CITY *of* CALABASAS

DRAFT PEDESTRIAN MASTER PLAN

RYAN SNYDER ASSOCIATES, LLC

SEPTEMBER 2004

Calabasas Pedestrian Master Plan
Prepared by Ryan Snyder Associates, LLC

TABLE OF CONTENTS

INTRODUCTION: PURPOSE OF THE PEDESTRIAN MASTER PLAN

The City of Calabasas joins a small, but growing list of communities that have embarked on an effort to create a higher quality of life through creating a more walkable environment. The reasons for this recent trend include:

- Concern over sedentary lifestyles
- Rapidly increasing rates of child obesity, diabetes and other health problems resulting from a lack of exercise
- Children are losing the independence that walking offers
- A need to make walking safer
- Walking offers an opportunity for families and friends to spend quality time together
- As our population ages, more people need walkable neighborhoods, and they need safer places to walk
- Pedestrian-friendly commercial streets draw people and enhance economic vitality
- The need to reduce air pollution and global warming gases emitted by motor vehicles
- Walking is enjoyable

The Pedestrian Master Plan will provide a foundation to build a more pedestrian-friendly Calabasas. Chapter 1 provides planning principals for making Calabasas more walkable. Chapter 2 sets goals and means to work towards these goals with policies and actions. Chapter 3 reveals the results of a pedestrian questionnaire that the City circulated and highlights key issues and attitudes towards walking in Calabasas. Chapter 4 provides design guidelines for sidewalks and crosswalks for the City to follow with new development and when improvements are made. Chapter 5 defines some of the most prevalent components of the new pedestrian planning toolbox and traffic calming devices that communities are using. Chapter 6 describes guidelines for new development that the City may incorporate into its planning and zoning codes. Chapter 7 identifies some of the top issues that can help make Calabasas more pedestrian friendly.

CHAPTER 1: WALKABILITY PLANNING PRINCIPALS

Walkability depends much on the design and configuration of the built environment. Some features attract and encourage walking, while others discourage walking. To the extent that the distance between land uses is minimized and the environment is safe, pleasant, and interesting, people will walk. As new development occurs over the coming years, opportunities will arise to enhance the pedestrian-friendliness of the Calabasas.

A walkable community is a place where:

- people of all ages and abilities have easy access to their community "on foot", where an automobile is not needed for every trip.
- parents feel comfortable about their children being outside in their neighborhoods, needing not worry about the threat of motor vehicles.
- children spend more time outside with other children and are more active, physically fit, and healthy.
- more people walk and in turn the community and neighborhoods are safer through greater resident presence on the street, healthier by introducing and sustaining a more active lifestyle, and friendlier where residents interact on a more intimate and frequent bases.
- streets and highways are designed or retrofitted to provide safe and comfortable facilities for pedestrians, and are safe and easy to cross for people of all ages and abilities.
- pedestrians are given priority in neighborhood, work, school and shopping areas motor vehicle speeds are reduced (and in some places motor vehicles have been eliminated entirely) to ensure compatibility with pedestrian traffic.
- motor vehicle operating speeds are carefully controlled to ensure compatibility with adjacent land uses and the presence and routine of pedestrians in that space.

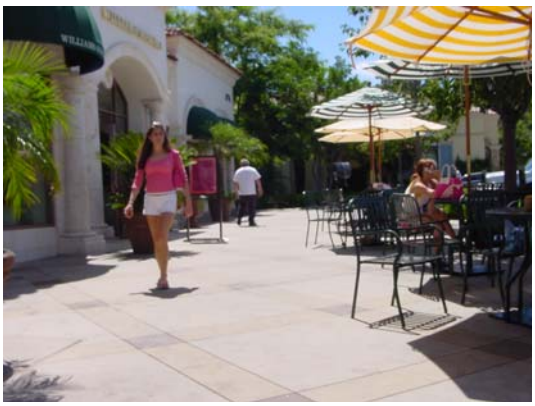
The following planning principles can serve as a guide for the continuation and further enhancement of the pedestrian environment.

- *Compact, concentric development* locates a greater number of destinations within walking distance than linear development.

- *High storefront density* in retail districts makes walking interesting and attracts pedestrians.

- *Zero lot line zoning* allows buildings to abut one another, keeping the distance between them convenient for walkers.

- *Ground floor retail and other interesting uses on the ground floor of buildings* also attract window shoppers and make for interesting and pleasant walking environments, as opposed to large blank walls.



- *Mixed land uses* make it convenient to walk between land uses -- from home to work, from home to the store, from work to restaurants, etc.

- *Convenient transit access* encourages a mode of travel that stimulates walking at either end of the trip.

- *Compact parking structures* spread walking destinations less than large surface parking lots.

- *Continuous walkways* and *safe street crossings* provide routes for people to walk on to any destination.

- *Safe, convenient, comfortable and interesting walking environments* attract pedestrians.

- *Sidewalks adjacent to business and storefronts* make access more convenient than those with parking separating sidewalks from entrances. This is safer for pedestrians as well. Sidewalks next to businesses attract window shoppers and make for interesting and pleasant walking environments.

- *Architecture* that blends well with its surroundings brings visual and functional interest and attracts pedestrians.

CHAPTER 2: PEDESTRIAN-FRIENDLY GOALS, POLICIES AND ACTIONS

By adopting a philosophy that incorporates pedestrian-friendly Principals the community, City staff and developers will understand the City's vision and will have a foundation to shape Calabasas into a more walkable community as it grows, and to implement capital improvements that incorporate these principals. Goals will follow the principals and provide a sense of direction. Policies will set a framework to work towards adopted Goals. Actions will implement the Goals and Policies and will bring Calabasas closer to the vision embodied in the Principals.

Pedestrian-Friendly Goals

1. Create a continuous network of walking routes that enable people to walk throughout Calabasas
2. Enhance pedestrian safety on existing streets and roads and create safe walking environments on new streets and roads
3. Encourage more people to walk in Calabasas

Pedestrian-Friendly Planning Policies

- Pedestrians should be able to walk to all destinations that motor vehicles access.
- Pedestrian access should be made safe, convenient, comfortable and interesting for all people including children, seniors, disabled people, as well as able-bodied adults.
- All developed streets, except for the US-101 freeway, should have sidewalks, street lighting, and safely designed intersections for pedestrians.
- All developed streets, except for the US-101 freeway, should have safely designed intersections for people with disabilities.
- Rural roads, except for the US-101 freeway and those where terrain prohibits, should have wide shoulders for pedestrians.
- The design and operation of pedestrian-oriented areas should carefully integrate the needs of people arriving by foot, as well as motor vehicles, transit and bicycle.
- Public events such as farmers' markets, arts and craft shows and festivals liven the streets and create public space.
- Areas with potential for high pedestrian activity should have a variety of streetscape features to make the pedestrian experience interesting.
- Streetscape features in pedestrian activity centers need to be tailored for each location.

Pedestrian-Friendly Actions

- Adopt and implement pedestrian-friendly guidelines for sidewalks along all types of streets.
- Adopt and implement pedestrian-friendly guidelines for street crossings.
- Adopt and implement guidelines for disabled access.
- Incorporate pedestrian-friendly guidelines for new development into planning and zoning codes.
- Assist developers to understand the City's walkability vision, development guidelines, sidewalk guidelines and street crossing guidelines.
- Develop a capital improvement list of projects that will improve walkability on existing streets and roads.
- Continue and enhance existing Safe-Routes-to-School program.
- Promote walking in Calabasas with publicized and organized walks, safety education programs and enforcement of traffic laws.
- Create land-use plans for new pedestrian-oriented areas that incorporate pedestrian-friendly planning principals and streetscape plans.
- Seek opportunities in appropriate places to enhance the pedestrian environment with streetscape features such as:

  - Bus shelters
  - Trees and landscaping
  - Benches and street furniture
  - Colored or textured pavers (smooth in the Pedestrian Through Zone)
  - Attractive street lights
  - Attractive trash and recycling receptacles
  - Attractive, consolidated news racks
  - Clocks
  - Public Art
  - Banners and Flags
  - Fountains
  - Information kiosks
  - District-wide logo/signage program

CHAPTER 3: COMMUNITY QUESTIONNAIRE

In order to assess the pedestrian issues and needs in Calabasas, the City conducted a questionnaire. --- surveys were distributed -----. A total of – were returned and processed. The survey instrument is attached as Appendix A.

Although the questionnaire asks and has answered the questions of distance, purpose, and frequency of walks taken, question 4 was the most telling and the most useful in establishing analytical groupings.
Question 4 asking how often do you walk to work/school/shopping/ or appointments and it therefore embodies the purpose of the PMP stratifying residents those who walk verses those that do not --allowing the remaining questions of the questionnaire to further explain the identity of the residents who assume a specific walking pattern.
Groupings: Influences, Imperfections, and Impediments and their creation of ease or difficulty in a pedestrian's travel.
In a perfect world city's would somehow be able to please all of its constituents; the city of Calabasas would be able to immediately furnish all the resident's requests from the recent survey; granting continuous sidewalks from here to everywhere, each new sidewalk would have a sufficient buffer from the street and from the threat of cars, and each car would be mandated to travel at a low speed. From a feasibility stand point this is impracticable. Therefore it is essential to understand the immediate needs of the residents and address what issues are most pertinent.
The Green Group: This group personifies a willingness to travel in imperfect conditions. Their ages range up to 60 years old, they live in a multiplicity of places throughout the city, they walk for every reason under the sun from recreation to scheduled appointments and they make up a majority of the respondents. One distinguishing factor about this group is their keen observation that the everywhere they walk is not safe yet they choose to walk with awareness. The landscape's imperfections do not serve as an impediment to their pedestrian activity.
The Blue Group: The mantra of this group could be nicer would be better, but sometimes they walk anyway. This group takes into consideration that the existing pedestrian landscape presents obstacles, yet they walk 1-3 times per week. Despite a respite desire for the presence of adequate sidewalks they are not impeded. The blue group is not blind to the misgivings in the pedestrian landscape their number one request is greater separation from automobiles, yet they present a willingness to bypass the landscape's misgivings realizing that it takes both time and money to make such change, hence they walk cautiously attempting to avoid incident. Persons belonging to the blue group would enjoy it if they felt more protected or if the landscape was beautified but they continue without those changes being made.
The Blue Triangle: This group is best characterized by the words walk where?, those in this group feel as if there is no objective or destination worth walking to, therefore they walk infrequently traveling by foot only 2-3 times per month on so called destination less trips i.e. walking for exercise or recreation. These trips have purpose but not a destination per se.

