

Calabasas Bicycle Master Plan



Submitted to:
City of Calabasas

Submitted by:

FEHR & PEERS

600 Wilshire Boulevard, Suite 1050
Los Angeles, CA 90017

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1. Introduction

In Southern California, driving often seems like our only transportation option. With its Mediterranean climate and nearly 300 days of sunshine annually, the City of Calabasas is an ideal place to walk and bike for transportation or recreation. To create a pedestrian and bicycle friendly environment, we must appreciate the users and create a landscape which makes walking and biking feasible, pleasurable and safe. The purpose of the Calabasas Pedestrian and Bicycle Master Plan (CPBMP) is to provide an overview and critique of pedestrian and cycling infrastructure within the City of Calabasas, to recognize the positives in Calabasas' existing landscape, and to make recommendations for improvements. These policy recommendations will serve as a guide for future grant proposals, public works endeavors, and legislative decisions that impact pedestrians and cyclists. In addition, the CPBMP as envisioned is a constituent based plan that aims to compliment the pre-existing General Plan already adopted by the City, yet adding further insight to the common goal – setting standards for agency action.

The City of Calabasas, located in northwest Los Angeles County about 29 miles from downtown Los Angeles, is adjacent to the cities of Hidden Hills and Agoura Hills and is a gateway to Malibu, via Las Virgenes Road. Incorporated on April 5, 1991, Calabasas is governed by a five-member City Council, has an active citizenry, and takes pride in civic activism which has insured a quality of life for its residents. The City of Calabasas covers a small area of only 12.9 square miles. The primary access to this City of 23,000 is from either US Highway 101 or Malibu Canyon Road/Las Virgenes, which connects with the Pacific Coast Highway. Calabasas is known for its reserves of open space, careful land use planning, attention to livable communities, and contains some of the most scenic and protected topography of Southern California. With Heritage Oak trees, Santa Monica Mountain peaks, ridgelines, canyons and creeks, this feeling of openness gives Calabasas its rural character.

The City of Calabasas has taken a proactive approach to transportation, both local and regional, understanding the nexus between land use development, transportation, and regional impacts. With the City's unique location along US 101, it serves as a connection between Ventura County and Los Angeles County, as well as, a gateway to the Santa Monica Mountains National Recreation Area (SMMNRA), the City of Malibu, and public beaches. This gateway to the SMMNRA has attracted many pedestrians and bicyclists, both residents of Calabasas and non-residents, for recreational and commuter cycling.

The City of Calabasas first adopted a Bicycle Master Plan (BMP) in November 1996. Updated and revised in 2005, and again in 2008, it is the guide by which the City develops and implements an effective, safe and interconnected bicycle transportation system that serves both commuters and recreational riders. The City does not currently have an adopted Pedestrian Master Plan. The CPBMP will be the first adopted pedestrian plan, providing guidance and direction towards building a pedestrian friendly community and an ever improving bicycle network.

This chapter describes the process that was used to develop the Plan, describes the contents of the Plan and outlines how these contents meet the requirements of Caltrans for BTA funding eligibility.

PLAN DEVELOPMENT AND PUBLIC INVOLVEMENT

The City of Calabasas has developed several designated bicycle facilities over the years. The development of the *BMP* comes as part of an effort by the City to address local and regional desires to enhance the

viability of bicycling as a mode of transportation and reduce transportation system impacts on local communities.

The goals, policies, recommendations, and action items in this *Plan* are the outcome of public outreach effort by the City. In 2011, the City of Calabasas worked with a group of volunteers that officially formed the Calabasas Bicycle Advisory Group (CBAG) to provide a re-focus in the development of the document towards safety and the promotion of cycling and alternative transportation in the City. CBAG, together with staff, developed the Master Plan’s Mission Statement:

MISSION STATEMENT:

To develop a cycling network that affords the citizens of Calabasas and outlying communities a safe and comfortable environment for commuters, children, and cycling enthusiasts. To provide an emphasis on “safety first” through the education of both cyclists and non-cyclists.

PUBLIC INPUT

In late 2010 and early 2011, the City of Calabasas organized the Calabasas Bicycle Advisory Group (CBAG) to meet and discuss bicycle issues and concerns and to provide recommendations. CBAG was composed of residents and bicycle enthusiasts within Calabasas and the surrounding area; the group was highly enthusiastic and provided significant assistance in establishing a direction and tone for the bicycle elements of the CPBMP.

CBAG consisted of a broad cross-section of cyclists including: commuters and recreational riders; members who wanted to increase accessibility; cyclists who are concerned with safety and education. Members included:

- Alicia Weintraub
- Sunil Bhandari
- Larry Elfenbein
- Norm Goodkin
- Victor Pesiri
- Caroline Lettieri
- Peter Huemann
- Michelle Dornfest
- Ryan Thompson
- Tatiana Holden
- Mark Seferian
- Robert Yalda

Over the span of 7 months, CBAG developed a Mission Statement for the bicycle component that emphasizes the goals of the City and its residents in the development of a bicycle master plan:

“To develop a cycling network that affords the citizens of Calabasas and outlying communities a safe and comfortable environment for commuters, children, and cycling enthusiasts. To provide an emphasis on “safety first” through the education of both cyclists and non-cyclists.”

Additionally, CBAG provided significant insight into the difficulties and dangers faced by cyclists in Calabasas, including:

- Network gaps
- Signage and striping limitations
 - Inconsistencies due to changing laws
 - Old/faded markings
- Enforcement and education
- Freeway interchange transitions

Finally, the group provided significant assistance in identifying project needs throughout the City.

Since the inception of CBAG, the CPBMP has been discussed at the Traffic and Transportation Commission at least twice a year. In early 2013, a draft of the CPBMP was posted to the City’s website encouraging Public Comment.

PLAN CONTENTS

The *Bicycle Master Plan* is presented in the following chapters:

TABLE 1-1 – BICYCLE MASTER PLAN CONTENTS

Chapter	Contents
1. Introduction	--
2. Existing Policy Framework	Summarizes the key plans, programs, policies and other planning documents that will be affected and may affect the recommendations and implementation of the Bicycle Master Plan
3. Existing Conditions	Discusses the existing local conditions relevant to bicycling and walking, including land use patterns and commuting statistics. This section also includes a variety of bicycle-specific information required for BTA compliance.
4. Proposed Bicycle Improvements	Establishes a menu of proposed network of bikeways and support facilities based on expressed needs, gaps in existing the network and key destinations and activity centers. This chapter also includes a map of the proposed network and provides a list of proposed projects based on City priorities.
5. Support Programs	Describes the bicycle and pedestrian safety and education

	<p>programs in Calabasas, and recommends additional programs or enhancements to improve the state of bicycling and walking in the city.</p>
<p>6. Funding and Implementation</p>	<p>Includes a phased implementation plan for bicycle projects based on community-input, project readiness, and connectivity. Provides planning-level cost estimates for implementation and maintenance of the proposed bicycle network. Potential funding sources are also identified. More detailed project descriptions are included for five high-priority projects, for use in grant applications.</p>

Caltrans requires that bicycle plans include certain components, as identified in Section 891.2 of the California Streets and Highway Code, to be eligible for BTA funding. **Table 1-2** summarizes these elements and the chapters of this plan in which each is addressed.

TABLE 1-2 – CALTRANS BICYCLE TRANSPORTATION ACCOUNT FUNDING REQUIREMENTS

Element	Chapter of this Plan
Number of Existing and Future Bicycle Commuters	Chapter 3 [p. 21-22]
Land Use and Settlement Patterns	Chapter 3 [p. 18]
Existing and Proposed Bikeways	Chapters 3 and 4 [Existing p. 28, Proposed p. 37]
Existing and Proposed Bicycle Parking Facilities	Chapters 3 and 4 [Existing p. 28-29, Proposed p. 38,42]
Existing and Proposed Access to other Transportation Modes	Chapters 3 and 4 [Existing p. 29, Proposed p. 42]
Facilities for Changing and Storing Clothes and Equipment	Chapters 3 and 4 [Existing p. 29, Proposed p. 42]
Bicycle Safety, Education, and Enforcement Programs	Chapter 5 [p. 43-53]
Citizen and Community Involvement in the Development of the Plan	Chapters 1 [p. 1-3]
Coordination and Consistency with Other Plans	Chapter 2 [p. 6-16]
Projects Proposed in the Plan and their Priority for Implementation	Chapter 6 [p. 60]
Past Expenditures for Bicycle Facilities and Future Financial Needs	Chapter 6 [p. 59,62]

Source: Caltrans Streets and Highway Code, Section 890-894.2

2. Existing Policy Framework

This chapter summarizes existing plans and policy documents relevant to non-motorized transportation in the City of Calabasas. These documents have been grouped into City of Calabasas Plans and Policies, Other City and County Plans, Regional Plans, State Plans, and Federal Initiatives. **Table 2-1** lists the existing planning and policy documents addressed in this chapter.

TABLE 2-1 – SUMMARY OF RELEVANT EXISTING PLANS AND POLICIES

City of Calabasas Plans & Policies	Other City and County Plans	Regional Plans	State Plans	Federal Initiatives	
General Plan	Agoura Hills Citywide Trails & Pathways Master Plan	Metro BTSP	Caltrans' Complete Streets Policy	Department of Transportation Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations	
Municipal Code			California Complete Streets Act		
Traffic Impact Study Guidelines	Santa Monica Mountains Area Trails Coordination Project		SCAG 2012 RTP/SCS		Assembly Bill 32 & State Bill 375
Las Virgenes Road Corridor Design					Assembly Bill 1581 & Caltrans' Policy Directive 09-06
Las Virgenes Gateway Master Plan	Los Angeles County Bicycle Plan	SCAG 2012 RTP/SCS	Assembly Bill 32 & State Bill 375	Department of Transportation Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations	
Mulholland Highway Master Plan for Capital Improvements					
Old Town Calabasas Master Plan					
Trails Master Plan					
West Calabasas Road Planning Guidelines					

CITY OF CALABASAS PLANS AND POLICIES

This section discusses adopted plans and policies relevant to bicycling and walking in the Calabasas. These documents guide how the City of Calabasas plans for and manages its built environment.

General Plan

The *City of Calabasas 2030 General Plan: Circulation and Element* describes the existing bicycle, pedestrian, transit, and vehicle facilities within the City and establishes the goals and policies for future transportation needs. **Table 2.2** summarizes the goals and policies that relate directly to the Bicycle and Pedestrian Master Plan:

TABLE 2.2 – SUMMARY OF RELEVANT GENERAL PLAN GOALS AND POLICIES

<p>Circulation Element Goals:</p> <ul style="list-style-type: none"> To provide easy and convenient access to all areas of the community To reduce dependence on single occupant automobile travel by providing a high level of pedestrian, bicycle, and public transit travel opportunities To consider the movement of people and vehicles in the design and operation of transportation systems To recognize the special mobility needs of seniors, youth, and persons with disabilities 	<p>Policy – Avoiding significant adverse impacts to sensitive environmental features and residents’ quality of life are higher priorities than improving traffic levels of service</p> <hr/> <p>Policy – Limit roadway and intersection capacity enhancement construction to that which will allow maintenance of the integrity of Calabasas’ bicycle and pedestrian circulation systems. Prohibit roadway and intersection capacity enhancements that would create gaps in the area’s bicycle and pedestrian circulation systems.</p> <hr/> <p>Policy – Provide adequate levels of maintenance for all components of the circulation system, including roadways, sidewalks, bicycle facilities, and trails</p>
<p>Circulation Element Bikeway System Objectives:</p> <p>Develop and maintain a comprehensive and safe bicycle system that:</p> <ul style="list-style-type: none"> Provides recreational opportunities and can serve as a partial alternative to automobile use Connects major destinations within and outside of the City Provides appropriate connections to regional routes and the bicycle facilities within adjacent jurisdictions 	<p>Policy – Reduce the need for vehicular travel by:</p> <ul style="list-style-type: none"> Establishing and maintaining a comprehensive system of bicycle routes and providing appropriate facilities for bicycle riders <hr/> <p>Policy – Encourage bicycling by preserving existing bicycle paths, lanes, and routes, and developing new and expanded bicycle facilities that offer direct connections between residential and non-residential areas, in accordance with the Calabasas Bicycle Master Plan</p>
<p>Pedestrian Circulation Objective:</p> <p>Continue to enhance Calabasas’ pedestrian circulation system to ensure that walking is a viable transportation option for all residents.</p>	<p>Policy – Ensure that parking for bicycles is available at major destinations to promote bicycle riding for commuting and recreation.</p> <hr/> <p>Policy – Make the safety and convenience of bicycle riders the primary concern with regard to determining locations for bicycle facilities.</p> <hr/> <p>Policy – Implement a safe routes to school program to</p>

<p>Citywide Community Design Objectives:</p>	<p>help ensure that students can safely walk or bicycle to and from school.</p>
<ul style="list-style-type: none"> • Create pedestrian access and connectivity opportunities as well as human-scaled gathering places 	<p>Policy – Promote pedestrian system improvements that create and sustain vibrant and active streets in major places of activity as well as providing direct connections between residential and non-residential areas.</p>
	<p>Policy – Provide neighborhood streets that are walkable and that contribute to the physical safety and comfort of pedestrians.</p>
	<p>Policy – Develop an inventory of and plan for implementing needed pedestrian system improvements and possible pedestrian system enhancements.</p>
	<p>Policy – Require new development in Calabasas to incorporate pedestrian-oriented circulation features, as described in the Community Design Element. Such features should include amenities that make walking not only available, but desirable.</p>
	<p>Policy – As commercial and mixed use districts redevelop over time, consider re-designing roadways in these areas to improve pedestrian circulation (possible re-design options include, but are not limited to, roadway narrowing, crosswalk enhancements, streetscape treatments that buffer pedestrians from traffic, and widened sidewalks). Roadways should be re-designed only if the re-design would not create unacceptable levels of service or unsafe conditions for vehicular traffic.</p>
	<p>Policy – Promote the establishment and maintenance of the following features to enhance community character:</p> <ul style="list-style-type: none"> - Commercial facilities that facilitate, rather than hinder, pedestrian circulation within the facility, as well as between commercial facilities and adjacent residential neighborhoods

Source: City of Calabasas 2030 General Plan, 2008

City of Calabasas Municipal Code

The City of Calabasas Municipal Code includes ordinances that address how development should occur within the City. In addition to defining standards for future development, the Code also defines existing pedestrian-oriented districts within the City. The following sections are relevant to the Cycling and Pedestrian Plans:

12.13.010 – Newsracks Purpose and Intent: The Calabasas municipal code presents guidelines for placement, appearance and servicing of newsracks in the public rights-of-way so as to:

(B) Avoid unreasonable interference with the flow of pedestrian or vehicular traffic, including ingress and egress from any residence or place of business or from the street to the sidewalks by persons crossing or exiting/entering parked or standing vehicles.

