proximate alternatives to the countywide High Injury Network (HIN). Projects that improve safety of both biking and walking will be more competitive for funding than those that address only one mode (countywide bicycle, pedestrian, and combined high injury networks were identified as part of the existing conditions phase of the Plan, shown in Book 2, The State of Walking & Biking in the County, section 1.6.3).

The High Injury Network (HIN) identifies the worst performing streets based on severity and frequency of collisions.

- **Major Barriers** – Projects that resolve or remove a barrier of countywide significance (e.g., railways, waterways, freeways, arterials). Book 2 contains additional information about barriers of countywide significance. Projects should improve access to:
 - Regional Transit – Barriers to accessing regional transit nodes for bicyclists and pedestrians; regional transit nodes include rail stations, ferry terminals, and major bus hubs (stop where multiple lines converge, and/or with high ridership and frequent service)
 - Connectivity between Jurisdictions – Barriers created by gaps in interjurisdictional connectivity, particularly discontinuities in the low stress network occurring at city boundaries given the countywide significance of connecting jurisdictions
 - Regional Trails – Barriers to safe and convenient travel along the regional trail network (e.g., high stress crossings of major arterials or gaps in trails)

Among major barriers, those representing connections of regional significance are of the highest priority; often, projects at these locations may require approvals from an outside agency and cooperation among many stakeholders. Major barriers are presented and discussed in Book 2, The State of Biking & Walking in the County, section 9.

- **Communities of Concern** – Projects located within a Metropolitan Transportation Commission (MTC)-designated Community of Concern. Projects that fulfill this criterion will also meet the requirements of the Statewide Active Transportation Planning Grant (ATP), increasing the likelihood of being funded by existing regional and state grant programs.

2.2.1.2 Secondary Criteria

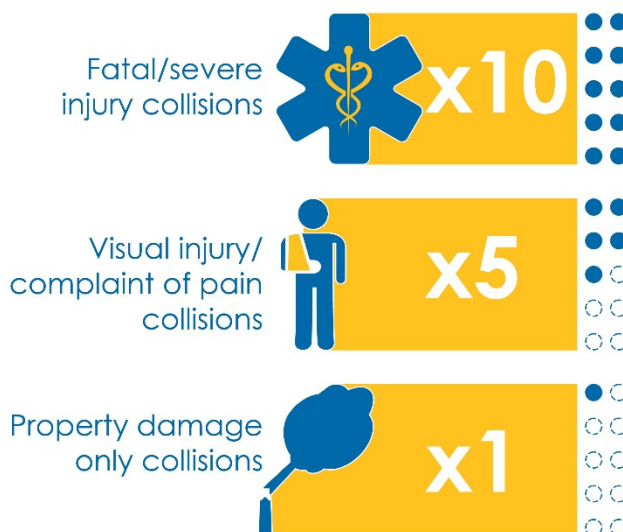
- **Local High Injury Network (HIN)** – Projects that are located on a local high injury network, defined as streets that rank in the highest 10% within the jurisdiction based on severity-weighted frequency of collisions (shown in Book 3). If local jurisdictions develop their own HIN, they may potentially use this but should discuss with Alameda CTC.
- **Access to Major Activity Centers** – Projects that overcome barriers to accessing major activity centers and destinations, such as employment centers, high-density downtown areas, and transit hubs

2.2.1.3 Background Regarding Primary and Secondary Criteria

2.2.1.3.1 High Injury Network

As is common in many locations nationwide, collisions in jurisdictions across Alameda County are often concentrated within a few particularly high-risk streets. Addressing unsafe conditions on those streets can significantly reduce collisions systemwide. Countywide collision data from the University of California, Berkeley, Transportation Injury Mapping System (TIMS) database and the California Statewide Integrated Traffic Records System (SWITRS) database from the most recent five years (2012-2016) were used to identify locations within Alameda County with the highest frequency and severity of collisions involving people biking and walking. The analysis evaluated collisions that occurred on public streets within unincorporated and incorporated areas of Alameda County. It excluded freeway mainlines but included the ramp terminal intersections of freeways.