The group's main concern is connectivity; they are not willing to walk within the present conditions of the pedestrian landscape in fact they feel restricted therefore they do not demanding better conditions just closer more well connected destinations. This group's greatest objections are abrupt land usages and traffic devices like roundabouts. The concerns of this group are shared by those who make transitory visits to the city (ex. those employed here who do not reside here also). Abrupt changes in the landscape are troublesome to those who venture out without a destination and to those who lack familiarity with the landscape. Where the pedestrian encounters a change they did not anticipate in the throughway there is a tendency for the pedestrian to feel unsafe and unconfident in navigating the landscape.

The Red Circle Group: characterized by the mantra "too many impediments and not enough enticement". This group's lack of frequency in travel is partly attributed to a lack of interest in the pedestrian landscape. This group consists of people 40 years of age and above. Their critique and their concerns are two sides of the same coin; this group does not travel because of impediments like rough terrain; and perceive insufficient enticement to walk hence they lack of motivation to walk because of a general disinterest in the pedestrian landscape.

The Red Circle Group makes suggestions like gating the Bird streets, if granted they presume that there would be no likelihood of pedestrian fatality – this act extinguishing the impediment that created the disinterest in walking.

The Red Star Group: is characterized by the statement "there are impediments that I cannot over come". The members of this group have an overall idea that pedestrian travel is unsafe, therefore they do not consider pedestrian travel as an option. Within this group there is a dichotomy those below the age of 50 would consider walking up to 30 hours a week if conditions were *ideal* where those above 50 continually assert a blanket disinterest in pedestrian travel no matter nature or condition of the pedestrian landscape. The latter portion of this group feels that their lack of pedestrian mobility is independent of any responsibility of the local government to better the conditions of the landscape. This group maintains adamancy that their chosen residence lacks connectivity and that they supply their necessities without consideration of pedestrian travel.

CHAPTER 5: PEDESTRIAN CROSSINGS

Safe pedestrian crossings are critical components of the pedestrian network. Although the California Vehicle Code states that a crosswalk implicitly exists on every leg at every intersection, it is important to recognize that visibility and safety are important factors that determine where people will attempt to cross a street. The following guidelines are recommended for pedestrian crossings, including both signalized and unsignalized crosswalks.

Pedestrian Crossing Guidelines

- Crosswalks should be a minimum of 12 feet in width. Wider crosswalks should be considered in areas of high pedestrian volumes.
- Appropriate pedestrian crossing signage should be displayed in advance of and adjacent to all marked unsignalized crosswalks in order to the enhance visibility of pedestrians by motorists.
- Unsignalized pedestrian crosswalks should be adequately lighted, have clear sight distances, and be free from obstructions, such as foliage and poles.
- Unsignalized crosswalks should be well marked with high visibility paint.
- Mid-block crosswalks should be designated only in areas with relatively high pedestrian activity and crossing patterns, or where the distance to the nearest marked crosswalk is greater than 200 feet.
- At signalized intersections, efforts should be made to install marked crosswalks at every leg of the intersection where feasible given traffic and other considerations.
- Pedestrian signals should be timed in order to accommodate slower pedestrians. This should take into consideration people with slower walking speeds, such as seniors and persons with disabilities, in areas where this is appropriate. This may be also be achieved by using Pedestrian-Friendly-User-Intelligent (PUFFIN) signals that detect pedestrians in the crosswalk and extend the walk time to allow pedestrians to finish their crossing.
- In Pedestrian-Oriented Retail Districts the “walk” signals should be automatically timed with the traffic signal and no push buttons should be needed.
- All crossings should meet all ADA standards and guidelines.
- ADA-compliant curb ramps should be provided at all corners. Where physically feasible, every corner should have two perpendicular ramps.
- Where feasible, pedestrian refuge islands should be considered where pedestrians are required to cross a wide multi-lane street.
- Consideration should be given to reducing the turning radius of corners at intersections in order to minimize the crossing distance of pedestrians and to slow traffic, especially across busy multi-lane arterials. The presence of buses,

trucks and other large vehicles should be considered in designing the turning radii.

- Curb extensions should be considered at intersection corners as a way to minimize the crossing distance of pedestrians and to increase visibility.

Intersection Toolbox

Accessible pedestrian signal: A pedestrian signal that provides for accessible information to pedestrians who are visually impaired using audible or transmittable tones or speech messages. These signals may also include vibrating surfaces to provide accessibility to those who have visual or hearing impairments.

Advanced limit line/advanced stop bar: A placing of the stop limit line for vehicle traffic at a traffic signal behind the crosswalk for the added safety of crossing pedestrians.

Bulbout/curb extension: A segment of sidewalk, landscaping, or curb that is extended into the street, usually associated with crosswalks, in order to shorten the crossing distance for pedestrians and improve visibility. It can also have the effect of slowing traffic, especially turning vehicles.

Crosswalk: The portion of the roadway, usually at intersections, where pedestrians are expected to cross the street. Crosswalks may be marked or unmarked.

Countdown signal: A walk signal that provides a countdown to the next solid "don't walk" signal phase in order to provide pedestrians with information on how much time they have to cross.

Curb ramp: A ramp and landing that allows for a smooth transition between sidewalk and street via a moderate slope. This feature at intersections allows persons using wheelchairs to cross the street.

In-pavement flasher: A set of flashing lights pointed toward approaching vehicles in-laid in the pavement on the outside of crosswalks activated by a pedestrian crossing the street.

High-visibility crosswalk: Well-marked crosswalk, usually the "zebra" or "ladder" type. Can also use colored pavement.

Leading pedestrian signal interval: Allows pedestrians a "walk" signal to begin crossing ahead of motor vehicles.

Mid-block crossing: A crosswalk designed at a mid-point between intersections. These are usually implemented where there is a long distance between crosswalks on a commercial street.

Pedestrian-activated signal: A traffic signal that is operable only by a pedestrian push-button. Only the push button summons a green signal phase for the direction in which the pedestrian indicated. These are usually not desired in high-pedestrian locations where the signal should automatically turn.

Pedestrian refuge island: A defined area in the center of the street that is raised and provides a refuge area for pedestrians crossing a busy street.

Pelican crossing: Pedestrian light controlled signals that are used at mid-clock to allow pedestrians to cross while motor vehicles stop.

Portable sign: Signs that may be places in the middle of the street for school crossings and at other crossings where pedestrians need more visibility.

Puffin crossing: Pedestrian user-friendly intelligent crossings detect pedestrians and hold the signal red for motor vehicles until the pedestrian has crossed.

Raised crosswalk: A crosswalk that has been raised to meet the vertical elevation of the sidewalk in order to facilitate ease of crossing for pedestrians. This treatment also has the effect of slowing traffic on the approach to the intersection due to the vertical change.

Raised intersection: An intersection that has been raised to meet the vertical elevation of the sidewalk in order to facilitate ease of crossing for pedestrians. This treatment also has the effect of slowing traffic on the approach to the intersection due to the vertical change.

Scramble intersection: Provides a separate all-direction red phase in the traffic signal to allow pedestrians to cross linearly and diagonally.

Signage: Alerts motorists to the presence of crosswalks and pedestrians.

Tactile ground surface indicator: A type of surface that is easily navigable across an intersection for the sight-impaired. Best placed on the outside edge of the crosswalk.

SIDEWALK DESIGN GUIDELINES

Some pedestrian design guidelines vary according to the type of street involved. Streets may be classified by type based on the uses they serve and the level of pedestrian activity expected there. The following classifications will be referenced in the design guidelines. Local jurisdictions may want to use their own zoning or street classifications instead.

Street Classifications

Pedestrian-Oriented Retail Districts

Pedestrian-Oriented Retail Districts are those where the greatest numbers of pedestrians are encouraged and expected. Ideally, they will have the widest sidewalks, the widest crosswalks, the brightest street lighting, the most furnishings, and other features that will enhance the pedestrian environment. Retail, restaurant, and entertainment areas are most often located along these streets.

General Commercial and Civic Streets

General Commercial and Civic Streets are arterial streets with retail, office, civic, and recreational uses. Transit service runs along them and pedestrians often require buffers from traffic.

Multi-Family Residential Streets

Multi-Family Residential Streets often have greater volumes of pedestrians than single-family residential streets. In some cases they are served by transit service. Streets that have transit service require good pedestrian links to bus stops.

Single-Family Residential Streets

Single-Family Residential Streets require basic pedestrian amenities, such as sidewalks. These streets are typically quieter than others and generally do not carry transit vehicles or high volumes of traffic, although pedestrians require a pleasant walking environment in order to access transit on the nearest arterial roadway.

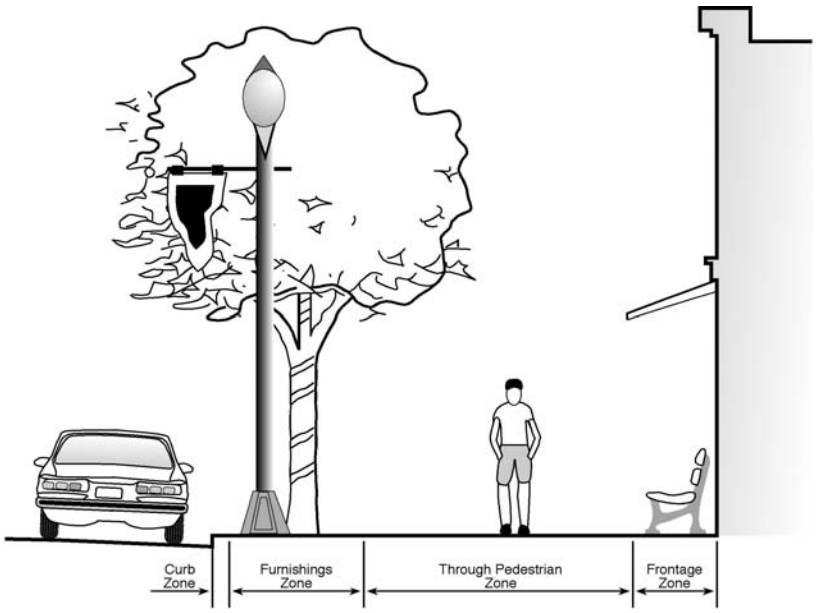
Guidelines for Each Classification of Street

Sidewalks along city streets are the most important part of pedestrian mobility. Sidewalks provide pedestrian access to virtually every activity and critical connections between modes of travel, including the automobile, transit, and bicycles. General provisions for sidewalks include standard width, provisions for street furniture and other obstructions, and guidelines for Americans with Disabilities Act (ADA) compliance. Sidewalks can be segmented into four zones that designers should provide for: the Frontage Zone, the Through Pedestrian Zone, the Furnishings Zone and the Curb Zone. The following describes these sidewalk zones and recommends specific guidelines that apply to each. Local jurisdictions may decide to develop their own similar guidelines.