12.13.090 – Location, placement and number of newsracks: No proposed site and no newsrack shall be placed, installed, used or maintained in the following locations:

1. Within five feet of any marked crosswalk;
2. Within fifteen (15) feet of the curb return of any marked crosswalks;
8. At any location where the newsrack unreasonably obstructs or interferes with the pedestrian access to abutting property;
11. Where the newsrack will endanger persons using the sidewalk or property;
12. Where the newsrack will unreasonably interfere with or obstruct the safe flow of pedestrian or vehicular traffic on the public right-of-way
13. At any location which creates less than a four-foot wide path of travel as required by Title 24 of the California Code of Regulations and the Americans with Disabilities Act;
14. Facing another newsrack when separated or divided only by the width of a sidewalk or pedestrian walk

17.28.040 – Number of parking spaces required: The Calabasas municipal code identifies the number of bicycle spaces required for various land uses. In general, bicycle spaces are to account for 5-10% of vehicle spaces for non-residential land uses, and 1 space per dwelling unit for residential land uses.

17.28.090 – Bicycle parking and support facilities: This section defines requirements for bicycle parking facilities, showers and lockers. Facilities are required for all commercial and industrial uses that have more than 50,000 square feet of floor area. This section identifies parking design, parking equipment, parking layout, signage and required shower facilities.

17.28.110 – Trip and travel demand reduction measures: This section provides requirements for new and reconstructed residential, commercial, and manufacturing/industrial projects that are intended to reduce vehicle trips and travel demand. The provision of bicycle amenities such as bicycle storage areas and bicycle lanes, paths our routes as determined by the city, in addition to bicycle shower/locker facilities are identified as potential Transportation Demand Management (TDM) measures.

City of Calabasas Traffic Impact Study Guidelines

The City of Calabasas adopted the latest revision of “Guidelines for Traffic Impact Study (TIS) Preparation” in July 2008. A TIS must address pedestrian circulation, as well as driveways, sight distance, and on-site circulation. The TIS should include pedestrian and bicycle improvements and funding within its proposed mitigation alternatives, per the TIS guidelines.

Las Virgenes Road Corridor Design Plan

The City of Calabasas adopted the Las Virgenes Road Corridor Design Plan in 1998. This is a long-range planning document that makes recommendations for beautification, circulation, and traffic improvements for Las Virgenes Road from Mulholland Highway to the Ventura County line. The plan contains both a corridor design plan with both bicycle and transit plans and beautification and traffic/circulation plans.

Needs identified within this plan included a lack of pedestrian circulation and improved pedestrian safety between A.E. Wright Junior High and the residential and commercial areas to the north and a comprehensive bikeway system needed along Las Virgenes Road. There was also the desire to create bike-pedestrian-equestrian links to the new DeAnza Park, Malibu Creek State Park, and the Santa Monica Mountain Recreational Area.

The bicycle plan provides for Class I Bike Paths, Class II-A bike lanes (lanes between parking and traffic), Class II-B bike lanes (lanes where street has no on-street parking), and Class III bike routes (bike signs only). The majority of the area would be planned for Class II-B facilities.

Las Virgenes Gateway Master Plan

The Las Virgenes Gateway Master Plan establishes more specific plans and guidelines for development occurring within the Las Virgenes Road and Ventura Freeway interchange area. Historically, this area has served as a rest stop area and gateway to the beaches along the Pacific Ocean, though more recently this corridor also serves the neighborhoods in western Calabasas, as well as a route to Pepperdine University, Malibu Creek State Park, and the Santa Monica Mountains. The Las Virgenes Gateway Master Plan is intended to provide the City with additional planning (beyond the General Plan) to address land uses and private property development/design standards that have arisen from this confluence of land uses and users of the area. The circulation/parking plan objectives are consistent with those presented in the *Las Virgenes Road Corridor Design Plan* in that they provide for a bicycle lane along the length of Las Virgenes Road. The plan also intends to provide enhanced crosswalk paving at all intersections and at the Las Virgenes Creek Bridge to enhance pedestrian circulation.

Mulholland Highway Master Plan for Capital Improvements

The Mulholland Highway Master Plan for Capital Improvements is a long-range planning document that provides recommendations for traffic, circulation, roadway, and landscaping improvements along a 1.7 mile segment of Mulholland Highway. The corridor extends from Mulholland Drive to the southern Old Topanga Canyon Road intersection. The Master Plan provides the City with recommendations to respond

to the City's General Plan vision statement for the area, which is to restore the original beauty of the Mulholland corridor by developing a comprehensive Master Plan for the roadway.

The Plan includes the following recommended traffic and circulation improvements pertaining to bicycle and pedestrian travel:

- Construct a continuous linear sidewalk on the south side of the highway from Eddingham Avenue to Parched Drive
- Provide continuous Class II bicycle lanes on both sides of the highway
- Create planning strips between travel lanes and pedestrian paths on both sides of the highway to create a safety buffer between vehicular and pedestrian traffic

Old Town Calabasas Master Plan

Adopted in March 1994, the Old Town Calabasas Master Plan was created in response to City residents' desires to retain an important cultural resource and establish a historic retail "downtown" in Old Town Calabasas. The Master Plan provides design guidelines for Old Town to ensure that a "sense of place" that is special and unique to the City of Calabasas is retained and enhanced, to reflect the history and spirit of Calabasas.

One of the goals of the plan is to "create a lively, attractive, and safe streetscape that efficiently moves motorists, cyclists, and pedestrians through Old Town." The design guidelines include provision of 12-foot wide medians with breaks to allow for turn lanes and pedestrian crossings. The plan also provides for Class II-A bicycle lanes along Calabasas Road throughout the Old Town study area, with connections to existing and planned bicycle facilities. There are also provisions for crosswalk enhancements and street furniture, including benches.

Trails Master Plan

The Calabasas Trails Master Plan provides a blueprint for the development of community trails over the next 10 years. The purpose of the Plan is to provide a continuous pedestrian, equestrian, and bicycle trail system that will incorporate trail connections to open spaces, public facilities, and nearby regional parks. The Plan will be used in fostering and guiding the creation of a citywide trail network. It is intended to provide guidance for the location and construction of trails in the City. Further, the Trails Master Plan is intended to improve the operation, design, and utilization of the City's off-street trail system, allowing equal and safe use for pedestrians, bicyclists, and equestrians.

West Calabasas Road Planning Guidelines

The West Calabasas Road Planning Guidelines are intended to provide clear and useful recommendations for the design, construction, review, and approval of all development in the West Calabasas Road Master Plan area. These guidelines are a reference point for a common understanding of the community's minimum design expectations. The guidelines are offered as one way of achieving attractive and functional projects that will realize the goals of both the City and the community.

The streetscape design guidelines within the report include new and contiguous sidewalks and bicycle lanes along the "Country Corporate" sections of West Calabasas Road.

OTHER CITY AND COUNTY PLANS

This section describes the plans and policies related to bicycling and pedestrian activity in adjacent cities, unincorporated areas, or along county-owned or managed facilities.

Agoura Hills Citywide Trails & Pathways Master Plan

The City of Agoura Hills adopted this plan in October 2008. The plan was developed to provide a pedestrian, bicycle, and equestrian system to link homes, schools, businesses, parks, and natural resources to each other. The plan provides an overview of the City and of related plans, projects and policies; describes existing conditions; presents a proposed trail and pathway system; develops equestrian trail standards; discusses general design, management policies, and implementation measures.

Santa Monica Mountains Area Trails Coordination Project

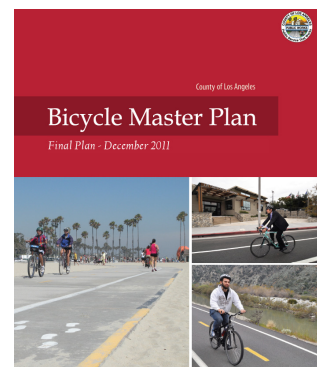
The National Park Service prepared the Santa Monica Mountains Area Trails Coordination Project (SMMART) in 1997 for coordinated planning among the agencies with responsibility for trails. This was established to be a coordination project rather than a comprehensive planning process. Missing links and backbone trails were identified as part of this project.

City of Los Angeles 2010 Bicycle Plan

The Los Angeles County Bicycle Master Plan was adopted by the in March 2011. The plan was developed by the Los Angeles Department of City Planning as a component of the City's Transportation Element. The Citywide Bicycle Plan designates a 1,684 mile bikeway system and introduces a comprehensive collection of programs and policies. The plan includes bicycle improvements in the City of Los Angeles adjacent to Calabasas, such as in the Woodland Hills and Warner Center areas of Los Angeles.

Los Angeles County Bicycle Master Plan

The Los Angeles County Bicycle Master Plan was adopted by the Los Angeles County Board of Supervisors. The Plan was developed by the Los Angeles County Public Works Department and an appointed Bicycle Task Force. The Countywide Bicycle Plan identifies opportunities for off-street bicycle facilities, on-street bicycle facilities, and shared-use pathways in unincorporated areas of Los Angeles County. Unincorporated areas near Calabasas where proposed facilities are considered include the Santa Monica Mountains North Area, and areas adjacent to Agoura Hills and Hidden Hills.



REGIONAL OR STRATEGIC PLANS

Regional or strategic plans are typically intended to facilitate coordinated planning across jurisdictional boundaries and set regional priorities for funding of transportation infrastructure, including bicycle and pedestrian projects.

Metro Bicycle Transportation Strategic Plan

In 2006, the Los Angeles County Metropolitan Transportation Authority (Metro) released two documents relating to bicycle planning in the region: the Metro Bicycle Transportation Strategic Plan and BTA Compliance Document. Both of these documents supplant prior countywide bicycle planning documents dating back to 1996. The Strategic Plan is intended to be used by local cities and Los Angeles County Transit agencies in setting bicycle-related priorities that lead to regional improvements. The document discusses the significance of bicycle usage with transit as a way of expanding mobility options within the region. The BTA document inventories and maps existing and planned facilities, and provides information regarding past expenditures by the 89 local jurisdictions within the county. The plan also includes: a listing of 167 “bike-transit hubs” in the county, procedures for evaluating access to transit, best-practices in a tool box of design measures, gaps in the regional bikeway network, and 12 prototypical “bike-transit hub” access plans in different areas of the county.

SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

In 2012, the Southern California Association of Governments (SCAG) adopted the 2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), which integrates the region’s transportation and land use planning. The RTP/SCS is intended to reduce greenhouse gas emissions from transportation in accordance with California’s Sustainable Communities and Climate Protection Act and includes significant investments in multimodal transportation. It identifies regional solutions to transportation issues in southern California by reviewing existing transportation system conditions and providing improvement recommendations for the various focus areas including aviation, goods movement, highways and arterials, land use, non-motorized transportation, transit, and transportation finance. The non-motorized transportation section provides information regarding existing mode split, bicyclist types, bicycle safety, the California Strategic Highway Safety Plan for bicyclists, and identifies implementation priorities for local jurisdictions. This document serves more as a policy guide for the region, than as a regional bicycle plan identifying potential expansion of bicycle facilities. The regional bikeway network is estimated to extend approximately 4,315 miles with an additional 5,807 miles of planned facilities. Of the \$524.7 billion transportation expenditures in the RTP, \$6.9 billion are allocated for non-motorized projects. Additionally, this document includes a regional Active Transportation Plan.



STATE PLANS

Caltrans is responsible for building and maintaining state-funded transportation infrastructure. Within the City of Calabasas, Caltrans maintains Interstate 101. The following policies would affect strategic planning decisions on this corridor. In conjunction with Caltrans, the State has also passed legislation that affects all streets in Calabasas.

Caltrans' Complete Streets Policy

In 2001, Caltrans adopted a routine accommodation policy for the state in the form of Deputy Directive 64, "Accommodating Nonmotorized Travel." The directive was updated in 2008 as "Complete Streets—Integrating the Transportation System." The new policy reads in part:

The Department views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in California and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system.

The Department develops integrated multimodal projects in balance with community goals, plans, and values. Addressing the safety and mobility needs of bicyclists, pedestrians, and transit users in all projects, regardless of funding, is implicit in these objectives. Bicycle, pedestrian and transit travel is facilitated by creating "complete streets" beginning early in system planning and continuing through project delivery and maintenance and operations....

The directive establishes Caltrans' own responsibilities under this policy. Among the responsibilities that Caltrans assigns to various staff positions under the policy are:

- Ensure bicycle, pedestrian, and transit interests are appropriately represented on interdisciplinary planning and project delivery development teams.
- Ensure bicycle, pedestrian, and transit user needs are addressed and deficiencies identified during system and corridor planning, project initiation, scoping, and programming.
- Ensure incorporation of bicycle, pedestrian, and transit travel elements in all Department transportation plans and studies.
- Promote land uses that encourage bicycle, pedestrian, and transit travel.
- Research, develop, and implement multimodal performance measures.

California Complete Streets Act

Assembly Bill 1358, the "California Complete Streets Act of 2008," requires "that the legislative body of a city or county, upon any substantive revision of the circulation element of the general plan, modify the circulation element to plan for a balanced, multimodal transportation network that meets the needs of all

users [including] motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation....” This provision of the law goes into effect on January 1, 2011. The law also directs the Governor’s Office of Planning and Research to amend its guidelines for the development of circulation elements so as to assist cities and counties in meeting the above requirement.

Assembly Bill 32 and State Bill 375

Senate Bill (SB) 375 is the implementation legislation for Assembly Bill (AB) 32. AB 32 requires the reduction of greenhouse gases (GHG) by 28 percent by the year 2020 and by 50 percent by the year 2050. GHGs are emissions – carbon dioxide chief among them – that accumulate in the atmosphere and trap solar energy in a way that can affect global climate patterns. The largest source of these emissions related to human activity is generated by combustion-powered machinery, internal combustion vehicle engines, and equipment used to generate power and heat. SB 375 tasks metropolitan and regional planning agencies with achieving GHG reductions through their Regional or Metropolitan Transportation Plans. The reduction of the use the automobile for trip making is one method for reducing GHG emissions. This can be achieved through the use of modes other than the automobile, such as walking, bicycling, or using transit.

Assembly Bill 1581 and Caltrans Policy Directive 09-06

Assembly Bill (AB) 1581 provides direction that new actuated traffic signal construction and modifications to existing traffic signals include the ability to detect bicycles and motorcycles. It also calls for the timing of actuated traffic signals to account for bicycles. In response to AB 1581, Caltrans has issues Traffic Operations Policy Directive 09-06, which has proposed modifications to Table 4D-105(D) of the California Manual on Uniform Traffic Control Devices. The California Traffic Control Devices Committee is considering the proposed modifications.

FEDERAL INITIATIVES

The United States Department of Transportation has issued the following statement on pedestrian and bicycle activity and planning.

The US DoT Statement on Bicycle and Pedestrian Accommodations, Regulations and Recommendations

On March 5, 2010, the United States Department of Transportation (DOT) announced a policy directive to demonstrate the DOT’s support of fully integrated active transportation networks by incorporating walking and bicycling facilities into transportation projects. The statement encourages transportation agencies to go beyond minimum standards in the provision of the facilities. The DOT further encourages agencies to adopt policy statements that would affect bicycling and walking, such as:

- Considering walking and bicycling as equals with other transportation modes



- Ensuring availability of transportation choices for people of all ages and abilities.
- Going beyond minimum design standards.
- Integrating bicycle and pedestrian accommodations on new, rehabilitated, and limited access bridges.
- Collecting data on walking and biking trips.
- Setting mode share for walking and bicycling and tracking them over time.
- Keeping sidewalks and shared use paths clear.
- Improving non-motorized facilities during maintenance projects.