The analysis included pedestrian and bicycle collisions of all severity levels. More severe collisions were weighted more heavily than other collisions. The assigned weighting intentionally treats fatal and severe injuries equally to recognize that the difference between a severe injury collision and a fatal collision is often more of a function of the individuals involved than the collision itself (e.g., more fragile/vulnerable individuals such as children are likely to have worse outcomes than stronger individuals). However, both represent locations where the Alameda CTC may want to prioritize improvements. The weighting used is illustrated below:



Countywide HIN: Concentrations of collisions are also impacted by the number of people biking and walking, and levels of biking and walking activity (exposure) vary greatly across Alameda County. To ensure that the countywide HIN captured conditions throughout Alameda County, the analysis also took usage into account. Cities were grouped based on walking and cycling commute rates (i.e., low, medium, high). Within each group, the HIN was defined as streets that ranked in the top 20%, based on frequency and severity of collisions.

Local HIN: The local HIN was included to consider projects that improve safety on parts of the network with lower exposure. Using the same methodology described above, local HIN were created by identifying streets where a crash had occurred and grouped into one of four percentile groups based on frequency and severity of collisions (0 to 50th, 50th to 75th, 75th to 90th, and 90th to 100th percentile).

2.2.1.3.2 Major Barriers and Gaps in Interjurisdictional Connectivity

Major barriers include freeways, bodies of water, and rail lines, as well as barriers created by gaps in the low stress biking network, which prevent comfortable access to major transit hubs and/or between local jurisdictions within Alameda County. These barriers were identified using GIS data, integrating analyses presented in more detail in Book 2, The State of Biking & Walking in the County, section 1.3.

2.2.1.3.3 MTC's Communities of Concern

Communities of Concern (CoCs) are areas that include a high share of individuals who face particular transportation challenges because of affordability, language, access to a car, family status, disability, and/or age-related mobility limitations. They are intended to represent a diverse cross-section of populations and communities that may be considered disadvantaged. MTC designates Communities of Concern geographies based on eight American Community Survey census tract variables:

- Minority (70% threshold)
- Low-Income (less than 200% of federal poverty level, 30% threshold)
- Level of English proficiency (12% threshold)
- Elderly (10% threshold)
- Zero-Vehicle Households (10% threshold)
- Single Parent Households (20% threshold)
- Disabled (12% threshold)
- Rent-Burdened Households (15% threshold)

A census tract exceeding both threshold values for low-income and minority shares or exceeding the threshold value for low-income and for three or more other variables, is categorized as CoC.

2.2.1.3.4 Trail Projects

There are several regional trails traversing Alameda County that provide safe, low stress separated facilities for bicyclists and pedestrians (e.g., the East Bay Greenway, Iron Horse Trail, Bay Trail, Ohlone Greenway). These are used for daily commuting, other daily travel, and recreation. Prioritization of trail projects will use the same general criteria: location on the HIN, linear barriers, access to regional transit, gaps in low stress network, gaps in interjurisdictional connectivity, and location in CoCs. Additionally, trail projects inherently solve many safety and barriers challenges that exist with on-street facilities and provide utility for a high number of users if part of a complete network.

2.2.2 Priority Programs and Policies

Based on existing programs and policies (documented in Book 3) as well as local agency interviews, Alameda CTC identified the following countywide strategies for program and policy implementation as well as resources and trainings to provide direct support to local jurisdictions.