Frontage Zone

The Frontage Zone is located immediately adjacent to buildings and provides shy distance from buildings, walls, fences, or property lines. It can include landscaping (permanent or temporary) as well as awnings, news racks, benches, outdoor café seating, and other furnishings typically found in the Furnishings Zone. In residential neighborhoods, landscaping typically occupies the Frontage Zone. The recommended minimum Frontage Zone width is:

- 30 inches in Pedestrian-Oriented Retail Districts, 8 feet where outdoor café seating is desired
- 18 inches along General Commercial and Civic Streets, Multi-Family Residential Streets, and Single-Family Residential Streets



Through Pedestrian Zone

The Through Pedestrian Zone serves as the area dedicated to walking and should be kept clear of all fixtures and obstructions. The clearance provided in the Through Pedestrian Zone should generally be straight for convenience of all pedestrians, but especially for the sight-impaired. This zone is located between the Frontage Zone and the Furnishings Zone. The recommended minimum Through Pedestrian Zone width is:

- 8 feet in Pedestrian-Oriented Retail Districts; wider where heavy pedestrian traffic is expected
- 6 feet along General Commercial and Civic Streets
- 4 feet, preferably 5 feet, along Multi-Family Residential Streets
- 4 feet, preferably 5 feet, along Single-Family Residential Streets

Furnishings Zone

The Furnishings Zone lies between the Through Pedestrian Zone and the Curb Zone. All fixtures, such as street trees, utility poles and boxes, lamp posts, signage, bike racks, news racks, benches, waste receptacles, drinking fountains, and other street furniture should be contained in the Furnishings Zone to keep the Through Pedestrian Zone free for walking. In residential neighborhoods, a planting strip often occupies the Furnishings Zone. The recommended minimum Furnishings Zone width is 4 feet and 8 feet where bus stops exist.

Curb Zone

The Curb Zone provides a buffer between the sidewalk and the street. It defines the pedestrian area from the street. It may simply consist of the width of the curb or may contain extra space for the unloading of passengers or freight. The recommended minimum Curb Zone width is:

- 18 inches where pedestrian or freight loading is expected and may conflict with obstacles in the Furnishings Zone
- 6 inches along segments of all other streets

The total recommended minimum sidewalk width for different districts include the following.

- 15 feet in Pedestrian-Oriented Retail Districts; wider where heavy pedestrian traffic or pedestrian loading is expected; more where bus stops exist
- 12 feet along General Commercial and Civic Streets; more where bus stops exist
- 11 feet along Multi-Family Residential Streets; may include planting strip; more where bus stops exist

- 10 feet, preferably 5 feet along Single-Family Residential Streets; may include planting strip

Other Sidewalk Guidelines

- All sidewalks should adhere to the latest Americans with Disability Act standards and guidelines.
- Driveway aprons should be confined to the Furnishings and Curb Zones.
- Landscaped buffers or fences should separate sidewalks from parking or off-street passenger loading areas.
- Sidewalks surface should be stable, firm, smooth, and slip-resistant.
- Pedestrian and driver sight distances should be maintained near driveways.
- Regulations regarding fencing and foliage near the intersection of sidewalks and driveways should be developed to ensure proper sight distance between vehicles and pedestrians when vehicles enter or exit a driveway across a sidewalk.

PLANNING FOR DISABLED ACCESS

In planning for pedestrians we must consider widely varying needs of people. People walk with different speeds. Some are able to endure long treks, while others can only go short distances. People's strengths, sizes and judgmental capabilities differ significantly.

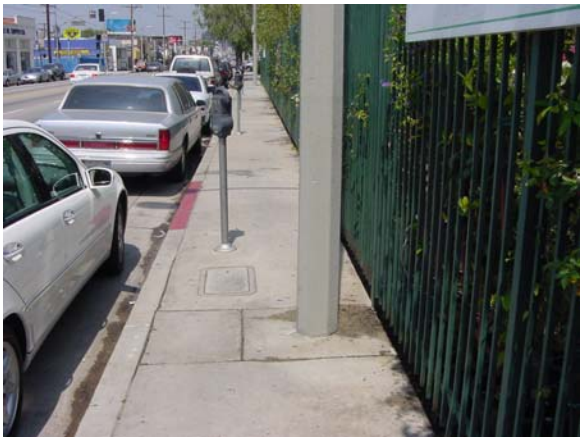
With advances in health care we are living longer. As our population ages the proportion of people with disabilities will grow. Moreover, most people endure temporary disabilities from injuries or illness at one or more points in their lives. So the number of people who are disabled for at least part of their lives is larger. Thus, the need for accommodating people with disabilities is large and will grow.

Standards and Guidelines

The specific impairments described above for varying disabilities lead us to designing walking environments with each of them in mind. Well-designed environments won't make people in wheelchairs walk, or sight-impaired people see. However, consideration of each impairment allows us to design sidewalks and streets that compensate for disabilities and allow users to ambulate in ways they couldn't otherwise. This section will describe the range of design standards and guidelines that communities can apply to mold the walking environment for maximum accessibility.

Guidelines for People with Mobility Impairments

The US Access Board has developed standards for "accessible routes," which includes sidewalks among other pedestrian paths. They are called the American with Disabilities Act Accessibility Guidelines (ADAAG) and must be followed. Under State Local Code Title 24 the State of California has also developed standards for sidewalks that must be followed. In most cases Title 24 is identical to ADAAG. In a few cases, it goes beyond ADAAG. The US Access Board has also developed non-mandatory guidelines that go beyond ADAAG standards for communities looking to become especially disabled-friendly. The following tables show those standards and guidelines for sidewalks and curb ramps.



Standards and Guidelines for Sidewalk Access			
Characteristic	**ADAAG Standards**	**US Access Board Guidelines**	**Title 24 Standards**
Maximum running grade without handrails	5%		
Maximum grade with handrails and level landings	8.33%		
Maximum rate of change of grade		13%	
Maximum allowable running cross-slope	2.0		
Design width		1.525 m (60 in)	
Minimum clearance width	0.915 m (36 in); 0.815 m (32 in) for no more than 0.610 m (24 in)	0.915 m (36 in)	
Minimum passing space	1.525 m (60 in) wide for at least 1.525 m (60 in) in linear distance		
Minimum passing space interval	61 m (200 ft)		
Vertical clearance	2.030 m (80 in)		
Maximum change in level	6 mm (.25 in); between 6 mm (.25 in) and 13 mm (.5 in) if beveled with maximum slope of 50%		
Maximum space in grates in walking surfaces	13 mm (.5 in)		12.5 mm (.49 in)
Elongated grate orientation	Perpendicular to dominant direction of travel		
Freestanding obstacles	May overhang no more than 0.305 m (12 in) from 0.685 m to 2.030 m (27 in and 80 in) above the ground		
Protrusions from walls	With leading edges between 0.685 m and 2.030 m (27 in and 80 in) shall not protrude more than 100 mm (4 in)		
Surface	Firm, stable and slip-resistant	Must be slip-resistant but relatively smooth so as to not create vibrations for wheelchairs	

Design Standards and Guidelines for Curb Ramps				
Curb Ramp Type	**Characteristic**	**ADAAG Standards**	**US Access Board Guidelines**	**Title 24 Standards**
Perpendicular	Maximum slope of ramps	8.33%; if space prohibits this, 8.33% to 10% with a maximum rise of 150 mm (6 in); or 10% to 12.5% with a maximum rise of 75 mm (3 in)	7.1% + or – 1.2%	
	Maximum cross-slope of ramps	2%		
	Maximum slope of flared sides	10%		
	Minimum ramp width	0.915 m (36 in)	1.22 m (48 in)	1.22 m (48 in)
	Minimum landing length	0.915 m (36 in); if landing is less than 1.22 m (48 in)		
	Minimum landing width		1.22 m (48 in)	
	Maximum gutter slope		5%	
	Changes in level		flush	
	Truncated domes		610 mm (24 in)	
Diagonal	Maximum slope of ramps	8.33%; if space prohibits this, 8.33% to 10% with a maximum rise of 150 mm (6 in); or 10% to 12.5% with a maximum rise of 75 mm (3 in)		
	Maximum cross-slope of ramps	2%		
	Maximum slope of flared sides	10%		
	Minimum ramp width	0.915 m (36 in)	1.22 m (48 in)	1.22 m (48 in)
	Minimum landing length	0.915 m (36 in); if landing is less than 1.22 m (48 in)		
	Minimum landing width		1.22 m (48 in)	
	Maximum gutter slope		2%	
	Changes in level		none	
	Minimum clear space		1.22 m (48 in)	
Parallel and combination	Maximum slope of ramps	8.33%; if space prohibits this, 8.33% to 10% with a maximum rise of 150 mm (6 in); or 10% to 12.5% with a maximum rise of 75 mm (3 in)	7.1%	
	Maximum cross-slope of ramps	2%		
	Maximum slope of flared sides	10%		
	Minimum ramp width	0.915 m (36 in)	1.22 m (48 in)	1.22 m (48 in)
	Minimum landing length	0.915 m (36 in); if landing is less than 1.22 m (48 in)		
	Minimum landing width		1.22 m (48 in)	
	Maximum landing slope		2%	
	Maximum gutter slope		5%	
	Changes in level		none	
	Truncated domes (parallel); detectable warnings (combination)		610 mm (24 in)	

Design Standards and Guidelines for Curb Ramps (continued)				
Curb extensions and built-up	Maximum slope of ramps	8.33%; if space prohibits this, 8.33% to 10% with a maximum rise of 150 mm (6 in); or 10% to 12.5% with a maximum rise of 75 mm (3 in)	7.1% + or – 1.2% (curb ext.); 7.1% (built-up)	
	Maximum cross-slope of ramps	2%	2% + or – 0.9% (curb ext.); 2% (built-up)	
	Maximum slope of flared sides	10%		
	Minimum ramp width	0.915 m (36 in)	1.22 m (48 in)	1.22 m (48 in)
	Minimum landing length	0.915 m (36 in); if landing is less than 1.22 m (48 in)		
	Minimum landing width		1.22 m (48 in)	
	Maximum gutter slope		5%	
	Changes in level		flush (curb ext.); none (built-up)	
	Detectable warnings		610 mm (24 in)	

Pedestrian-Activated Signals should be about 30 inches in height to be reached by people in wheelchairs. They should be convenient to reach at the top of the ramp, but not in the ramp.