3. Existing Conditions

Calabasas provides an excellent environment for active transportation, including a temperate climate, recreational users, an active citizenry, and proximity to natural parks and open space.

This Bicycle Master Plan lays the groundwork for developing a system of on-street bicycle facilities throughout the City, focusing on completing a system of bikeways and support facilities between neighborhoods, providing safe routes to schools, and improving access to major destinations such as employment centers, stores and shops, parks, trails, and open space areas. This *Plan* also includes criteria for defining different types of bicycle facilities, a listing of priority projects, and education and safety programs. This chapter provides a snapshot of the existing physical environment and existing programs, practices, and policies related to bicycling conditions in the City. The chapter outline is shown in **Table 3-1** below.

TABLE 3-1 – CHAPTER OUTLINE

Existing Bicycling Conditions

Calabasas Today

-
- Existing Land Use and Settlement Patterns
 - Existing and Potential Bicycle Activity in Calabasas

Types of Bikeway Facilities

Existing Bicycling Facilities

-
- Existing On- and Off-Street Facilities
 - Existing Bicycle Parking
 - Status of On-Going and Past Bike Projects

Barriers to Cycling / Needs Assessment

Vehicle/Bicycle Collision Analysis

CALABASAS TODAY

Land Use and Settlement Patterns

The City of Calabasas is located in western Los Angeles County along the heavily traveled Ventura Freeway, approximately 29 miles from downtown Los Angeles. A portion of the City's northern boundary also borders Ventura County. As of 2007, the City of Calabasas' corporate boundaries encompassed approximately 12.9 square miles, or 8,512 acres of land. The City's population in 2010 was estimated at 23,058. In addition, there is a 3.9 square mile area of unincorporated land surrounding the City that may be annexed in the future and includes residential neighborhoods, commercial areas, open space, and a public school.

Calabasas was governed by the County of Los Angeles prior to incorporation in 1991. Among the original goals of incorporation were placement of greater emphasis on environmental protection and design compatibility, and creation of transitions between urban and rural land uses. The City's major thoroughfares are the Ventura Freeway (US 101), Las Virgenes Road, Lost Hills Road, Calabasas Road, Mulholland Highway, and Old Topanga Canyon Road/Mulholland Drive.

Calabasas' land use pattern is well established and is not expected to change over time. It is a primarily low intensity, residential community bounded by natural environmental features, such as the Santa Monica Mountains. Future growth, according to the City's General Plan, will primarily consist of infill development, and minor extension of rural residential development at the edge of the urban area. The City aims to protect Calabasas' natural setting and significant environmental features. Land uses within Old Town and adjacent areas to the west long Calabasas Road up to Parkway Calabasas are a pedestrian-oriented mix of retail and office uses. Figure 3-1 shows the existing land use map for Calabasas.

The Las Virgenes Unified School District operates sixteen schools, serving the Cities of Agoura Hills, Calabasas, Hidden Hills, and Westlake Village. Seven of these schools are located within Calabasas. The City also has two private schools, one K-12 and one K-8. The schools located in Calabasas include:

LVUSD Elementary Schools

- Bay Laurel Elementary School
- Chaparral Elementary School
- Lupin Hill Elementary School
- Round Meadow Elementary School

LVUSD High School

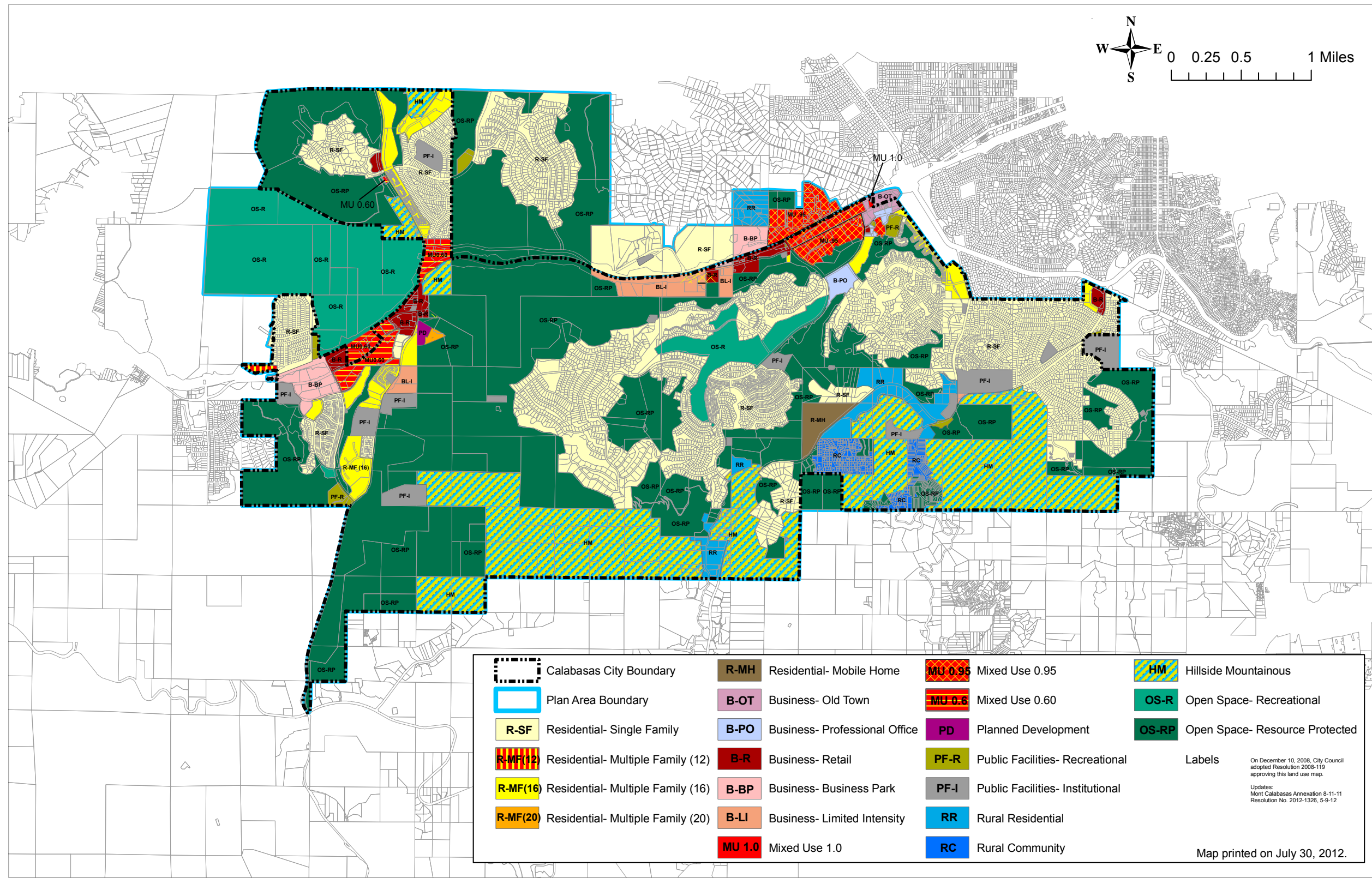
- Calabasas High School

LVUSD Middle Schools

- A.C. Stelle Middle School
- A.E. Wright Middle School

Private Schools

- Viewpoint School (K-12)
- Muse School (K-8)



Calabasas City Boundary	R-MH Residential- Mobile Home	MU 0.95 Mixed Use 0.95	HM Hillside Mountainous
Plan Area Boundary	B-OT Business- Old Town	MU 0.60 Mixed Use 0.60	OS-R Open Space- Recreational
R-SF Residential- Single Family	B-PO Business- Professional Office	PD Planned Development	OS-RP Open Space- Resource Protected
R-MF(12) Residential- Multiple Family (12)	B-R Business- Retail	PF-R Public Facilities- Recreational	Labels
R-MF(16) Residential- Multiple Family (16)	B-BP Business- Business Park	PF-I Public Facilities- Institutional	On December 10, 2008, City Council adopted Resolution 2008-119 approving this land use map.
R-MF(20) Residential- Multiple Family (20)	B-LI Business- Limited Intensity	RR Rural Residential	Updates: Mont Calabasas Annexation 8-11-11 Resolution No. 2012-1326, 5-9-12
	MU 1.0 Mixed Use 1.0	RC Rural Community	Map printed on July 30, 2012.

SOURCE: CITY OF CALABASAS

Existing and Potential Bicycling Activity in Calabasas

Knowing how many people bicycle, and for what purposes, can help Calabasas develop effective projects and programs to better serve residents and resident-employees. A common term used in describing demand for bicycle facilities is “mode split.” Mode split refers to the form of transportation a person chooses to take, such as walking, bicycling, public transit, or driving, and is often used in evaluating commuter alternatives such as bicycling, where the objective is to increase the percentage of people selecting an alternative means of transportation to the single-occupant (or drive-alone) automobile.

Table 3-1 presents American Community Survey data for the journey-to-work mode split for the City of Calabasas, compared to the United States, California, and Los Angeles County. As shown, driving is the predominant means of commuting in Calabasas, and is higher than in Los Angeles County, California, and the United States as a whole.

TABLE 3.1 – EXISTING JOURNEY TO WORK DATA

Mode	United States	California	Los Angeles County	City of Calabasas
Drive Alone	76%	73%	72%	84%
Carpool	10%	12%	11%	5%
Transit	5%	5%	7%	1% (0.6%)
Bike	1% (0.5%)	1%	1% (0.8%)	0%
Walk	3%	3%	3%	0% (0.4%)
Other	5%	6%	6%	10%
Total	100%	100%	100%	100%

Source: American Community Survey 2007-2011

Note: Totals may not add to 100% due to rounding

As shown in **Table 3-1**, bicycle trips represent less than one percent of home-based work trips in Calabasas. This should not be misinterpreted as the bicycle mode share of all trips for several reasons:

- Journey-to-work data only represents commute trips, which tend to be longer than shopping, school, recreation, and other trips, and are therefore less compatible with bicycling.
- Census journey-to-work data fails to capture people who commute by bicycle one or two days per week.
- Journey-to-work data does not account for commuters with multiple modes of travel to and from work, such as commuters that ride a bicycle to a transit station before transferring to transit for the remainder of their journey to work.
- No separate accounting of shopping, school, or recreational trips is made in the Census; these trips make up more than half of the person trips on a typical weekday and a significantly greater proportion on the weekend. These trips also tend to be short to medium in length and are therefore very well suited for bicycling.

Chapter 3 – Existing Conditions

- Journey-to-work reports information for adult work trips, but does not request data on school trips, which are much more likely to be bicycling trips because school-aged individuals cannot drive until the latter half of their high school years.

The SCAG’s Year 2000 Post-Census Regional Travel Survey, which surveyed 17,000 households in the six-county Los Angeles area, found that one percent of all trips in the region are by bicycle. Bicycle commuting rates in Los Angeles County have risen since 2000 (from 0.6% to 0.8%), so it is likely that overall bicycle trips have risen as well.

Table 3-2 summarizes bicycle ridership estimates for commute and non-commute cyclists. According to the California Department of Education (Accountability Progress Reporting) and data from independent schools, there were 5,875 enrolled students from grades K to 12 in Calabasas. According to local surveys cited in the Metro Bicycle Transportation Strategic Plan BTA Compliance Document, approximately 2% of students commute by bicycle. Assuming that Calabasas has a similar student bicycle share percentage, the City would have an estimated 118 student cyclists. Approximately 60 residents commute by transit. According to on-board bus and rail surveys conducted by Metro in 2001, approximately 1.2% of transit riders cycle to transit stops; therefore, Calabasas would have about 1 home-to-transit cyclists.

TABLE 3-2 – CALABASAS BICYCLISTS BY TRIP GROUP

Trip Group	Daily Bicycle Commuters	
Workers (Home-to-Work Trips)	0	0%
Students (Home-to-School Trips)	118	99%
Transit Riders (Home-to-Transit Trips)	1	1%
Total	119	100%

Source: 2007-2011 American Community Survey; Fehr & Peers, 2013

Commute trips represent a minority of bicycle trips. To get a fuller sense of bicycling in Calabasas, one must account for the other reasons for which people use bicycles. The *National Bicycle & Walking Study*, published by the Federal Highway Administration in 1995, estimated that for every commute trip made by bicycle, there were 1.74 trips made for shopping, social, and other utilitarian purposes. We can estimate these types of trips in Calabasas as follows:

- **Number of daily bicycle commuters:** 119
- **Number of daily trips per commuter:** 2 (assuming each commuter bikes to work or school and then bikes home again later)
- **Number of daily bicycle commute trips:** 238 (119 x 2)
- **Daily bicycle trips for non-commute purposes:** 414 (238 x 1.74)

Lastly, cycling is a popular recreational activity for all age groups. While most of this plan is focused on encouraging bicycling as a form of transportation, recreational riders, with encouragement, may transition to bicycling commuters. Similarly, recreational cycling can be a popular family activity, and children who ride with parents may be more likely to bike to school or with their friends. Regardless, Calabasas has a

mild climate, several bicycle lanes, and many parks within a 10-minute bicycle ride of the Old Town or residential neighborhoods.

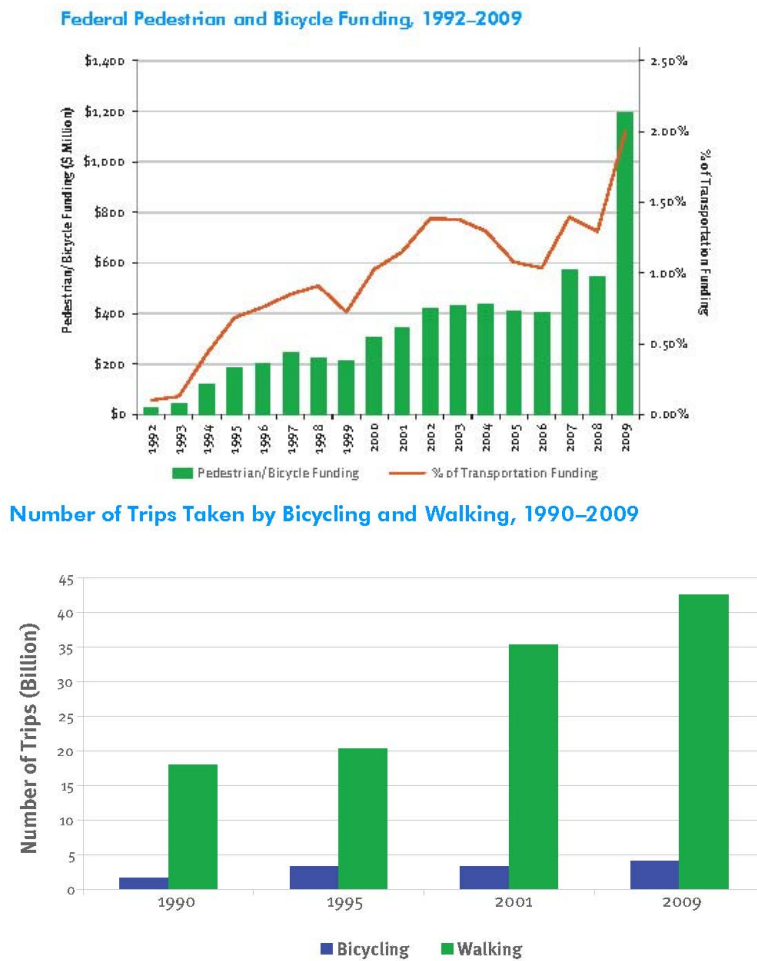
The Federal Highway Administration and U.S. Department of Transportation released in May 2010 the *National Bicycle & Walking Study: 15 Year Status Report*. The agencies found that between the initial report in 1995 and household survey data collected in 2009, bicycling activity had increased in general, though not to the goal of doubling walking and biking trips that was set in 1995. Interestingly, though only one percent of respondents in the 2009 National Households Transportation Survey said that they made everyday trips by bike, 12 percent said that they had ridden a bike in the past week.