- **Program Expansion:** Continue to expand the Safe Routes to Schools and Student Transit Pass programs
- **Safety:** Explore Vision Zero policy support and local jurisdiction frameworks
- **Countywide Projects:** Identify projects or feasibility studies that focus on barriers of countywide significance, e.g. freeway crossings, regional routes that connect jurisdictions, and work towards a complete East Bay Greenway and Bay Trail, along with connections that enhance access to regional trails
- **Integration with Transit:**
 - Consider conducting studies to address storage of more than three bicycles on transit buses
 - Consider conducting a study to address regional transit station and bus stop access
 - Coordinating trainings related to the design of bicycle and pedestrian treatments along transit corridors
- **Funding:**
 - Explore funding options for the operation and maintenance of regional trails
 - Provide guidance and explore funding options for maintenance of on-street bicycle facilities
- **Health/equity:** Provide resources for evaluating health and equity
- **Communication:** Create a forum to enhance communication and coordination between jurisdictions, especially regarding the implementation of local innovative projects
- **Best Practices:** Provide resources and education/training on best practice facility design and public engagement, including identifying best practices for working with fire departments and addressing their needs through design, and encouraging the use of new and innovative design guidance from national best practice sources. Consider hosting webinars, such as Association of Pedestrian and Bicycle Professionals (APBP) webinars, as continuing education and networking opportunities, as appropriate.
- **Emerging mobility:** Provide resources related to shared- and micro-mobility
- **Bike Parking:** Provide guidance on bicycle parking standards to improve end-of-trip facilities consistently across the County

2.3 Performance Measures

Alameda CTC routinely measures the performance of the entire multimodal transportation system and uses this data to track progress towards key goals and to deepen an understanding of the multimodal transportation system. This monitoring involves all components of the multimodal system including roads, transit, freight, and active transportation. The Plan provides an opportunity to revisit some of the active transportation performance measures, refine them, and consider new measures by which to best assess progress towards achieving the goals of the Plan.

2.3.1 Collisions

Reducing collisions and improving safety remains one of the primary goals of the Plan. Alameda CTC will continue to track collisions that involve people biking and walking throughout the county. The project team is currently developing a white paper to refine the methodology being used to track these data and improve reporting in a way that better aligns with the strengths and weaknesses of the Statewide Integrated Traffic Records System (SWITRS).

2.3.2 Bike Facility Completion

Alameda CTC has periodically asked jurisdictions to report new construction of bicycle facilities. Continuing to request these data will allow Alameda CTC to track the completion of the bicycle vision network and assess multimodal connectivity.

2.3.3 Program Evaluations

Alameda CTC regularly compiles evaluations for programs like Safe Routes to School and the Affordable Student Transit Pass Pilot Program. Additionally, staff collect information on participation in outreach programs like Bike to Work Day and Bicycle Safety Education classes. Alameda CTC will continue to monitor the progress of the educational/encouragement program activities as well as the school site assessments and the impacts of these activities on the mode of transportation used by children and parents for the trip to and from school.

2.3.4 Commute Trips

Understanding commuter patterns is fundamental for anticipating multimodal travel demand. Alameda CTC has consistently reported changes in mode share and commute origins and destinations, using data provided by the US Census Bureau. Although commute trips do not offer a complete picture of actual active transportation behavior and demand, they are some of the most regular and predictable trips we make. Therefore, commute trips remain important to understand. Alameda CTC will continue to track commute patterns by mode as well as origins and destinations.

2.3.5 Bicycle/Pedestrian Count Program

Alameda CTC's Bicycle and Pedestrian count program provides direct observed data on bicycle and pedestrian activity in Alameda County. The agency has collected count data in various forms since 2002. The current program consists of annual in-person manual counts of bicyclists, pedestrians, and scooters at 150 locations in the county. These counts can also be used by Alameda CTC and local jurisdictions to apply for grant funding.

Performance Measure	CATP Goals			
	Safety	Multimodal Connectivity	Encouragement	Impactful Investment
Collisions	●		●	
Bicycle Facility Completion		●		
Program Evaluations	●		●	
Commute Trips (by mode)			●	
Bicycle/Pedestrian Count Program			●	●

● Primary CATP Goal(s) Met