Accommodating People with Visual Impairments

People with visual impairments must gather information about their traveling environment in different ways from fully sighted people. While people with full vision primarily use their sight to find their way, people with vision impairments use other cues, such as the sound of traffic and its direction, changes in slope such as are found on curb ramps, textures and color contrast. Good design provides these cues for them. Moreover, predictability in the walking environment makes navigation easier. Intersections that are at 90-degree angles with simple crossing patterns are easily discerned, as compared with irregularly shaped intersections, or complex intersections. If devices are used to help the visually impaired, such as audible pedestrian signals or truncated domes, consistency is important. The same devices should be used uniformly.

Raised Tactile Devices should provide both texture and color contrast.

Raised Tactile Devices or Textured Pavement may be used for wayfinding.

Audible Traffic Signals provide information as to when and where it is safe to cross. Verbal information is more useful than simple sounds.

Pedestrian-Activated Signals should be at least 2 inches in diameter to be seen by partially-sighted people.

CHAPTER 6: LAND USE PLANNING AND ZONING

As new development occurs it presents opportunities to remold our communities into ones that facilitate and encourage walking. The following can be incorporated into planning and zoning codes to ensure this.

- Setbacks shall be required where adequate width does not presently exist to meet the minimum widths for sidewalks.
- In Pedestrian-Oriented Retail Districts and along General Commercial and Civic Streets the ground floor of new buildings shall contain active uses.
- In Pedestrian-Oriented Retail Districts a building entrance from the sidewalk shall be provided at least every 75 feet where there are retail and office establishments. This will ensure a pedestrian-oriented compactness.

- In Pedestrian-Oriented Retail Districts and along General Commercial and Civic Streets, vehicular parking shall be located in the back of the building or in a subterranean garage. This is to prevent parking lots in front of buildings that spread walking distances between buildings, visually impact the pedestrian environment, and conflict with pedestrian movement in driveways.
- In Pedestrian-Oriented Retail Districts and along General Commercial and Civic Streets the number of driveways should be limited.
- Drive-through commercial establishments should be prohibited.
- Mixed-use development should be encouraged through planning and zoning codes.
- Along Multi-Family Residential Streets, vehicular parking shall be located in the back of the building or in a subterranean garage. A maximum of one level of parking garage shall be permitted above natural grade up to a maximum of 7 feet in height. Any portion of the parking garage above grade shall be mechanically ventilated and enclosed, except for the driveway.
- Where vehicles on commercial property are parallel to sidewalks, the drive-in area shall be separated from the sidewalk by a fence or landscaping. This will prevent the intrusion of cars into the sidewalk.
- Driveways and driveway landscaping shall be designed to minimize interference with pedestrians. Motorists' view shall not be obstructed from 8 feet inside the property line to a distance of 10 feet from the side of the driveway on the driver's right side and 10 feet from the centerline of the driveway to the driver's left side. It will minimize conflicts between pedestrians and vehicles backing out of driveways on private lots.

- Driveway aprons shall not extend beyond the sidewalk Furnishings Zone into the Through Pedestrian Zone. This will maintain an even walking surface for persons in wheelchairs and others.
- Parking structure entrances shall be designed in a way that minimizes the occurrence of vehicles waiting for gates to open. Entry controllers shall be set back a minimum of 19 feet from the property line.
- For multi-family development projects, the intersection of the sidewalk and the pathway leading to the building's entry shall be wide enough to allow for enhanced mobility for pedestrians and persons in wheelchairs.

TRAFFIC CALMING

In some neighborhoods cars may speed and degrade the safety and ambiance of walking. Design measures can slow cars down. The details of each traffic calming device need to be carefully considered by the traffic engineer. Many traffic calming devices deflect the travel path of motor vehicles or narrow the travel lane. In all uses of traffic calming devices emergency access must be considered, the need for pedestrian crossings, as well as the need for larger vehicles to turn. The most common devices are identified below.

- *Speed humps* are designed to slow cars down while they go over.
- *Chokers* narrow the street by extending the sidewalk or planting strip.
- *Median barriers* prevent cars from traveling through to the other side.
- *Medians or center islands* narrow the travel lanes.
- *Neighborhood traffic circles* deflect the travel path of motor vehicles. They often replace 4-way stops.
- *Chicanes* divert the path of motor vehicles mid-block.
- *Raised crosswalks and raised intersections* slow vehicles like speed humps.

- *Punishment/reward* traffic signals stop cars that are speeding.
- *Partial diverters* restrict selected vehicle movements.
- *Street closures* eliminate motor vehicles altogether for at least designated times.
- *Speed display units* remind motorists of their speed and the speed limit.
- *Combined traffic calming measures* use the attributes of different devices to slow vehicles.

CHAPTER 7: PRIORITY IMPROVEMENTS NEEDED

Each of the following maps is snap shots of the state of the pedestrian landscape. The highlighted portion of the map signifies place where pedestrian improvements are needed. Below are the explanations that correspond to each map.

Region 1- Pedestrian access to Gates Canyon Park form Eden park. *Capital Improvement* : Pedestrian access Lupin Hill elementary school from all of the surrounding areas.

Region 2- No improvement needed at this time.

Region 3- Along Canwood from Parkville to west city boundary sidewalk improvement/installation is necessary. In addition when paving is done traffic signals will become necessary. These improvements will invite greater pedestrian travel and the signal will allow travel to be done safely.

Region 4- A footbridge to A.E Wright is needed. The planned housing track will extend to Agoura Rd., presently the development plans to extend the sidewalk adjoining the development. This sidewalk is planned for the dog park to Agoura Road. On the apposing side of the street there is a lack of sidewalk from the frontage of the La Paz Restaurant to the Shopping Center at Agoura road. Here the pedestrian landscape is in needs improvements.

Region 5- Open Space, please refer to Trails Master Plan. Here the goal is to link communities to our city's recreation.

Region 6- Here are mostly gated communities with adequate sidewalks. In addition as the Bay Laurel extension is completed greater attention need be given to safe crossing from the all points in the community to the school.

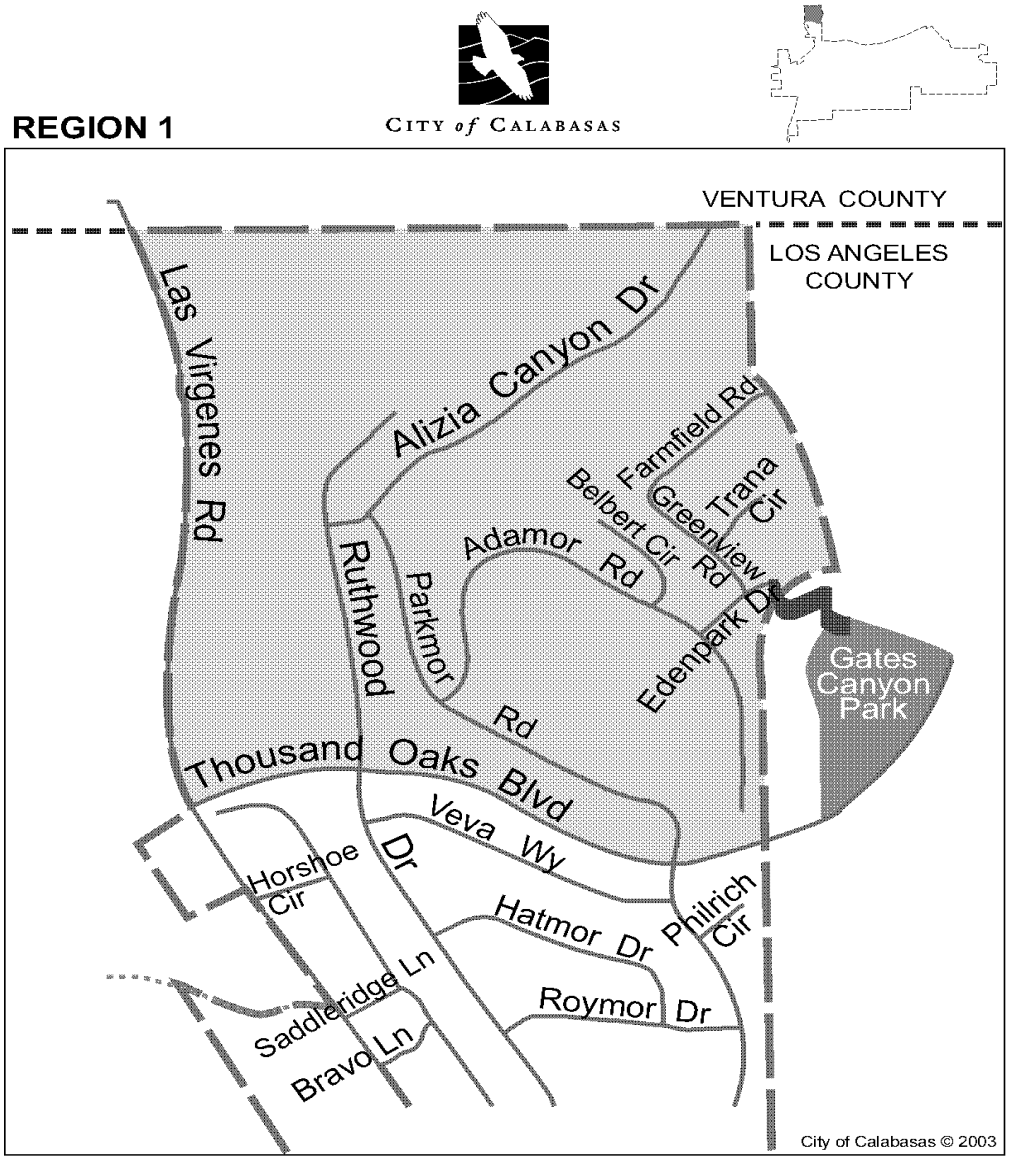
Region 7, 8- The major improvement in this area relates to Mulholland Highway (see also Mulholland Highway Master Plan): In addition to considerations of making Mulholland Highway pedestrian friendly, one intersection at Old Topanga Canyon Road needs redesign, with an adjustment of the proximity between the pedestrian island to the passing traffic.