Future Bicycling Activity

Future bicycle trips will depend on a number of factors such as the availability of well-connected facilities, appropriate education and promotion programs designed to encourage cycling, and location, density, and type of future land development. Cities with thoughtful bikeway plans and meaningful implementation programs have found high levels of correlation between bicycle facilities and number of cyclists. Three cities with such plans – Portland, San Francisco, and Seattle – found that the number of cyclists on a bicycle corridor after it was improved was double or triple the previous count. More generally, the 2010 *National Bicycle & Walking Study: 15 Year Status Report* found that between 1990 and 2008 funding for bike and pedestrian projects increased from less than 0.5 percent of federal transportation funding to about one percent. Over that same time, pedestrian and bicycle trips increased by about 50 percent.

With appropriate bicycle facilities in place and implementation of employer trip reduction programs, the bicycle mode split could increase significantly above its current rate. According to the methodology adopted by the Los Angeles County Metropolitan Transportation Authority and outlined in their Bicycle Transportation Strategic Plan (Volume 2), cities can expect to see a 279% increase in bicycling upon buildout of a complete bicycle network. By expanding bicycle facilities that encourage a broad cross section of bicyclists and improve safety, Calabasas could increase the current mode split, which would result in over 1,819 bicycle trips daily by 2020, as shown in **Table 3-3**.

Figure 3-2 – National Pedestrian and Bicycle Funding and Number of Trips



Source: National Bicycle & Walking Study: 15 Year Status Report (2010)

TABLE 3-3 – CALABASAS BICYCLE TRAVEL – EXISTING AND 2020

Mode	City of Calabasas – Today	City of Calabasas – 2020
Daily Bicycle Commuters	119	332
Daily Bicycle Commute Trips	238	664
Daily Non-Commute Bicycle Trips	414	1,155
TOTAL	652	1,819

Sources: U.S. Census Bureau, ACS, 5-years estimates (2007-2011); LACMTA, Bicycle Transportation Strategic Plan, 2006; Fehr & Peers, 2013

TYPES OF BIKEWAY FACILITIES

The City of Calabasas first published its bicycle master plan in 1995. Since that time, the City has identified additional bike facilities for future consideration. These bikeways include three distinct types of facilities, as defined by Caltrans, and shown in **Figure 3-3**:

- Class II bike lanes, such as on Mulholland Highway, Old Topanga Canyon Road, Mulholland Drive, Calabasas Road, Parkway Calabasas, and Agoura Road.
- Class III bike routes, such as on Thousand Oaks Boulevard and Park Sienna.

An understanding of the condition of existing bicycle facilities in Calabasas is necessary for determining future opportunities for improvement. The existing and future bike network will aim to provide and enhance connections to city and regional destinations, including the Santa Monica Mountains Recreational Area, Old Town Calabasas, and various schools, park, and other community destinations.

TABLE 3-4 – BIKE FACILITY TYPES

Class I: Shared-Use Path

These facilities provide a completely separate right-of-way and are designated for the exclusive use of bicycles and pedestrians with vehicles cross-flow minimized.

Class II: Bike Lane

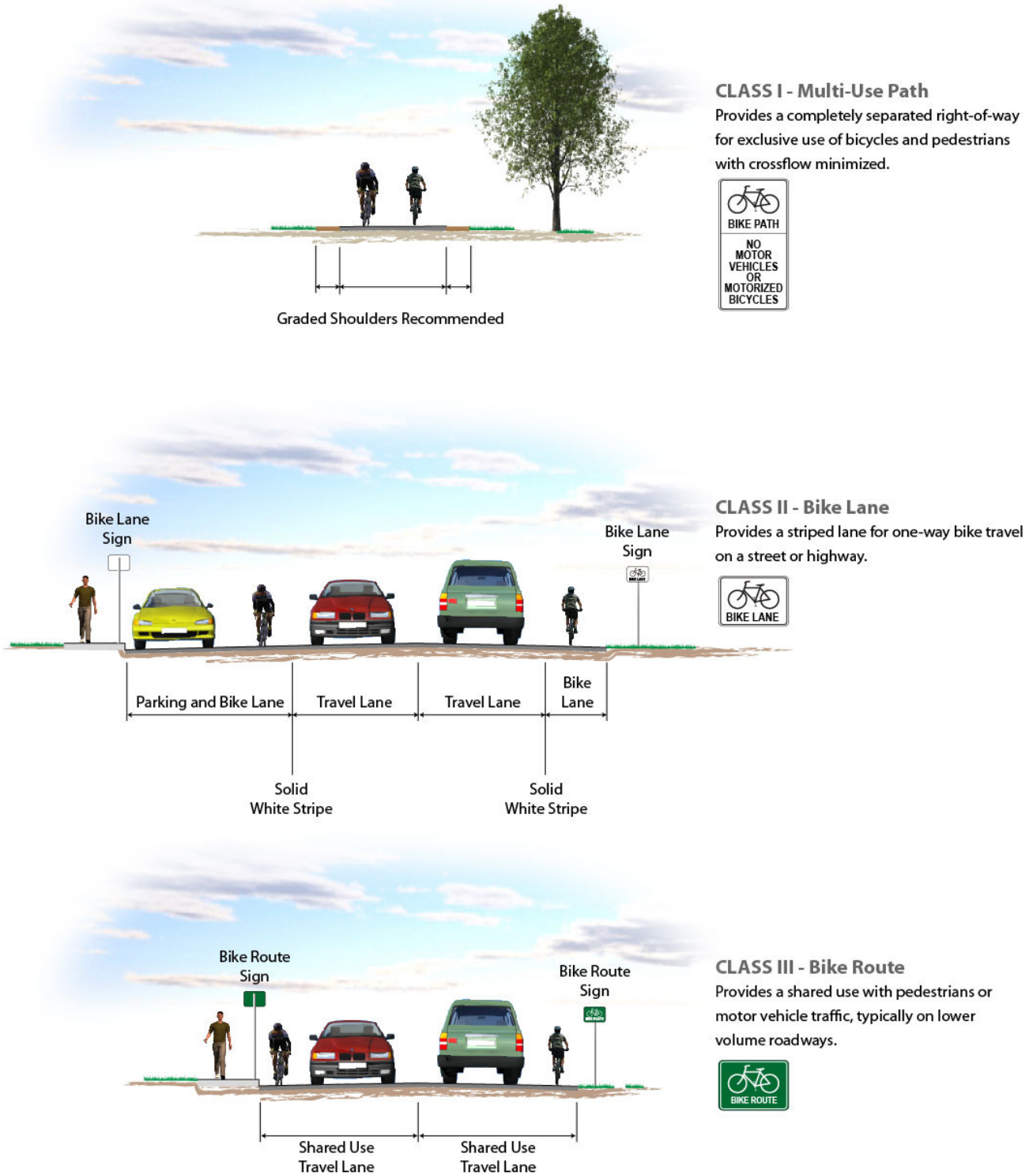
Bike lanes provide a restricted right-of-way and are designated for the use of bicycles with a striped lane on a street or highway. Bicycle lanes are generally five feet wide. Vehicle parking and vehicle/pedestrian cross-flow are permitted. Recent variations on the bike lane seeing increased use in urban areas of the U.S. include **cycle tracks** and **buffered bike lanes**, which are not covered in traditional roadway design manuals, but are featured in the NACTO Urban Bikeway Design Guide, described below. These facilities, like bike lanes, are constructed within a roadway, but provide a greater level of separation from vehicular traffic and/or parked vehicles.

Class III: Bike Route

Bike routes provide a right-of-way designated by signs or pavement markings for shared use with pedestrians or motor vehicles. A standard Class III bike route per the CA-MUTCD may simply have signs or combine signs and shared lane markings. A **bicycle boulevard** is a special type of shared route on a local or collector street that encourage through travel by bicyclists, but discourages motor vehicle through traffic. Bike boulevards may include a range of bicycle treatments and traffic calming elements from simple signage and pavement markings to mini traffic circles to traffic diverters.

Source: Caltrans, 2001

Figure 3-3 – Bikeway Types



Note: bike lanes may be striped adjacent to the curb or between the travel lane and on-street parking.

Bikeway planning and design in California typically relies on the guidelines and design standards established by Caltrans as documented in “Chapter 1000: Bikeway Planning and Design” of the *Highway Design Manual* (5th Edition, California Department of Transportation, January 2001). Chapter 1000 follows standards developed by the American Association of State Highway and Transportation Officials (AASHTO) and the Federal Highway Administration (FHWA), and identifies specific design standards for various conditions and bikeway-to-roadway relationships. The California Manual on Uniform Traffic Control Devices (MUTCD) also provides design standards for bicycle facilities, pavement markings, signage, and traffic control. Caltrans standards provide for three distinct types of bikeway facilities, as described in **Table 3-4**.

Another important source for bikeway planning and design is the National Association of City Transportation Officials (NACTO) *Urban Bikeway Design Guide*. This document was developed based on the experience of cities in designing and implementing bicycle facilities. Because cities and the built environment differ throughout the country, this source was developed to provide urban areas with innovative solutions that have been implemented in cities across the United States and abroad. Many of the treatments in this document are not specifically identified in the documents referenced above, but have received approval status from the FHWA. Ultimately, the document seeks to guide the development of bikeway facilities where uncommon challenges are created by competing modal demands for limited right-of-way.

EXISTING BICYCLING FACILITIES

An inventory was completed of existing bikeway facilities. The City currently has Class II bicycle lanes on seven facilities comprising of 8.1 miles of bikeway facilities.

The Existing Bikeway Network map (**Figure 3-4**) shows locations for all existing bikeways.

Class I Multi-Use Paths (Off-Street)

The City of Calabasas does not currently have any existing multi-use paths.

Class II Bike Lanes (On-Street)

Calabasas’ on-street bicycle facilities are composed of the following segments. **Table 3-5** provides a list of existing on-street bike facilities.

TABLE 3-5 – EXISTING CLASS II AND CLASS III BIKE FACILITIES

Street	From	To	Class	Length (miles)
Calabasas Road	Mureau Road	Park Granada	II	1.3
Parkway Calabasas	Park Granada	gate to the Oaks	II	1.8
Mulholland Highway	Mulholland Drive	Calabasas High School	II	1.3
Old Topanga Canyon Road	Park Ora	Palm Drive	II	0.7
Las Virgenes Road	Parkmor Road	Agoura Road	II	0.7
Agoura Road	City Limits	Las Virgenes Road	II	1.7
Park Granada	Calabasas Road	Parkway Calabasas	II	0.6
Total				8.1

Class III Bicycle Routes (Unmarked, On-Street)

The City of Calabasas does not currently have any existing Class III bicycle routes.

Existing Bicycle Parking, Transport, and Support Facilities

Bicycle parking is present at eight locations in the City, including parks, schools, and community facilities:

- Schools: A.E. Wright Middle School, Bay Laurel Elementary School, Calabasas High School
- Parks: De Anza Park, Las Virgenes Creek
- Community Facilities: Civic Center, The Commons, Agoura Hills/Calabasas Community Center

As previously mentioned, the City Municipal Code includes requirements for on-site bicycle parking and support facilities for private developers and property owners, as described in sections 17.28.040 and 17.28.090. However, the City does not currently have any on-site facilities for changing and storing clothes and equipment.

The City operates a trolley shuttle service that circulates the City. Some of the shuttle buses are equipped with bicycle racks. If a shuttle does not have racks, cyclists are permitted to bring their bicycles on the bus provided that there is space available.

KEY ISSUES AND BICYCLE NEEDS ASSESSMENT

In making conscious efforts to enhance the bicycle network, the City has a number of challenges to overcome. As described in Chapter 1, the Calabasas Bicycle Advisory Committee was formed to identify the key public concerns with cycling in the City. The comments received reinforced several issues previously identified by City staff. Comments could be summarized in one of the following three broader categories:

- Make cycling safe and comfortable to commuters, children, and cycling enthusiasts.
- Identify solutions for bridging network gaps, and signage and striping limitations.
- Identify priority projects.

The following section discusses more specific elements of these issues to be addressed in the proposed facilities section and design guidelines. A complete list of public comments is available in Appendix A.

As discussed, Calabasas is primarily comprised of residential neighborhoods well suited for biking with collector and arterial roadways that have Class II facilities.

Regional Bikeway Improvements

The 2012 Los Angeles County Bicycle Master Plan proposes one Class II facility and 12 Class III facilities in the Santa Monica Mountains Planning Area, adjacent to the City of Calabasas. The proposed Class II facility along Mureau Road between 0.2 miles west of Las Virgenes Road and Calabasas Road would connect to the existing Class II facility on Calabasas Road within the City limits. The Class III proposed facilities generally would link up to existing or proposed facilities in the City of Calabasas and would connect into the Santa Monica Mountains down to the Cities of Malibu and Santa Monica.

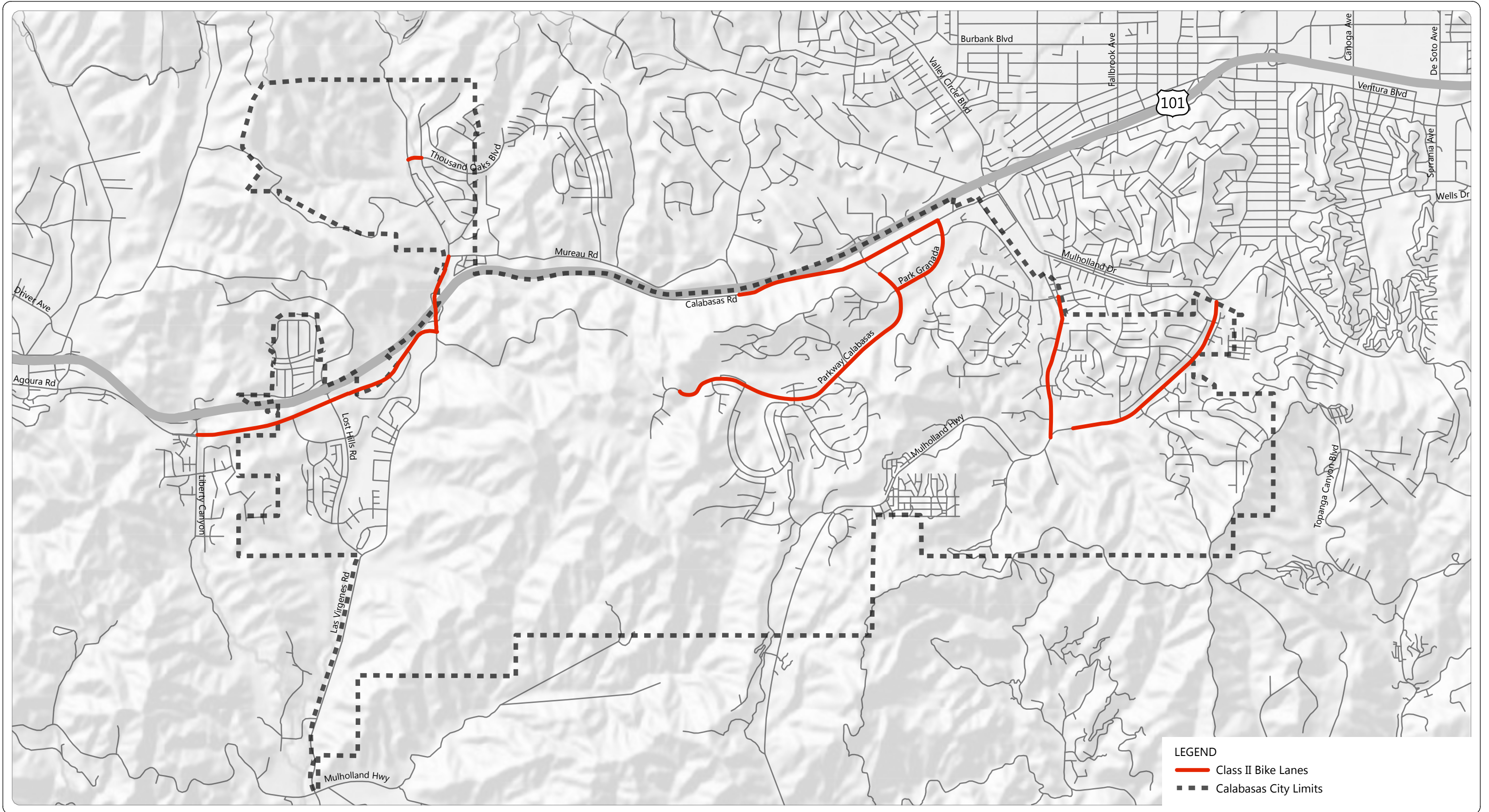
Retail Areas

Several key destinations, such as the Calabasas Commons, Calabasas Civic Center, and De Anza Park are within a mile radius of many residential homes in Calabasas. A one-mile radius from the Calabasas Civic Center generally encompasses the area to Park Entrada to the southwest, Mureau Road at Calabasas Road to the west, Abbeyville Avenue to the east, and Ventura Boulevard at Valley Circle Boulevard to the north. Despite this proximity, driving remains a dominant mode.

It is important to recognize that many cyclists, at least initially, may not feel comfortable utilizing some of the key arterials that provide access to key destinations in Calabasas- with or without bicycle lanes. A fundamental component of implementing any successful bicycling plan is providing projects and facilities that provide interconnected and alternative routes for cyclists of different capabilities. For example, commuter cyclists are typically more confident, defensive, and faster than children or less frequent riders. Thus, these types of cyclists require a different type of facility than a child riding to school or an occasional cyclist who rides on the weekends. Having different types of facilities also requires providing education on how different facilities should operate, so that cyclists as well as drivers understand what is expected to maintain a safe facility.

Intersections

Oftentimes, bicyclists must wait through lengthy signal cycles or risk proceeding through intersections against the light. At uncontrolled intersections, cyclists must wait for gaps in traffic before proceeding. Bicycle-specific detectors or bicycle-specific signals should be considered at intersections along the bicycle network and stencils should be used to inform bicyclists where to position their bikes in order to actuate the signal. The 2012 California MUTCD requires that all new limit line detector installations and modifications, all new and modified bike path approaches, new signalized intersections, or modifications to advanced detection provide bicycle detection and appropriate markings informing bicyclists where to place their bikes or utilize a push-button for actuation. Alternatively, these locations can operate with fixed time signal cycles.



Not to Scale

BICYCLE COLLISION REPORTS

While traffic collisions can affect anyone, they have a disproportionate impact on bicyclists, who, along with pedestrians, are the most vulnerable users on the road. Data on collisions and a brief analysis of collision reports provided by the City of Calabasas can show some generalized trends in vehicle-cyclist collisions in the City and help planners and decision-makers identify specific locations and support programs. Between 2007 and 2011, there were ten collisions in Calabasas involving bicyclists. Injuries were reported at all ten collisions. There were no fatalities at the collisions, and one account of a serious injury. This data was provided by the California Highway Patrol’s Statewide Integrated Traffic Records System (SWITRS).

The collision reports identify crash locations; however, many factors that influence collision rates are not location-specific, such as time of day, weather conditions, degree of sobriety, and age of parties involved. Furthermore, many bicycle collisions might involve stationary objects, and these types of collisions are not typically recorded in the City’s collision database. Therefore, a small number of data points may not indicate much about a specific location. While the collision locations identified in this section help identify “hotspots,” they should not be assumed to be the most hazardous or risky locations. For a more meaningful evaluation, the data would need to be adjusted for the number of bicyclists to account for “exposure.” At best, a group of data points at a single location reveals that there is a tendency for collisions to occur relative to the number of bicyclists in the area. It is possible that the places with high numbers of collisions also have a high number of bicyclists. Furthermore, the total number of bicycle collisions is very low – an average of two per year – so there is low statistical significance between the hot spots and overall safety. Absent a complete database of bicycle volumes, there is no reliable way to adjust for exposure and relative safety. Thus, the data in the following section is presented for informational purposes only, and does not necessarily identify a certain location as unsafe.

Collisions occurring within 100 feet of an intersection are assigned to that intersection, defined as the combination of primary and secondary roadway. Collisions occurring more than 100 feet from an intersection are assigned to that segment. Based on the data provided, 10% of bicycle-involved collisions occurred at an intersection. **Table 3-10** summarizes the locations that were reported in the 2007-2011 bicycle-involved collision data. The collision data set also includes the reported violation type, according to the California Vehicle Code.

TABLE 3-10 –BICYCLE COLLISION LOCATIONS– 2007-2011

Intersection/Segment	Collisions Reported
Las Virgenes Road <ul style="list-style-type: none"> • At Mureau Road • 450’ south of Los Hills Road • 590’ south of Country Creek Lane 	3

Chapter 3 – Existing Conditions

Old Topanga Canyon Road <ul style="list-style-type: none"> • 220' north of Mulholland Highway • 100' south of Bluebird Drive 	2
Agoura Road <ul style="list-style-type: none"> • 1320' west of Los Hills Road 	1
Park Sorrento <ul style="list-style-type: none"> • 2' east of Edison Pole #2082033E 	1
Parkway Calabasas <ul style="list-style-type: none"> • 200' north of Ariella Drive 	1
Mont Calabasas Drive <ul style="list-style-type: none"> • 150' west of Alsace Drive 	1
Calabasas Road 1056' west of Park Granada	1
Source: SWITRS, 2013	

Table 3-11 provides a list of the most common PCFs for collisions at signalized locations. The top three PCFs were travel on the wrong side of the road, auto right-of-way violations, and traffic signals and signs. These three PCFs accounted for 60% of collisions.

Table 3-12 provides a summary of time of day data for collisions. The time of day was grouped into four categories: school/business hours (7:00 AM to 4:59 PM), evening hours (5:00 to 8:59 PM), night hours (9:00 PM to 2:59 AM), and morning hours (3:00 to 6:59 AM). Among bicycle involved collisions, the greatest proportion of collisions occurred during business hours with 90% of the total, followed by one collision during evening hours. There were no reported collisions during night or morning hours.

Table 3-13 provides information on the involvement of alcohol for collisions. The PCF “driving under the influence” did not occur at any of the collisions reported.

TABLE 3-11 – PRIMARY COLLISION FACTORS, 2007-2011

Primary Collision Factor	Percent Share
Improper Turning	30%
Unsafe Lane Change	20%
Other Hazardous Violation	20%
Unsafe Speed	10%
Wrong Side of Road	10%
Automobile Right of Way Violation	10%

Source: SWITRS, 2013

TABLE 3-12 – COLLISIONS BY TIME OF DAY

Time of Day	% of Total
7:00 AM to 4:59 PM	90%
5:00 to 8:59 PM	10%
9:00 PM to 2:59 AM	0%
3:00 to 6:59 AM	0%

Source: SWITRS, 2013

TABLE 3-13 – INVOLVEMENT OF ALCOHOL FOR BICYCLE-VEHICLE COLLISIONS IN CALABASAS, 2007-2011

Alcohol Involved?	% of Total
PCF for Driving Under the Influence	0%
Other PCF	100%

Source: SWITRS, 2013

As indicated in the data above, a majority of bicycle-involved collisions in Calabasas occur along roadway segments, during daylight business hours, and do not involve alcohol. Developing a bicycle network with a mix of bicycle facility types and up-to-date design guidelines for signing and striping will help communicate the rules of the road and designate space for motorists and cyclists on the public roadway network.

4. Proposed Active Transportation Network

While all streets should be designed to safely accommodate all who use them, the proposed active transportation network consists of pedestrian improvements at a number of locations and bicycling facilities that are designed to be the primary system for active transportation within, to, and from Calabasas.

The pedestrian-oriented improvements and the Bikeway Network are the primary tools that allow the City to focus and prioritize implementation efforts where they will provide the greatest community benefit. Streets or corridors selected for inclusion in the networks are targeted for specific improvements in this Plan, such as the installation of bicycling lanes, off-street paths, signage, crossing improvements, or streetscape improvements. Combined, these two networks form the citywide active transportation network. The individual projects in this Plan represent specific improvements considered necessary to help Calabasas meet its goals and objectives for active transportation.

Once completed, the active transportation network will provide safer and more direct travel paths throughout the City for those who prefer to walk or bike. The proposed system was developed according to the following criteria:

Connection to Activity Centers: Schools and universities; community facilities, the community center, parks, and open space; and neighborhood commercial districts should be accessible by foot or bicycle. Residents should be able to walk or bike from home to both local and regional destinations.

Comfort and Access: The system should provide safe and equitable access from all areas of the City to both commute and recreation destinations, and should be designed for people of all levels of ability.

Purpose: Each link in the system should serve one or a combination of these purposes: encourage bicycling for recreation, improve facilities for commuting, and provide a connection to the citywide bike network. On-street facilities should be continuous and direct, and off-street facilities should have a minimal number of arterial crossings and uncontrolled intersections.

Connection to Regional Networks: The system should provide access to regional bikeways, regional trails, and routes in adjacent communities.

PROPOSED BICYCLING NETWORK

To be eligible for grant funds under Caltrans’ Bicycle Transportation Account, a city or county must adopt a bicycle plan that includes certain components outlined in Section 891.2 of the Streets and Highways Code. This section addresses the components required under Sections 891.2 (c), (d), (e), (f), and (j).

The proposed bikeway network, in addition to the existing network, consists of routes that are designed to be the primary system for bicyclists traveling through Calabasas. Streets or corridors selected for inclusion in the network are targeted for specific improvements in this Plan, such as the installation of bicycling lanes, off-street paths, or signage. By law, unless explicitly prohibited (as they are on US-101), bicyclists are allowed on all streets and roads regardless of whether the streets and roads are a part of the bikeway network.

TABLE 4-1 – LENGTH OF BICYCLING NETWORK

Bikeway Classification	Caltrans Classification ¹	Existing	Proposed
On-Street Bicycling Lane	Class II	8.1 miles	13.4 miles
Bicycling Route (Signed and Marked)	Class III	--	1.9 miles
Inter-Jurisdictional Improvements	Class II and III	--	11.1 miles
Total	--	8.1 miles	26.4 miles

Notes:

Based on Caltrans Highway Design Manual

The Caltrans definition of Class III includes only bicycling route signs.

Source: Fehr & Peers, 2013

Figure 4-1 illustrates the Citywide Existing and Proposed Bikeway Network. The proposed system includes a total of approximately 18 miles of new bikeway facilities in addition to the three miles currently in place. **Table 4-1** above shows the number of proposed miles for each bikeway classification.

General Design Guidance

The City of Calabasas has a curvilinear street network that tends to confine travel options to major arterial roadways. To accommodate a wide range of bicyclists, this network should be designed to facilitate commute bicycling trips and recreational and casual bicycling. Regardless, some design features may be universally applied to many bicycling facilities. This section summarizes some basic design features of standard Class I (shared-use paths), Class II (bicycling lanes), and Class III (bicycling routes). More detailed bicycling facility design guidelines are provided in Chapter 8 - Design Guidelines.

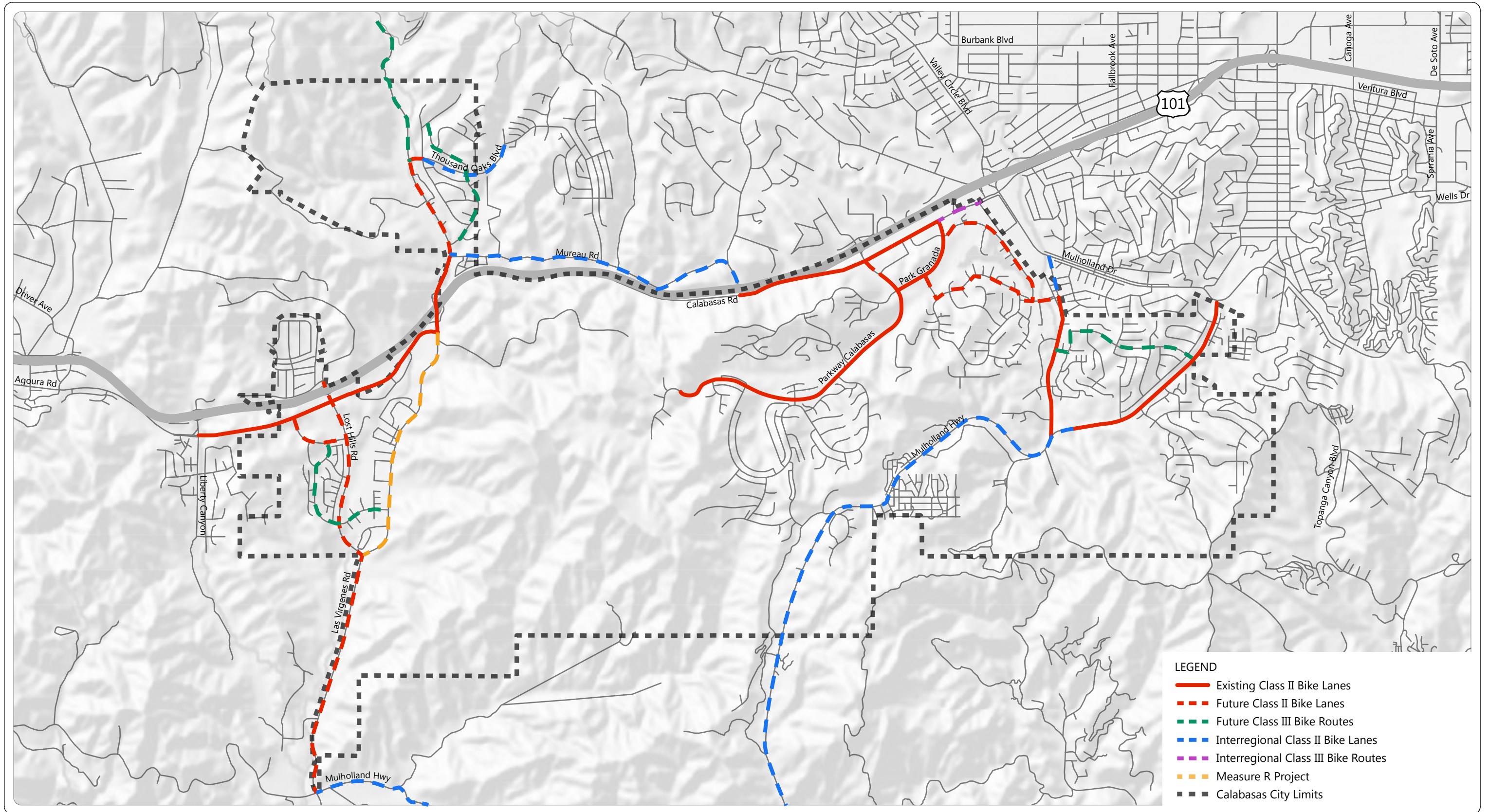
Shared-use Paths (Class I) should be designed to separate bicycle and pedestrian traffic as much as possible. The bicycling path portion should be a minimum of eight feet wide, with a preferred width of ten feet and up to fourteen feet in areas where heavy use is expected. Adjacent to bicycle paths, a separately designated walking path constructed with decomposed granite is preferable. Signage or stencils should indicate bicycling and walking only paths, as well as portions of paths that are shared. Paths should be continuous and have as few stops and crossings as are practical and safe.