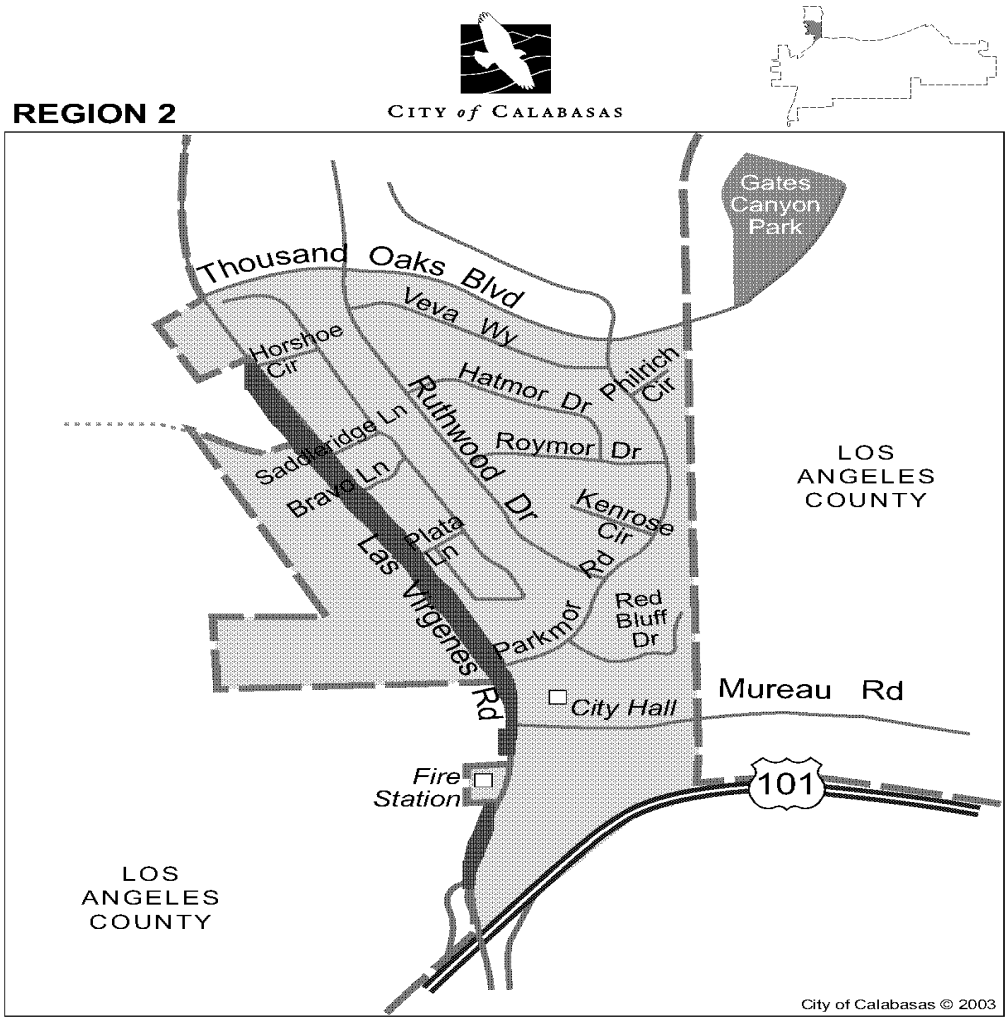
Region 9- The View Point School is with out sidewalks. As to the Highlands, the public streets were inherited in a substandard quality with out a plan to modernize. This matter illustrates a need to demand connectivity and pedestrian accessibility in all new developments (including hosing developments, schools, and mass transit) in doing so the city can minimize its burden for future public works initiative.
Parkway Calabasas between Entrada and Park Granada

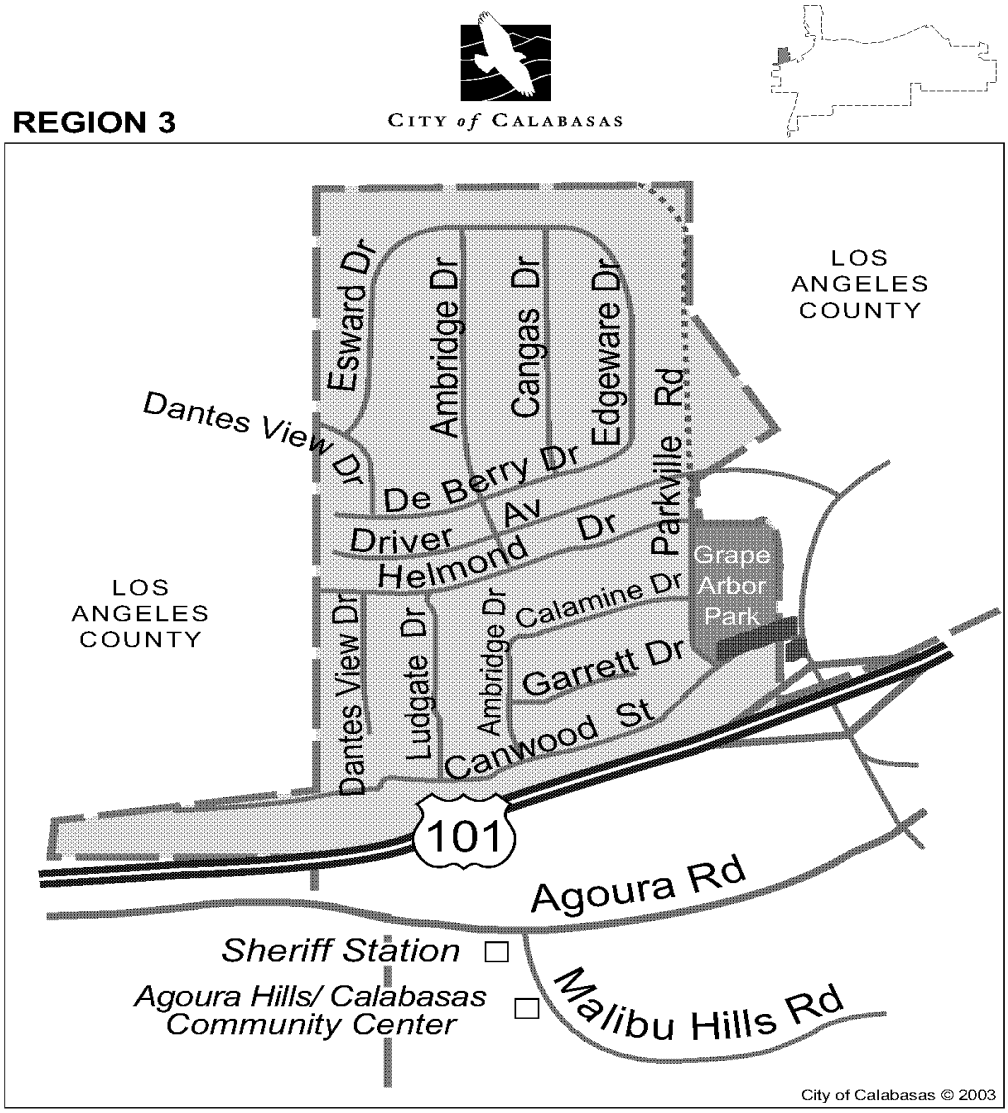
Region 10- Adding sidewalks to Old Topanga east to west.

Region 11- Per the map the designated area of the Bird Tract could use improvements (in the surveys the residents state a need for these improvements.)

Region 12- No improvement recommended at this time.