Bicycle lanes (Class II) should be a minimum of five feet wide with a preferred width of six feet, measured from the edge of the parking lane or the curb face at locations without on-street parking. A minimum area outside of the gutter pan of four feet (three feet for a five-foot bicycling lane) should be provided. A 4-foot lane may be provided where there is no on-street parking and no gutter. In urban areas, 4-foot bike lanes are typically used only on intersection approaches where the bike lane is striped to the left of a designated right-turn lane. Bicycle lanes should be striped and marked on both sides of the roadway at the same time to provide continuity and discourage wrong-way riding. On steep grades, bicycle lanes may be provided in the uphill direction with shared lane markings in the downhill direction. If shorter segments of the corridors have insufficient width for bicycle lanes, on-street signage or stencils to raise the visibility of bicyclists and alert motorists that they are likely to encounter cyclists may be appropriate.

All bicycle routes (Class III) should be marked with signage and stencils to raise the visibility of bicyclists to motorists. In addition to standard bicycle lanes and bicycle routes, several bicycling design and traffic calming treatments should be considered to enhance the comfort and safety along specific routes.

Proposed Parking Facilities

It is recommended that the City of Calabasas establish a bicycle rack program that allows for the installation of bike parking throughout the City and should prioritize locations near bicycle generators, civic uses, and other key destinations. Additionally, the city should maintain an inventory of requests for the installation of bicycle racks based on local requests. Resident and stakeholder input would assist with the prioritization process and the city should seek to install additional bicycle racks as funding allows and demand justifies. Locations for which bicycle parking is recommended are shown in **Figure 4-2**.

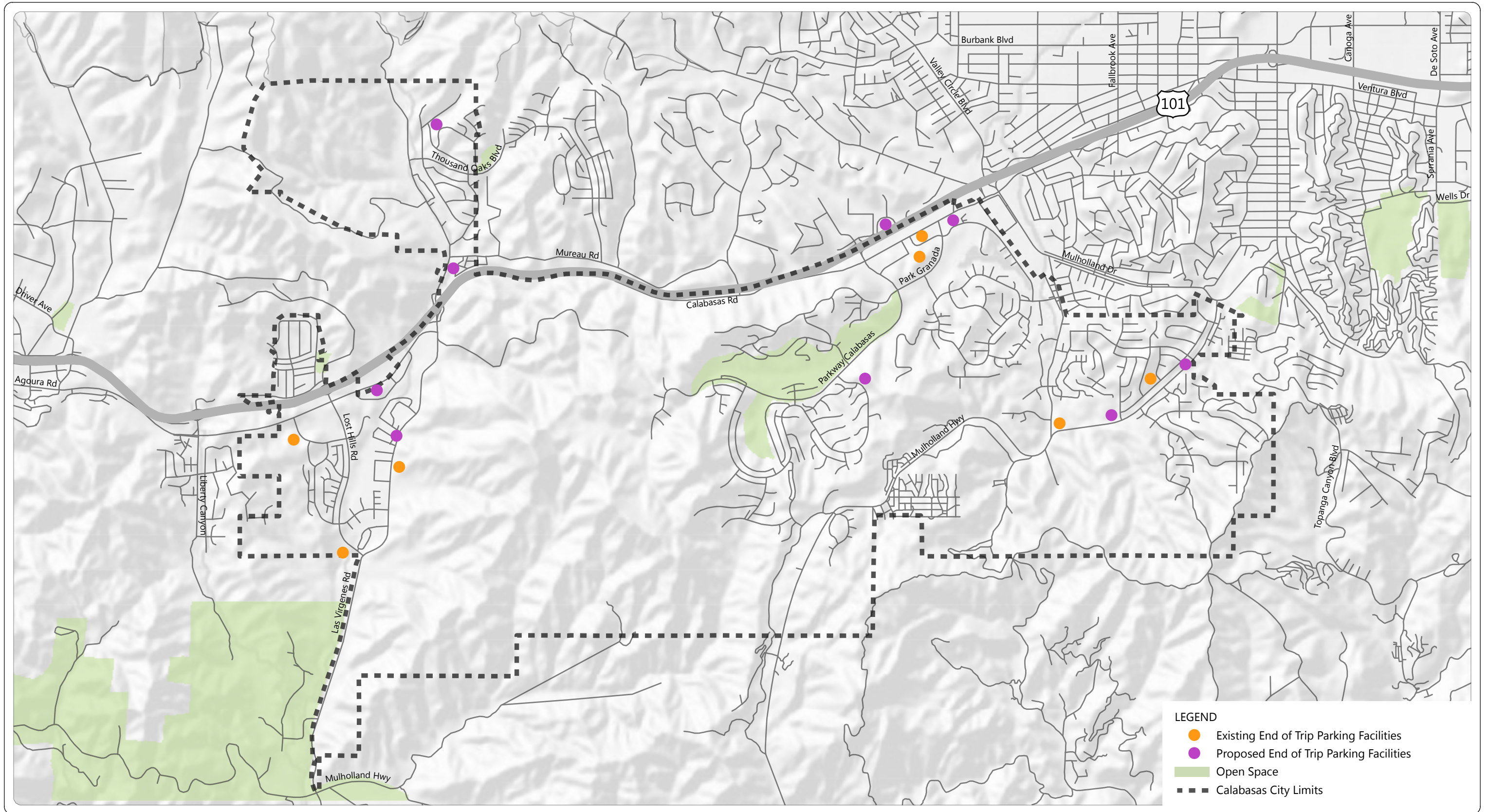


- LEGEND**
- Existing Class II Bike Lanes
 - - - Future Class II Bike Lanes
 - - - Future Class III Bike Routes
 - - - Interregional Class II Bike Lanes
 - - - Interregional Class III Bike Routes
 - - - Measure R Project
 - - - Calabasas City Limits



Not to Scale

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LEGEND

- Existing End of Trip Parking Facilities
- Proposed End of Trip Parking Facilities
- Open Space
- Calabasas City Limits



Not to Scale

Public transportation in Calabasas is limited to shuttle facilities. Currently, some vehicles have bicycle racks installed. Where these facilities do not exist, cyclists are permitted to carry their bicycle onboard on a space-permitted basis. It is recommended that the City install bicycle racks on all shuttle vehicles to further enhance the bicycle facilities for those cycling to transit.

The City Municipal Code includes guidelines for providing support facilities for bicyclists for major non-residential developments. It is recommended that the City encourage businesses that are smaller in nature to also provide bicycle support facilities, even if not required under the City's Municipal Code.

SCHOOL AREA BICYCLE IMPROVEMENTS

The City also plans to improve bicycle access to Calabasas's four public middle and high schools. Middle and high schools were studied as many students at these age levels rely on bicycling and walking as their primary modes of transportation. At a later date, this analysis may be expanded to include Calabasas' elementary schools.

We propose infrastructure improvements both on school properties and nearby streets. While the improvements are based on a careful, field-researched examination of existing conditions, they are subject to additional, more refined traffic and design review. Furthermore, all projects located on school grounds will require coordination with and approval from the Las Virgenes Unified School District and/or school principals. Coordination and approval may alter the design or location of proposed facilities on school properties.

The goal is to make bicycling to school safer and more convenient for students by minimizing bicycle, pedestrian, and auto conflicts. This can be done through the following improvements:

1. School Access– Infrastructure improvements designed to enhance the safety and convenience of bicycle access to schools. These improvements are located on a school's campus or in its immediate vicinity.
2. Bicycle Parking– Modifications to existing on-campus bicycle parking or recommendations for new/additional bicycle parking. All proposed bicycle parking should adhere to the guidelines for adequate and secure bicycle parking set forth in Chapter 8. Middle schools should provide bicycle parking for 20 bicycles; high schools should provide parking for 30 bicycles. These figures represent a baseline that may be adjusted in accordance with demand.
3. Bikeway Network– Bikeways radiating from a school's campus into surrounding neighborhoods, which are designed to improve connectivity between schools and their surrounding communities. In some instances, these recommendations include additional bikeways beyond those in the overall proposed Calabasas bikeway network. Other routes are coterminous with bicycle facilities proposed in the overall Calabasas bikeway network. We highlight both here to signify their importance in developing a cohesive, safe network of school-serving bikeways.

5. Support Programs

While Chapter 4 focused on specific engineering/infrastructure enhancements to improve safety and encourage walking and bicycling in Calabasas, this chapter presents recommendations for complementary, and essential, education and enforcement strategies in support of active transportation and specific programs and policies that will facilitate non-motorized transportation in Calabasas. This section also addresses BTA requirement (g): “A description of bicycling safety and education programs conducted in the area included within the plan, efforts by the law enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the Vehicle Code pertaining to bicycle operation, and the resulting effect on accidents involving bicyclists.”

Education is a critical element for a complete and balanced approach to improving both bicycling and walking safety in Calabasas. Education campaigns should include residents of all ages, especially emphasizing education of school children where safe walking and bicycling habits may be instilled as lifelong lessons. The following organizations and projects are involved in active transportation education initiatives in Calabasas.

EXISTING PROGRAM

Calabasas Bicycle Advisory Group

The Calabasas Bicycle Advisory Group (CBAG) was founded in 2011 to provide a re-focus in the development of the Bicycle Master Plan towards safety and the promotion of cycling and alternative transportation in the City.

PROPOSED PROGRAMS

Support programs are important because they increase the safety, utility, and viability of infrastructure projects. They may also be more cost effective, longer lasting, or reach a broader audience for more meaningful impact. Municipalities provide and administer support to a broad range of programs and activities related to bicycling and walking safety, education, promotion, and law enforcement as a way to complement their project-building efforts. Below is a list of programs and activities that have proven effective in other jurisdictions and which the City of Calabasas could choose to offer its residents. The toolbox of education, encouragement, and enforcement programs that follows is both adaptable to Calabasas’ unique needs and flexible to budget opportunities and constraints. Many education efforts involve an element of community participation as they are volunteer-based. As a result, education programs are among the most inexpensive tools to improve the walking and bicycling environment. Education programs can also be a collaborative effort between the City and local public health organizations.

Education and Encouragement Programs

Billboards/Electronic Message Boards and Street Smarts Program

Billboards and electronic message boards promote safety in the community, inform the public about bicycling and walking safety programs, and provide feedback on the program's effects. Street Smarts is one example of a public education campaign targeted at changing driver, pedestrian, and bicyclist behavior to improve safety on city streets.

Street Smarts (<http://www.getstreetsmarts.org/>) is a safety program initiated by the City of San Jose. Electronic message boards were used to display safety messages. Messages were changed regularly and



the boards were moved repeatedly to maximize their impact. The Street Smarts campaign launched in November 2002 and has received positive feedback from the public.



Street Smarts was designed as both a media and a community relations campaign. It uses education to raise

awareness of certain problem behaviors that contribute to traffic crashes and aims to change those behaviors over time. Behaviors addressed by the campaign are: red-light running, speeding, stop sign violations, school zone violations, and crosswalk violations. In addition to a media campaign, a community relations campaign should be conducted, working with schools, neighborhood associations, businesses, and community organizations to create a public forum to address this community issue.

Message boards can be used at various safety hot spots. The Street Smarts campaign materials are designed for use by any public agency for any community and are available from the City of San Jose. Materials are available in English, Spanish and Vietnamese.

The Street Smarts program has the following advantages:

- The program provides multiple messages using a single tool.
- The high-quality campaign materials were designed to be used by any public agency.
- The artwork is available from the City of San Jose for \$3,500.
- Media campaigns use a wide variety of communication tools.

Although the Street Smarts campaign requires staff resources, the overall cost is low to implement.

Citywide Walking and Bicycling Maps

Attractive maps with bicycle and walking routes, both in print and on City websites, can serve as an educational tool. These maps should highlight convenient routes for walking and bicycling in Calabasas and include tips on safe walking and bicycling practices. Maps should be distributed at public facilities throughout the City, through the Calabasas Bicycle Advisory Group, and at local bicycle shops.

Brochures and Pamphlets

Supplemental brochures and pamphlets are helpful to educate residents and visitors on topics such as (1) how to ride a bicycle safely in traffic, (2) how traffic signals work for pedestrians and bicyclists and the best way to be detected at signalized intersections, (3) pedestrian and bicyclists' rights and responsibilities when sharing the road, and (4) motorists' rights and responsibilities when sharing the road. Premade versions these pamphlets are available through advocacy organizations, the Federal Highway Administration (FHWA) (http://safety.fhwa.dot.gov/ped_bike/ped_bike_order), the American Automobile Association (AAA) (<http://www.aaafoundation.org/products>), and the National Highway Traffic Safety Administration (NHTSA) (<http://www.nhtsa.gov/Pedestrians>). These materials can be distributed at locations with high volumes of pedestrians and bicyclists and through the same outlets as citywide bicycle maps.

Safe Routes to School

Safe Routes to School (SRTS) refers to a variety of programs aimed at promoting walking and bicycling to school, and improving traffic safety around schools. The program takes a comprehensive "5 E" approach (as defined in this chapter) with specific engineering, education, encouragement, enforcement, and evaluation. The programs involve partnerships among school staff, parents, students, city staff, school districts, neighbors, and law enforcement. The National Center for Safe Routes to School has in-depth programming information. Integrating educational messages into a comprehensive SRTS program can be a very effective way to kick-start a citywide program. Specific education tools include:

- Pedestrian skills training for 1st and 3rd graders.
- Bicycle skills training for 3rd and 5th graders.
- Messaging to parents about safe driving, walking and bicycling habits.
- Creating drop-off and pick-up procedures.
- Incorporating information about walking and bicycling into classroom subjects such as math or science (e.g., calculate average walking speeds or distances).
- Assemblies or classroom sessions about safety.

Bicycling Guide for Kids Brochure

Children should learn the correct bicycling rules at an early age. For example, riding on a sidewalk is one of the most dangerous places for a child to ride, particularly in a residential neighborhood, because of the driveways and cars backing out, curb cuts, parking lots, trees, bushes, garbage cans, etc.

A bicycling guide targeting children and similar resources are available from the International Bicycle Fund's website at <http://www.ibike.org/education/>.

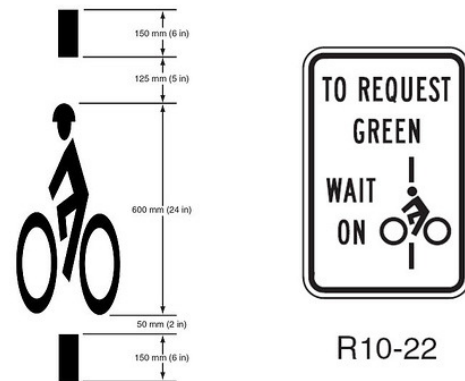
Perils for Pedestrians

A great way to educate the public on walking and bicycling issues is the media. Perils for Pedestrians (<http://www.pedestrians.org/>), a monthly television series, promotes awareness of issues affecting the safety of people who walk and bicycle. Many cities in California, including Berkeley and Davis, are already taking part through cable stations and webcasts. A typical series consists of interviews with walking and bicycling advocates, planners, engineers, and local and international public officials. They talk about important issues affecting active transportation, such as: walking hazards, infrastructure, bicycles, transit, and more. This program helps raise awareness of local and international issues through a common form of interface.

Educational Signs for Bicycle Detectors

Educational signs can be installed along bicycling routes approaching signalized intersections. They instruct bicyclists to look for the bicycle detector symbol and stop their bicycle on it. Signs can improve the understanding of bicycle detections and encourage bicyclist compliance at signals. This could supplement brochures available on the City's website and at City Hall. Signs can be posted along bicycling lanes, routes, and boulevards at actuated signals. Calabasas is using video detection technology on new signals, which eliminates the need for indicating where bicyclists should stop.

Figure 9C-7. Example of Bicycle Detector Pavement Marking



The cost of a sign is approximately \$200 plus installation. Costs can become high if large numbers of intersections are signed. Additionally, the use of word-intensive signs poses difficulties in areas with multilingual populations.

Educational Signs for Pedestrian Signal Indications

Educational signs can be installed above pedestrian push buttons or integrated into the push button housing to improve understanding of pedestrian signal indications. Signs improve public understanding of pedestrian signal indications, and thus encourage pedestrian compliance at the signals. Signs should be considered where 10 or more pedestrian crossings per hour are anticipated.

The cost of a sign is approximately \$200 plus installation. Costs can be high if large numbers of push buttons are signed. Additionally, this treatment is not accessible to pedestrians with visual impairments, and the use of word-intensive signs poses difficulties in areas with multilingual populations.

Bicycle Training/Repair and Partnership with Local Bicycle Stores

Bicycling training and bicycle repair classes, as currently offered by the Calabasas Strollers and Rollers, are an excellent tool to increase community knowledge of bicycle maintenance issues and street riding skills. Youth training classes can include a “build-a-bike” program, in which youth learn how to rebuild a used bicycle that they may keep at the end of the program. Such classes are most helpful for beginner to intermediate bicyclists who would like to improve their understanding of bicycle maintenance and street riding skills.

Bicycle shops are a natural outlet for distributing walking and cycling pamphlets, maps, and other informational materials to the community. These stores are also ideal locations to post notices about bicycle/pedestrian meetings, safety workshops, and events. Bicycle shops may also offer knowledgeable personnel and/or sponsorship for future cycling events and workshops.

Walking School Buses/Bicycle Trains

Walking school buses and bicycle trains are organized walking and bicycling groups, respectively, where adults “pick up” walkers and bicyclists along a specific routes to school at specific locations. This way, children are supervised during their travel to school.

Walking Mascot

Bellevue, WA launched a walking mascot campaign at their elementary school in conjunction with roadway improvements. The mascot, called PedBee, is on school safety signs and makes personal appearances at school safety days. Safety days include local staff from the City’s Transportation and Police Departments. Children are taught bicycling, walking, and traffic safety basics, such as crossing the street safely. Children are also given traffic safety workbooks that provide guidance with hands-on activities such as coloring and safety procedure quizzes.

Corner Captains

The program is effective in neighborhoods where lack of adult supervision is a barrier to walking and bicycling. Neighbors or parents agree to stand at a corner of a route to school during the start or end of the school day to supervise kids as they walk to or from school. With clear sight lines, students will be seen the entire length of the block. Corner captains should wear reflective vests.

Teen Driving, Cycling, and Pedestrian Education

Teens need different educational messages than adults or children. The City should work with local teen-organizations or schools to facilitate a participatory process whereby teens create educational messages. Youth Participatory Action Research (YPAR) is an effective way to assist youth to create visuals, videos, or campaigns for bicycle and pedestrian safety among their peers. The California Department of Public Health has guides on YPAR and youth-led projects.

Adult Bicycle Education

A course on safe urban bicycling skills, such as that developed by the League of American Bicyclists, could be offered in coordination with the Calabasas Valley Bicycle Coalition and League of American Bicyclists. This program would train adults to ride defensively in traffic and provide instructions for effective bicycle commuting.

Senior Bicycle, Pedestrian, and Driving Education/Walk Wise, Drive Smart

Seniors often rely on walking and transit as their primary modes of transportation. Calabasas should work with local senior centers to provide activities related to safe walking for seniors. The City's program should also focus on safe driving for seniors. Many seniors do not want to give up driving even when it may be unsafe because it is perceived as a loss of independence. Educational messaging should address this concern.

Nationally and regionally, the number of senior citizen pedestrians is growing. Walk Wise, Drive Smart is a program aimed to improve the walking environment not only for senior adults, but also for all members of the community. It is a program that holds educational workshops, walking audits, and feedback surveys. Activities are aimed at senior citizens providing exercise at a pace and location comfortable to the participants, but are open to all. More information is available at <http://www.walk-wise.org/>.

Enforcement Programs

Enforcement tools have been demonstrated to be very effective in improving safety for road users. However, some programs can require a significant investment from local agencies. Newer enforcement tools like radar "wagons" can minimize the amount of time required for local law enforcement agencies.

Increased Fines

An increase in traffic fines has been shown to discourage driver violations against pedestrians in crosswalks. For example, in Salt Lake City, UT, fines were increased from \$34 to \$70 for driver violations against pedestrians in crosswalks. A lowering of fines for jaywalking from \$70 to \$10 was also implemented. Variations on this include double fines in school zones and construction zones.

Bicycle Traffic School

With this program, bicyclists or motorists who are ticketed for unsafe bicycling or unsafe driving around bicyclists, respectively, attend a class about safe and lawful behavior while riding a bicycle or sharing the road as a motorist with bicyclists. The class is offered in lieu of paying a fine or appearing in court. Bicycle traffic school is often accompanied by a media campaign informing road users of the program. Citations can be focused on common or uniquely hazardous behaviors such as unsafe passing of bicyclists by motorists or wrong way riding by bicyclists.

Speed Trailers and Active Speed Monitors

Speed trailers and active speed monitors display the speed of oncoming vehicles. Speed trailers are portable, whereas speed monitors are installed at permanent locations. Both devices help officers track motorist speed, display current speed to motorists, and create awareness of the posted speed limit. Devices should be placed at known locations with reported speeding, and should be used in conjunction with random ticketing operations.

Neighborhood Pace Vehicle

Residents can set the pace on streets in their neighborhood by driving no faster than the posted speed limit. On streets with only one lane in each direction, this will effectively force other motorists to drive slower. Many communities distribute stickers that say “Neighborhood Pace Car - Drive the Speed Limit,” which residents can place on their rear windshield.

Speed Enforcement in School Zones

Strict enforcement of speed laws in school zones can improve the safety for children walking and bicycling to school. A ‘zero tolerance’ policy for speeders in school zones, and an increase in fines for drivers who violate the posted school zone speed limit, are both potential approaches.

Tattletale Lights

To help law enforcement officers catch red-light runners safely and more effectively, a “rat box” is wired into the backside of a traffic signal controller and allows enforcement officers stationed downstream to identify, pursue, and cite red-light runners. Warning signs may be set up along with the box to warn drivers about the fine for red-light violations. Rat boxes are a low-cost initiative (approximately \$100 to install the box), but do require police officers for enforcement.

Law Enforcement Officer Bicycle and Pedestrian Training/Bicycle Liaison Officer

Law enforcement officers should receive training specifically focused on bicycle and pedestrian safety and enforcement principles. As a cost-saving measure, the City of Calabasas may collaborate with surrounding jurisdictions and share resources as practical. Additionally, the Calabasas Police Department should consider appointing a bicycle and pedestrian liaison officer—as the Los Angeles Police Department has successfully instituted—who is a single point of contact for all matters concerning bicyclist and pedestrian safety.

Citywide Programs and Strategies

As a complement to the support programs listed above, the following policies and programs are recommended for the City of Calabasas:

Accessibility

- Facilitate bicycles on transit.
 - Install secure bicycle parking at major transit stops/centers.
 - Encourage Foothill Transit and Metro to install triple bike racks on buses.
- Provide bicycle detection at intersections.
- Install bicycle parking throughout downtown.
- Install bicycle parking in the public right-of-way, such as in converted car parking spaces, serving major destinations. Prioritize corridors with existing or planned bicycle facilities.
- Adopt a bicycle parking ordinance to ensure quality bike parking is installed on private property. The parking ordinance should include commercial, residential, and office uses; specify the number of spaces and types of parking racks to be provided; and provide for long-term and short-term parking.
- Adopt a bicycle amenities ordinance that requires or provides incentives for developers of new commercial buildings to install showers and clothing lockers for bicycle commuters.
- Develop citywide bicycle wayfinding signage (including distances and travel times). Principal destinations to include on wayfinding signs are:
 - Old Town
 - Library
 - City Hall
- Develop an ADA Transition Plan.
- Continue to create capital improvement projects to enhance pedestrian access.

Maintenance and Funding

- Improve pavement condition (give priority to designated bike routes and corridors with high bike ridership).
- Keep roads and bike lanes clear of debris (prioritize street sweeping on routes with curbside bike lanes).
- Pursue active transportation and multi-modal funding to implement the projects in this plan. Sources for funding include, but are not limited to, State and Federal Safe Routes to School

grants, California Bicycle Transportation Account, Caltrans Transportation Planning Grants, SCAG RTIP Call for Projects, and Metro Call for Projects. Set a goal of submitting at least two non-motorized grant-funding applications per year.

- Identify an employee who will serve as the bicycle and pedestrian coordinator and manage non-motorized transportation projects and ongoing route maintenance.
- Update infrastructure capital improvement project list to prioritize projects that would proactively address areas with substantial pedestrian or bicyclist-involved collision history.
- Coordinate street repaving, facility upgrades, and restriping with bicycle plan implementation and prioritize projects that include bicycle infrastructure.
- Assign a funding source or responsibility to keep sidewalks maintained.

Education/Community Involvement

- Promote increased driver awareness and respect for bicyclists and pedestrians.
- Pursue Office of Traffic Safety grants for outreach campaigns.
- Consider developing a permanent bicycle and pedestrian information website/blog hosted within the City's web domain, similar to the successful Los Angeles Department of Transportation (LADOT) Bicycle Services website (<http://www.bicyclela.org>) and LADOT Bike Blog (<http://ladotbikeblog.wordpress.com>).
- Conduct targeted outreach of proposed bicycle and pedestrian related improvements and events to educate local residents and employees, and garner greater interest and support.
- Develop the Calabasas Bicycle Advisory Group into a standing committee that meets regularly with City staff to discuss walking and bicycling issues. The role of the CBAG includes identifying key problems, crafting public outreach campaigns, promoting bicycle and pedestrian programs, and serving as an interface between the City and community members/advocacy organizations. CBAG members may include:
 - Local bicycle and pedestrian advocates,
 - Las Virgenes Unified School District students and staff
 - City Public Works Department staff
 - City Planning Department staff
 - Law enforcement and fire department officers
 - Neighborhood business owners
 - Hospital and public health staff
- Establish a Bike-Friendly Business District (BFBD) in Old Town Calabasas. Long Beach began the first BFBD program in 2010. The program encourages merchants and their customers to replace cars with bicycles. The City of Calabasas should work with local business owners in certain retail

districts, such as those in Calabasas’s downtown, to offer incentives including discounts for bicyclists, free bike valet, free bike tune-ups, bicycle parking, and special stickers. This creates an incentive to travel by bicycle and benefits merchants, who often see an increase in customers.

Enforcement/Safety

- Consider police bicycle patrol for downtown area.
- Conduct targeted enforcement efforts, with citations and educational materials that focus on safe and lawful behavior for all road users. Enforcement can be targeted at areas such as schools, public facilities, and locations with demonstrated collision history. Combine with bike traffic school above.
- Monitor and record bicyclist and pedestrian-involved collisions.
- Consider the establishment of repair, air, and bike maintenance sites.
- Prohibit sidewalk bicycle riding in high pedestrian areas/downtown (include “no bicycle riding on sidewalk” signage and markings).

Encouragement/Evaluation

- Establish a large-scale car-free day similar to the popular CicLAvia.
- Establish a “bike-buddy” program in conjunction with the Calabasas Bicycle Advisory Group and employers. This program would pair experienced cyclists with new cyclists to bicycle to work together. The City could hold skills training workshops prior to the program’s kick-off to teach bicycling safety skills to all participants.
- Conduct walk/bicycle audits as part of outreach strategies for new development projects or as a comprehensive SRTS program. A walk/bicycle audit leads stakeholders on a set course to discuss bicyclist/pedestrian safety concerns and strategies to improve safety.
- Partner with the Los Angeles County Bicycle Coalition and high school students to conduct annual bicycle and pedestrian counts, to implement an annual monitoring program that conducts bicycle and pedestrian counts once a year, or require that all traffic study counts include bicycles and pedestrians to estimate bicycling levels and changes in bicycling levels over time.
- Develop metrics to measure the impact of walking and bicycling on public health, resident and merchant perceptions, environmental impact, amount of cycling, and safety (note: it may not be possible to measure the impact of bicycling alone). Some examples are provided below:
 - Public Health – Partner with local schools to measure distance cycled or calories/weight lost during Bike Month (May).