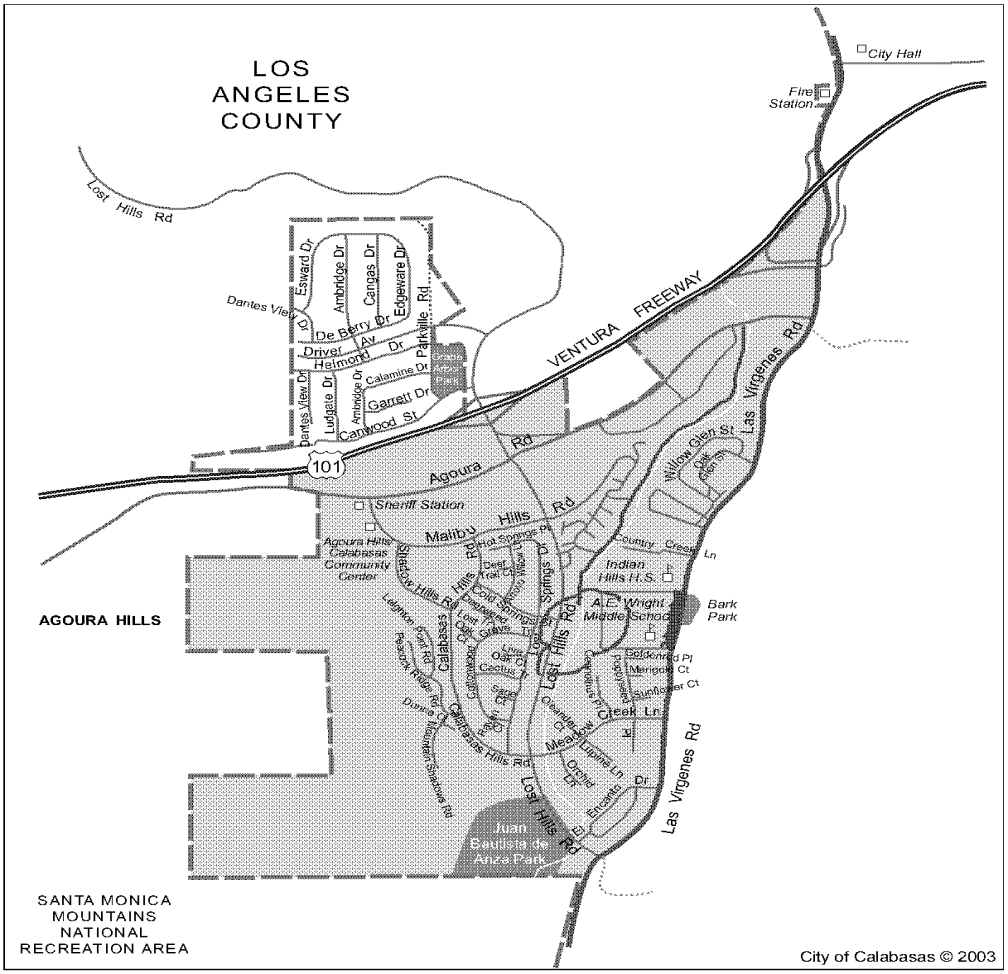



REGION 2
CITY of CALABASAS
Gates Canyon Park
Thousand Oaks Blvd
Veva Wy
Horshoe Cir
Hatmor Dr
Philrich Cir
Ruthwood Dr
Roymor Dr
Saddleridge Ln
Brayo Ln
Kenrose Cir
Rd
Plata Ln
Las Virgenes Rd
Parkmor
Red Bluff Dr
LOS ANGELES COUNTY
Mureau Rd
City Hall
Fire Station
101
LOS ANGELES COUNTY
City of Calabasas © 2003


REGION 3
CITY of CALABASAS
LOS ANGELES COUNTY
LOS ANGELES COUNTY
Esward Dr
Ambridge Dr
Cangas Dr
Edgeware Dr
Parkville Rd
Dantes View Dr
De Berry Dr
Av
Driver
Helmond
Dr
Grape Arbor Park
Calamine Dr
Dantes View Dr
Ludgate Dr
Ambridge Dr
Garrett Dr
Canwood St
101
Agoura Rd
Sheriff Station
Agoura Hills/ Calabasas Community Center
Malibu Hills Rd
City of Calabasas © 2003

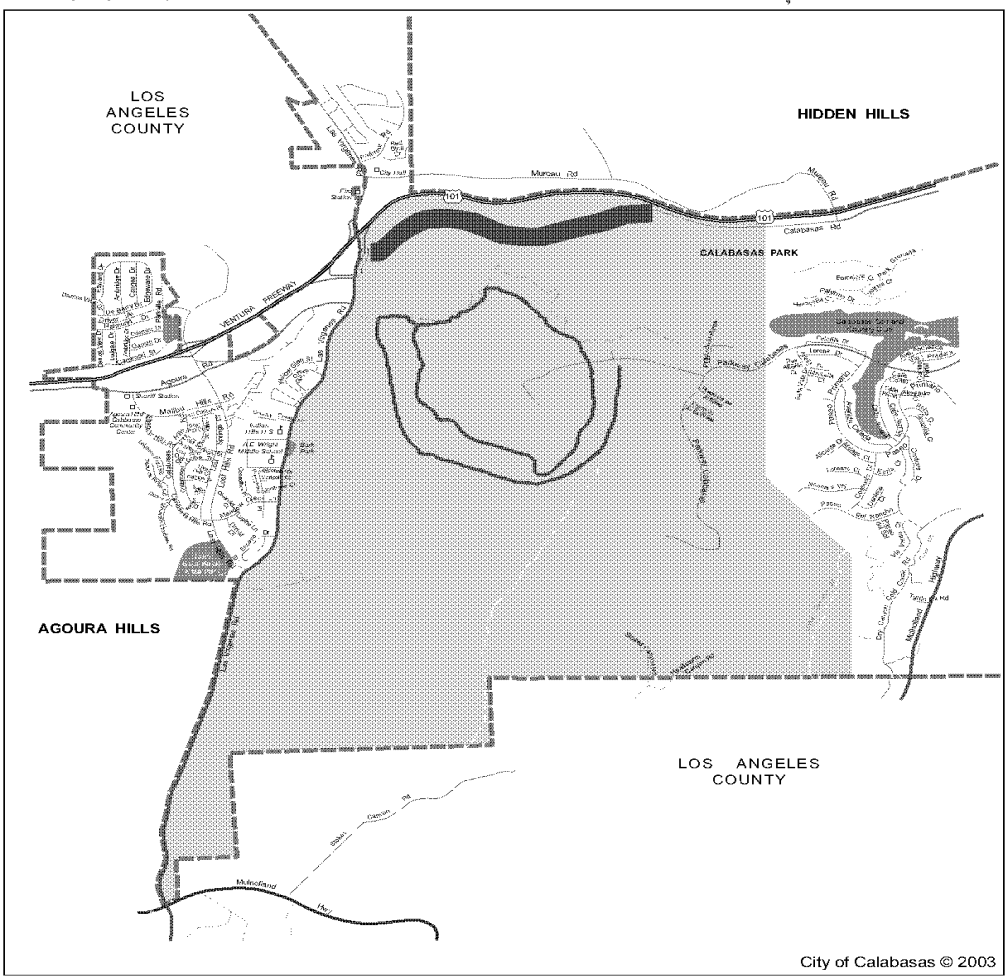
REGION 4

CITY of CALABASAS



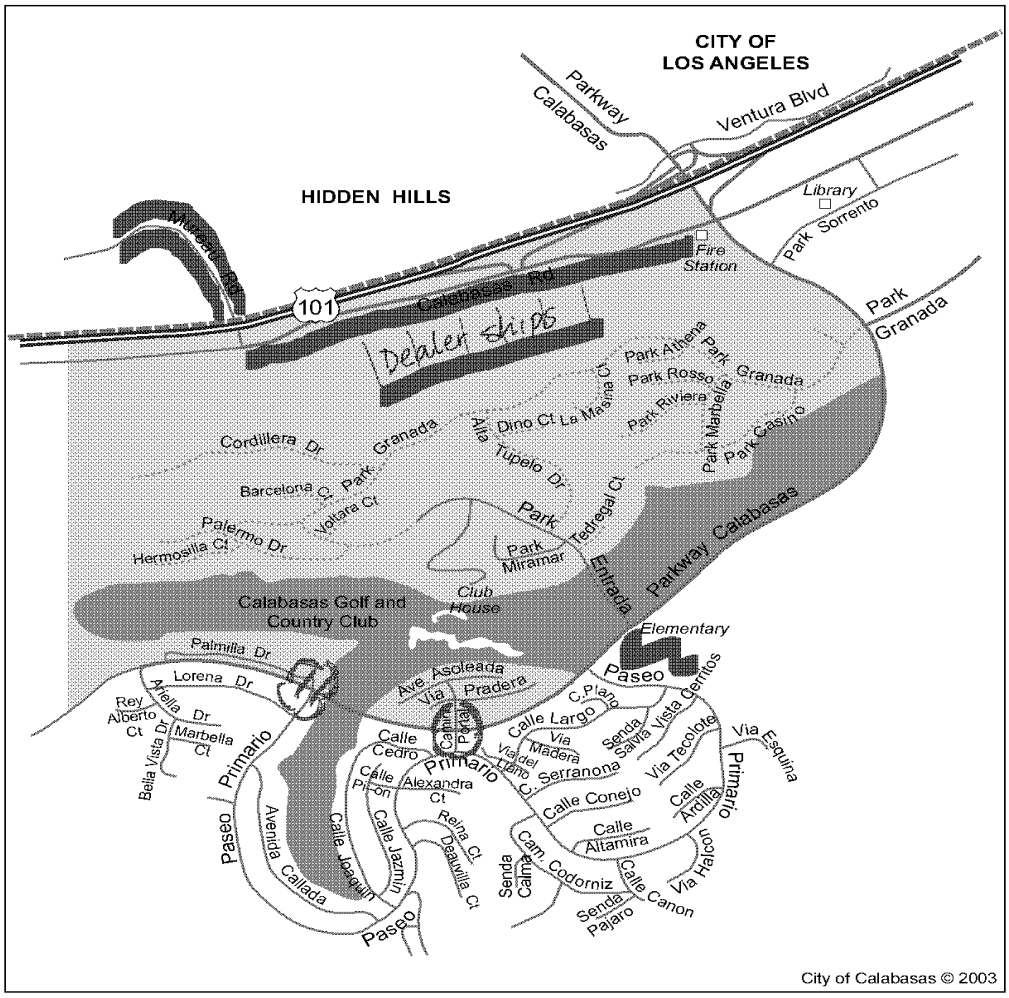
REGION 5

CITY of CALABASAS



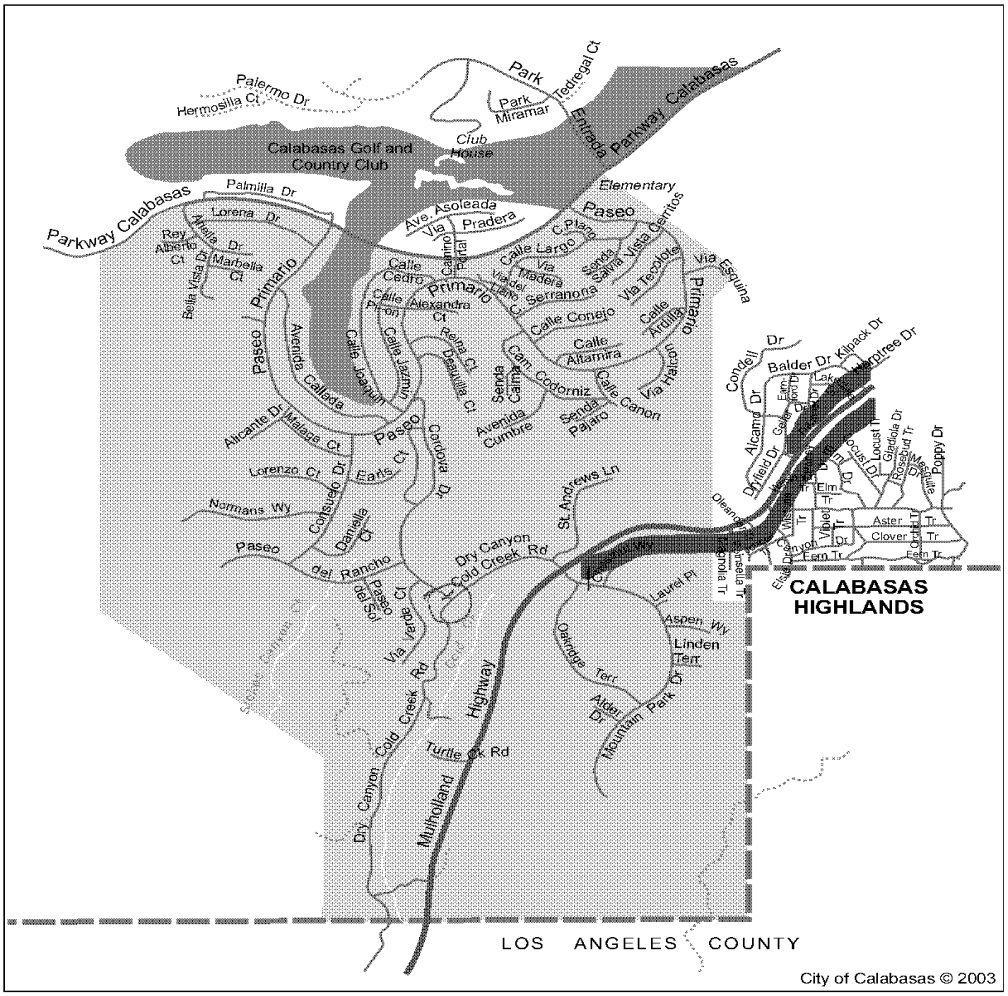
REGION 6

CITY of CALABASAS



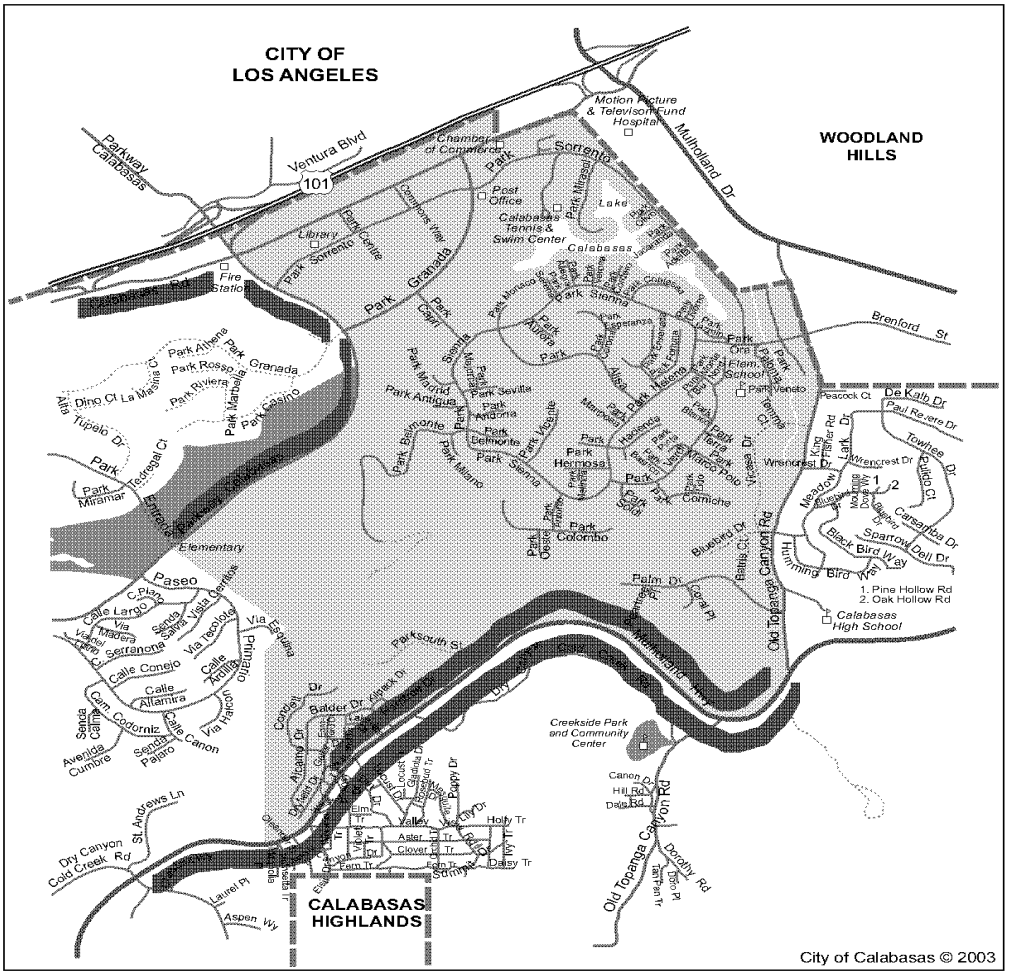
REGIONS 7&8

CITY of CALABASAS



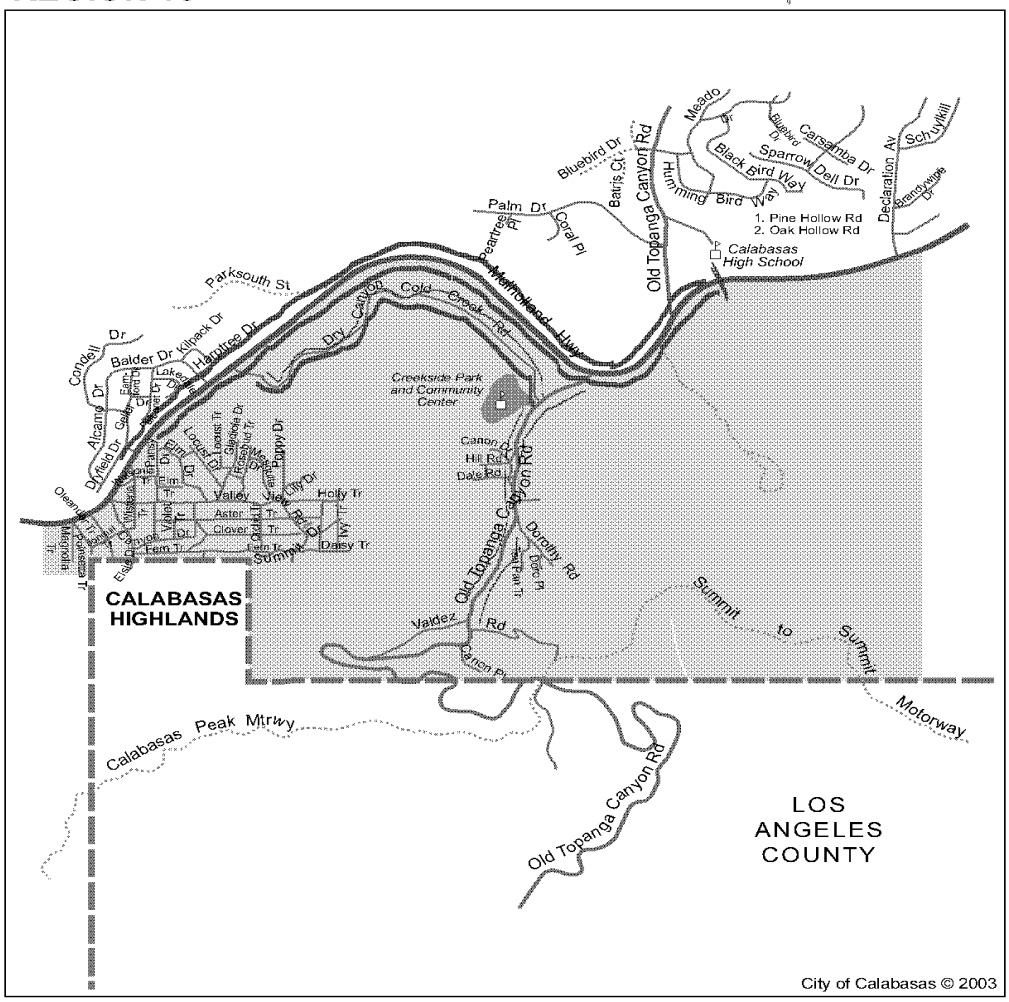
REGION 9

CITY of CALABASAS



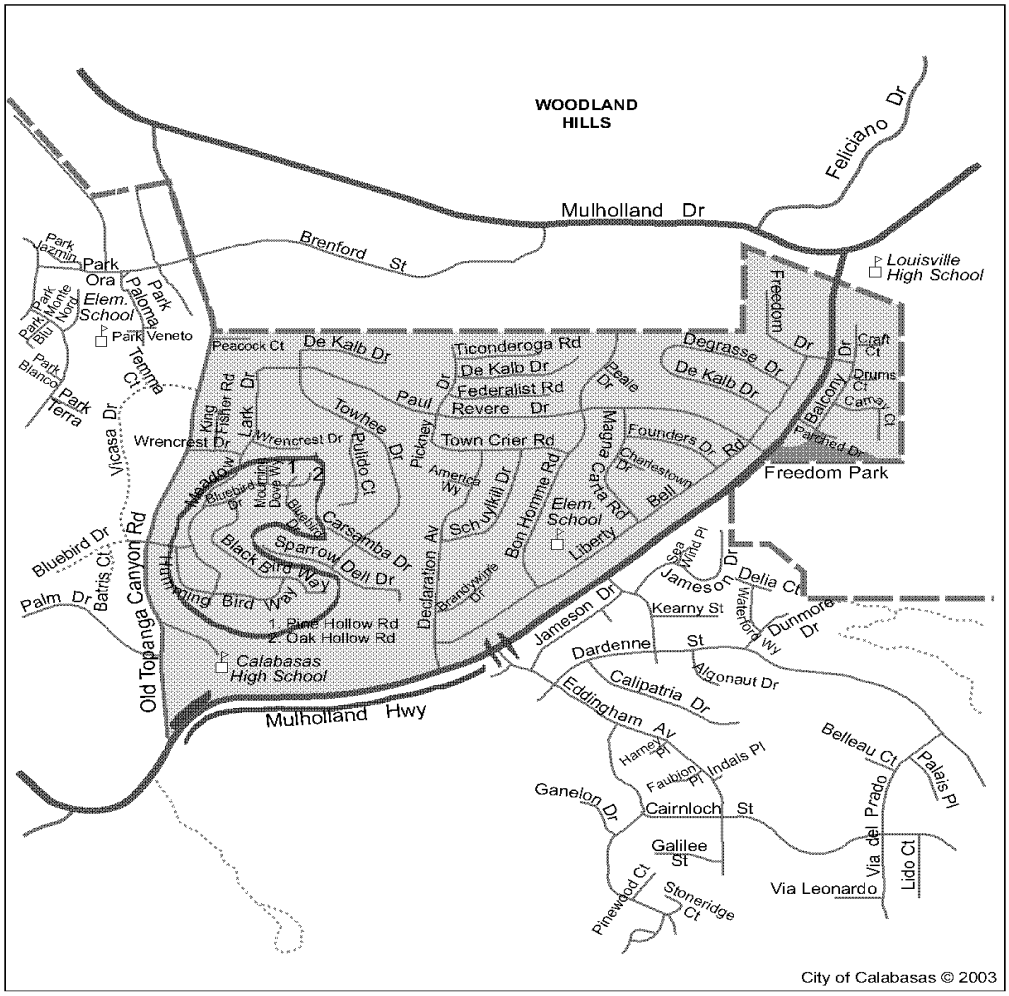
REGION 10

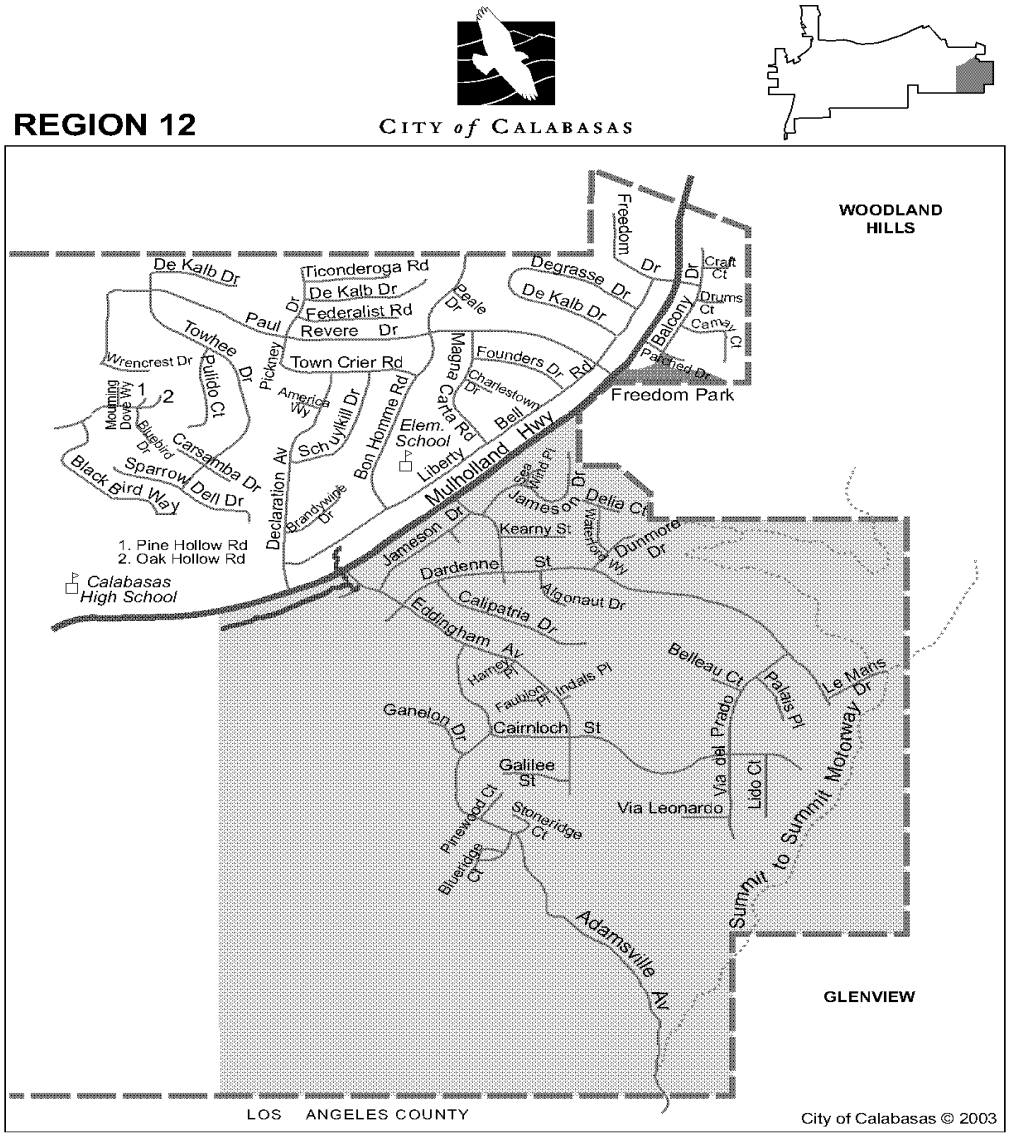
CITY of CALABASAS



REGION 11

CITY of CALABASAS




REGION 12
CITY of CALABASAS
WOODLAND HILLS
Freedom Dr
Craft Ct
Drums Ct
Camaj Ct
Balcony Dr
Parfield Dr
Freedom Park
De Kalb Dr
Ticonderoga Rd
De Kalb Dr
Federalist Rd
Revere Dr
Paul Dr
Peale Dr
Degrasse Dr
De Kalb Dr
Towhee Dr
Pickney
Town Crier Rd
Founders Dr
Rd
Wrencrest Dr
Pulido Ct
Mourning Dove Wy
Bluebird Dr
Carsamba Dr
Sparrow Dell Dr
Black Bird Way
America Wy
Schuylkill Dr
Bon Homme Rd
Magna Carta Rd
Charlestown Dr
Bell
Hwy
Elem. School
Liberty
Mulholland
Declaration Av
Brandywine Dr
Great Meadow Pl
Jameson Dr
Della Ct
Kearny St
Waterford Wy
Dunmore Dr
Dardenne St
Algonaut Dr
Calipatria Dr
Eddingham Av
Hamelin Pl
Faulson Pl
Indals Pl
Belleau Ct
Palais Pl
Le Mans Dr
Ganelon Dr
Cairnloch St
Galilee St
Via del Prado
Lido Ct
Via Leonardo
Pinewood Ct
Stoneridge Ct
Blueridge Ct
Adamsville Av
Summit to Summit Motorway
1. Pine Hollow Rd
2. Oak Hollow Rd
Calabasas High School
GLENVIEW
LOS ANGELES COUNTY
City of Calabasas © 2003

APPENDIX: PEDESTRIAN QUESTIONNAIRE

Pedestrian Questionnaire

The City of Calabasas is developing a Pedestrian Master Plan to improve walking conditions and to increase the number of people who walk as a mode of transportation. This questionnaire encourages the community to share their innovative and creative ideas for a better walking environment in their neighborhoods.

1. What is the closest street intersection to where you live? _____ and _____.

2. What is your age? ☐ 18 or under ☐ 19-29 ☐ 30-39 ☐ 40-49 ☐ 50-59 ☐ 60-69 ☐ 70-79 ☐ 80 or over

3. Describe the places you walk to or things you do when you are out walking. (**Check all that apply**)

4. How often do you walk to work/school/shopping/or appointments?
   ☐ Daily ☐ 1-3 Times Per Week ☐ 2-3 Times Per Month ☐ Rarely ☐ Other

5. Describe the things that would encourage you to walk more often. (**Check all that apply**)
   Good Lighting ____ Buffer from Cars ____ Easier to See Cars ____ More Signs ____
   Trimmed Trees or Bushes ____ Highly Visible Crosswalks ____ Educational Programs
   ____ More Time to Cross the Street ____ Few Obstacles on Sidewalk ____
   Smooth Crosswalks or Sidewalks ____ Other (explain)

6. Describe the things you would like to see and experience while walking. (**Check all that apply**)

Pedestrian Scale Signage ____ Trash Cans ____ Attractive Architecture ____ Storefront Windows ____ Open Areas ____ Public Art ____ Landscaping ____ Colored or Treated Pavement ____ Other (Please explain)

_____

7. What is the longest you would walk if conditions were ideal? (**Check only one**)
   5 minutes ____ 10 minutes ____ 20 minutes ____ 30 minutes ____ 45 minutes____ 1 hour+ ____

8. Please identify five of the top reasons you don't walk more often, and then rank them 1 to 5 (1 = top reason)
   No sidewalk ____ Sidewalk is discontinuous ____ Poor surface ____ Sidewalk is too narrow ____ Lack of crossings or signals ____Sidewalk has obstructions (poles, signs, shrubbery, etc.)

   ____ High traffic speeds or volumes ____ No curb ramps ____ Inadequate separation from traffic ____ Autos do not yield to pedestrians ____ Inadequate Lighting ____ Family Constraints____ Destination too far____ Carrying heavy objects____ Personal Safety____

9. Please tell us any specific locations you avoid because it is difficult to walk there.

10. Please list the ideas you have to encourage more kids and adults to walk more often, for transportation to shops, errands, commercial areas and local schools.