- Resident and Merchant Perceptions – Survey questions such as “how frequently do you walk or bicycle around town?” “what prevents you from walking and bicycling?” and “what mode of travel do you use for short trips?” aim to understand attitudes toward walking and bicycling, and common concerns. These surveys, which should be available in English and Spanish, can be done citywide or as part of an SRTS program for parents.
- Environmental Impact – Measure reductions in vehicle miles traveled or vehicle emissions through surveys.
- Safety – Review the number of bicycle/pedestrian-involved collisions on a regular basis and develop collision rates as data on the number of vehicles, bicyclists, and pedestrians is collected over time.

6. Funding and Implementation

As the currently planned heavy infrastructure projects come under construction, the City should use opportunities such as roadway repaving, or utility work, to implement network segments that require limited changes or consist of “sign and paint only.” These features can be implemented relatively rapidly at low cost and greatly expand the network, which would both facilitate and encourage increased cycling in the City. This approach allows the City to implement more of the Plan at a quicker pace, with the intent of effectively providing alternative mobility choices.

Numerous funding sources are potentially available at the federal, state, regional, county, and local levels for the City of Calabasas to implement the projects and programs in the Bicycle Master Plan. Below is a description of the most promising funding programs available for the proposed projects at the federal, state, MPO and county levels. Most of these sources are highly competitive and require the preparation of extensive applications.

STATE AND FEDERAL PROGRAMS

The majority of public funds for bicycle and pedestrian projects are derived through a core group of federal and state programs. Federal funds from the Surface Transportation Program (STP), Transportation Enhancements (TE), and Congestion Mitigation Air Quality (CMAQ) programs are allocated to the County and distributed accordingly.

Bicycle Transportation Account (BTA)

The BTA is a Caltrans-administered program that provides funding to cities and counties for projects that improve the safety and convenience of bicycling commuting. Eligible projects include secure bicycle parking; bicycle-carrying facilities on transit vehicles; installation of traffic-control devices that facilitate bicycling; planning, design, construction and maintenance of bikeways that serve major transportation corridors; and elimination of hazards to bicycling commuters. In fiscal year 2008/09, the BTA provided \$7.2 million for projects throughout the state. To be eligible for BTA funds, a city or county must prepare and adopt a bicycling transportation plan that meets the requirements outlined in Section 891.2 of the California Streets and Highways Code. More information on the Bicycle Transportation Account is available at: www.dot.ca.gov/hq/LocalPrograms/bta/btawebPage.htm

Transportation Enhancements

Under the Transportation Enhancements (TE) program, California receives approximately \$60 million per year from the federal government to fund projects and activities that enhance the surface transportation system. The program funds projects under 12 eligible categories, including the provision of bicycling lanes, trails, bicycle parking, and other bicycling facilities; safety-education activities for pedestrians and bicyclists; landscaping, streetscaping, and other scenic beautification projects; and the preservation of abandoned railway corridors and their conversion to trails for non-motorized transportation. In California, 75 percent of TE funding is distributed by the regional transportation planning agencies. For the Los Angeles County, the Metropolitan Transportation Authority (Metro) manages the disbursement of funds. The remaining 25 percent of the state budget is allocated by Caltrans at the district level.

Safe Routes to School (SR2S)

California's Safe Routes to Schools program (SR2S) is a Caltrans-administered grant-funding program established in 1999 (and extended in 2007 to the year 2013). Eligible projects include bikeways, walkways, crosswalks, traffic signals, traffic-calming applications, and other infrastructure projects that improve the safety of walking and biking routes to elementary, middle, and high schools, as well as "incidental" education, enforcement, and encouragement activities. Planning projects are not eligible. In fiscal year 2007/08, approximately \$25.5 million was available in grant funding. More information on the Caltrans www.dot.ca.gov/hq/LocalPrograms/saferoutes/saferoutes.htm

Proposition 84

The Department of Conservation manages competitive grants, on behalf of the California Strategic Growth Council (SGC), to cities, counties, and designated regional agencies to promote sustainable community planning and natural resource conservation. The grant program supports development, adoption, and implementation of various planning elements. In 2010, it awarded \$20 million through the Proposition 84 Sustainable Communities Planning Grant and Incentives Program. The SGC will award \$20 million more in grants in both 2011 and 2012 (totaling \$40 million). Eligible projects include plans that support greenhouse gas emission reduction and sustainable communities.

http://www.sgc.ca.gov/planning_grants.html

Caltrans Transportation Planning Grants

Caltrans provides Transportation Planning Grants on a yearly basis. These grants are available to jurisdictions focusing on improving mobility by innovatively addressing problems or deficiencies in the transportation system. Funds can be used for planning or feasibility studies. The maximum funding available per project is \$300,000. Fiscal year 2012-2013 grants were awarded to 70 projects totaling almost \$10 million.

<http://www.dot.ca.gov/hq/tpp/grants.html>

OTS Grant Opportunities

The California Office of Traffic Safety (OTS) provides grants for safety programs and equipment. Bicycle and Pedestrian Safety is a specifically identified funding priority. This category of grants includes enforcement and education programs, which encompass a wide range of activities, including bicycle helmet distribution, design and printing of billboards and bus posters, other public information materials, development of safety components as part of physical education curriculum, or police safety demonstrations through school visitations. In 2009, OTS awarded \$82 million to 203 agencies.

<http://www.ots.ca.gov/Grants/default.asp>

Highway Safety Improvement Program (HSIP)

The Highway Safety Improvement Program (HSIP) is a core federal-aid program that aims to reduce traffic fatalities and serious injuries on public roads. Caltrans administers the program in California and received

\$74.5 million for the 2010/11 Federal Fiscal Year. HSIP funds can be used for projects such as bike lane or sidewalk projects on local roadways, improvements to Class I multi-use paths, or for traffic calming measures. Applications that identify a history of incidents and demonstrate their project's improvement to safety are most competitive for funding. The Transportation Development Act can also be used to fund related improvements; however, these funds are allocated to cities on the basis of a formula.

<http://www.dot.ca.gov/hq/LocalPrograms/hsip.htm>

Land and Water Conservation Fund

The Land and Water Conservation Fund (LWCF) provides matching grants to States and local governments for the acquisition and development of public outdoor recreation areas and facilities. The program is intended to create and maintain a nationwide legacy of high quality recreation areas and facilities and to stimulate non-federal investments in the protection and maintenance of recreation resources.

<http://www.nps.gov/ncrc/programs/lwcf/grants.html>

Environmental Enhancement and Mitigation Program

The Environmental Enhancement and Mitigation Program (EEMP) was established in 1989 and is administered by the California Natural Resources Agency and Caltrans. The program offers a total of \$10 million each year for grants to local, state, and federal governmental agencies and to nonprofit organizations, funded through gasoline taxes. EEMP Funds are allocated to projects that either directly or indirectly offset environmental impacts of modified or new public transportation facilities including streets, mass transit guideways, park-n-ride facilities, transit stations, tree planting to offset the effects of vehicular emissions, and the acquisition or development of roadside recreational facilities, such as trails.

<http://resources.ca.gov/eem/>

Recreational Trails Program

The Recreational Trails Program (RTP) provides funds to states to develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses. The RTP is an assistance program of the Department of Transportation's Federal Highway Administration (FHWA). The RTP funds come from the Federal Highway Trust Fund, and represent a portion of the motor fuel excise tax collected from non-highway recreational fuel use. RTP funds are distributed to each state by legislative formula: half of the funds are distributed equally among all states, and half are distributed in proportion to the estimated amount of non-highway recreational fuel use in each State. RTP funds may be used for maintenance and restoration of existing trails, purchase and lease of equipment to construct or maintain trails, administrative costs associated with the program, or operation of educational programs to promote safety and environmental protection related to trails.

http://www.fhwa.dot.gov/environment/recreational_trails/index.cfm

Transportation Development Account Article III

Transportation Development Act was enacted by the California State Legislature and is administered by Caltrans. Article 3 of the TDA provides funding for pedestrian and bicycle facilities. By ordinance, Metro is responsible for administering the program and establishing its policies within Los Angeles County. TDA, Article 3 funds are allocated annually on a per capita basis to both cities and the County of Los Angeles. Agencies must submit a claim form to Metro by the end of the fiscal year in which they are allocated. TDA Article 3 funds may be used for right-of-way acquisition, design costs, construction or major reconstruction, retrofitting to comply with the Americans with Disabilities Act (ADA), route improvements such as bicycle detectors at signals, and purchase and installation of supporting bicycle facilities such as parking, lockers, and showers.

<http://www.metro.net/projects/tda/>

Safe and Active Communities

The California Department of Public Health Safe and Active Communities Branch (SACB) is soliciting applications from eligible entities to develop, implement, and evaluate a set of small-scale, low-cost educational interventions with underserved California schools. A total of \$375,000 is available in the support of building school interest and capacity to conduct year-round interventions to improve safety for walking and bicycling in the neighborhoods surrounding school campuses. Interventions must focus on improving safety rather than simply encouraging walking and bicycling. The desired outcome is that each local intervention site will create a calendar outlining its ongoing SRTS activities during the year subsequent to the grant period. Applications must include five to eight elementary or middle school interventions over a 24-month period.

www.cdph.ca.gov

REGIONAL AND LOCAL FUNDING

At the regional and county level, SCAG and Metro administer much of the funds that can be used to fund active transportation projects. Metro administers several programs that are sources of funding for recommended projects. As mentioned, federal and state programs, such as the Transportation Enhancements program, are administered at the state or county level and distributed to local jurisdictions.

Metro Call for Projects

Metro is responsible for allocating discretionary federal, state, and local transportation funds to improve all modes of surface transportation. Metro also prepares the Los Angeles County Transportation Improvement Program (TIP). The Call for Projects program is a competitive process that distributes discretionally capital transportation funds to regionally significant projects. Metro accepts applications for this program every other year. Funding levels for each mode is established by the Metro Long Range Transportation Plan and bicycling may be included in up to five modal categories.

Modal Categories Relevant to Bicycle Plan Projects and Programs

Chapter 6 – Funding and Implementation

Modal Category	Share of Funding*	Eligible Projects**
Bikeway Improvements	8%	Regionally significant projects that provide access and mobility through bike-to-transit improvements, gap closures in the inter-jurisdictional bikeway network, bicycle parking, and first-time implementation of bicycle racks on buses.
Regional Surface Transportation Improvements	40%	On-street bicycle lanes may be eligible if included as part of a larger capacity-enhancing arterial improvement project. Bikeway grade-separation projects may be eligible as part of larger arterial grade-separation projects.
Transportation Enhancement Activities	2%	Bicycle-related safety and education programs. Bikeway projects implemented as part of a scenic or historic highway, and landscaping or scenic beautification along existing bikeways may also be eligible.
Transportation Demand Management	7%	Technology and/or innovation-based bicycle transportation projects such as Bicycle Commuter Centers and modern bicycle sharing infrastructure. Larger TDM strategies with bicycle transportation components would also be eligible.
Pedestrian Improvements	8%	Pedestrian improvements that promote walking as a viable form of utilitarian travel, pedestrian safety, and an integral link within the overall transportation system.
*Funding estimate is bi-annual (every other year) based on the approved funding from the 2007 CFP. **The discussion of eligible projects is based on 2009 CFP requirements and assumes all eligibility requirements are met and the questions in the CFP application are adequately addressed. These requirements are subject to change in future cycles. City staff should refer to the latest CFP Application Package for detailed eligibility requirements.		

From LA City Bicycle Plan, 2010.

SCAG Non-Motorized RTP

The Southern California Association of Governments' Non-Motorized Program is currently developing a Regional Bicycle and Pedestrian Plan. The program was kicked off in August 2009 and is working towards improving transportation options, increasing safety and assisting with the SB 375 goals in reduction in greenhouse gases.

<http://www.scag.ca.gov/nonmotorized.htm>

COST OF NEW BICYCLING FACILITIES

Table 7-1 provides a unit cost summary for the construction of bikeway facilities in Calabasas; **Table 7-2** summarizes the conceptual cost estimates for each priority project. These estimates are based on costs experienced in other communities throughout southern California. More detailed estimates should be developed following the preliminary engineering stage as individual projects advance towards implementation.

TABLE 7-1 – CONCEPTUAL UNIT COSTS FOR BIKEWAY CONSTRUCTION

Facility Type		Improvement	Estimated Cost Per Mile
Class I	Shared-Use Path	Construct Path with Minimal Grading Needed	\$1.5 million
Class II	Bicycling Lane	Signing/Striping with Minor Improvements	\$50,000
Class III	Bicycling Route	Signing Plus Stencils	\$30,000

Note: Costs are in 2012 dollars, excluding right-of-way costs

For purposes of this Plan, conceptual construction costs for the proposed system were based on the following assumptions:

- New Class I facilities would be constructed on generally flat right-of-way with no grade separation and minimal grading needed given the existing topography within the City; cost of right-of-way acquisition is not included.
- New Class II facilities would require minimal or no roadway improvements.
- New Class III facilities would require signing only and stencils with minor improvements.

Past Bicycle Facility Expenditures

The City of Calabasas has implemented 8.1 miles of bicycle lanes throughout the City. Based on the length of existing bicycle facilities and planning level cost estimates, it is estimated that the City has spent \$405,000 on bicycle facilities.

Bicycle Facility Implementation Phasing

The project list developed in chapter four was updated to reflect project implementation phasing. The project list is divided into four tiers:

- Tier 1 – Top Priority Projects
- Tier 2 – Second Priority Projects
- Tier 3 – Long-term Priority Projects
- Tier 4 – Inter-Jurisdictional Projects

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The Tier 1 and Tier 2 projects were prioritized based on project readiness, public input, the connectivity considerations described at the beginning of this chapter, and ease of implementation as related to street resurfacing projects. The following section includes grant ready project sheets for five projects in the Tier 1 priority list that are prime candidates to receive funding such as Bicycle Transportation Account funds, Metro Call for Projects, or Safe Routes to School funding.

Construction of the Class II and III system would require approximately \$322,000 for jurisdictional facilities plus an additional \$555,000 for inter-jurisdictional facilities, for a total of 877,000, which equates to an investment of approximately \$87,700 per year over 10 years. This means that if the City were to implement these projects, a local match of approximately \$90,000 would be needed. A portion of the proposed system may be constructed as part of new development or as redevelopment occurs, which may offset some costs.

Maintenance Costs

Multi-use path maintenance includes cleaning, resurfacing, and re-striping the asphalt path; repairing bridges and other structures; cleaning drainage systems; removing trash; and landscaping. While this maintenance effort may not be incrementally major, it does have the potential to develop heavy expenses if it is not done periodically.

The estimated annual maintenance expenses for Class I bicycling paths is approximately \$15,000 per mile. There are currently no Class I facilities being proposed for Calabasas.

For Class II bicycling lanes, the cost consists of maintaining signage, pavement markings and striping, estimated at \$2,500 per year. The estimated additional annual cost for maintenance of all near and medium-term facilities proposed in this plan (13.4 miles) is \$33,500.

Class III facilities will require maintenance of signage and shared lane markings located along the route, also estimated at \$2,500 per year. At full build-out, the annual cost of maintaining the Class III facilities proposed in this plan (1.9 miles) is estimated at approximately \$4,750.

