

# Transportation 5



## Access

**Access** refers to a person's ability to reach desired goods, services, and destinations typically needed on a daily basis.

This chapter describes a framework for a balanced transportation system in the Plan area that meets the needs of residents, workers, and visitors, and supports the Vision detailed in Chapter 2. Throughout the planning process, the community supported a transportation system vision that would enhance quality of life, promote environmental sustainability goals, and complement the unique community character in the Plan area.

This chapter is organized in several sections. First, the existing transportation network is described in terms of travel patterns, areas of strength, and opportunities for improvements. Second, the Plan area street network is organized into suggested street types based on prioritized and non-prioritized modes. Next, possible performance measures for evaluating future programs and projects are introduced, and a list of suggested improvement projects to move toward the goals and vision including possible General Plan policy updates, are presented in Chapter 8 and Appendix B.

## GUIDING PRINCIPLES FOR TRANSPORTATION

The vision for transportation in the Plan area is to improve the environment and quality of life for residents through a safe, reliable, and efficient transportation network comprised of a range of transportation choices. Residents would have access to an interconnected network of both vehicular and non-automobile options in the Plan area, so they could leave their cars at home for some trips. Throughout the Plan area, there are locations such as villages, coastal trails, and community centers that are destinations with a strong sense of community. A connected, convenient transportation network would complement this sense of community.

Promoting active modes and transit use for work and leisure trips would help reduce dependence on the automobile, reduce local road congestion, and improve public health. Feedback from residents emphasized that it should be easy and safe to walk or bike from one neighborhood or commercial center to another, with new connections supplementing the existing network of sidewalks and bike facilities. Also, given that seniors and other citizens are often less able to walk or ride a bicycle, it is important to improve street connectivity and bus frequencies as well.

In this vision, an optimized transportation network comprised of diverse transportation options would connect residents to activity centers via reliable transit and convenient facilities for cyclists and pedestrians. Within unincorporated Santa Cruz County, some amount of improving and retrofitting the existing vehicular roadway network is necessary to reduce vehicle miles traveled (VMT) and congestion on Highway 1 and constrained arterial roadways. With fewer trips in single occupancy cars, Highway 1 would function better with reduced travel times for automobiles and trucks. Pressure on local streets would be relieved, increasing the reliability of travel for both short and regional trips, locally and on the freeway. In addition, connections between rural and urban portions of the Plan area would be strengthened in terms of access and reliability. The railroad and Monterey Bay Sanctuary Scenic Trail (MBSST) would contribute to transportation and recreation choices, as well as enhance public health, the sense of community, and economic vitality.

## VALUES FOR SUSTAINABLE TRANSPORTATION

Four core values included in the guiding principle of “Transportation Choices” illustrate the public’s strong desire for increasing mobility, and serve as the touchstones for the suggested performance metrics to evaluate the transportation system. These values are:

- Access for All
- Unique Community Character
- Multimodal Safety
- Clean Environment and Healthy Community

### Access for All

Providing access to all destinations for all residents and visitors translates directly to the identification of improvements that would strengthen connectivity and proximity to employment and activity centers in the Plan area. Destinations include employment centers, community centers, schools, community buildings, and gathering places. Access is a person’s ability to reach desired goods, services, and destinations typically needed on a daily or frequent basis, regardless of which travel mode one chooses. In contrast, mobility refers to physical movement, including travel by non-motorized and motorized modes. Although the two concepts are related, they are distinct and separate.

Overall, the future transportation network seeks to provide access to activity centers, including areas of dense employment, within a 10- or 20-minute walk, bike, or transit trip in the Plan area. Strengthening access would improve the ability of residents and workers to meet most short-distance daily needs without having to drive. For longer trips, automobile or express bus would remain the primary mode

of transportation for most residents and workers. The challenge of ensuring that a public transit user can connect to and from different transit services to their destination is commonly referred to as the first- or last-mile problem (Mineta Transportation Institute, 2009). First- and last-mile connections to transit would need to be enhanced to achieve this goal. Transit users need to access a transit station via some other mode—for example by driving/carpooling, taking a shuttle or taxi, biking, or walking. Maintaining pedestrian and bike network connectivity would help improve first- and last-mile connections as well as enhance connectivity for trips made entirely on foot or by bike.

### Unique Community Character

The Plan area is rich with neighborhoods each with unique character. Many of the key activity centers in the Plan area are located in these neighborhoods, including Soquel Village, Aptos Village, and Pleasure Point. These activity centers are the anchors of the Plan area—and can celebrate the diverse and inclusive community of residents and workers. Developing a transportation network that provides access to these activity centers within a 10- or 20-minute walk, or a short bike ride, would encourage people to experience and strengthen the unique community character of their neighborhoods.

Streets in the Plan area should be designed with the intention of encouraging walking, biking, and transit, especially near activity centers that people naturally gravitate to for work and play. Amenities such as street furniture, trees lining sidewalks, sidewalk café spaces, and inviting building facades would help accentuate the community character of neighborhoods and activity centers and make travel routes to them more appealing.

### Vehicle Miles Traveled (VMT)

**Vehicle Miles Traveled (VMT)** is a commonly used measure of how much people in a specific area travel by car. VMT is calculated based on the number of vehicles multiplied by the distance traveled by each vehicle. In Santa Cruz County, 60 percent of all greenhouse gas emissions are attributable to VMT (Santa Cruz County Climate Action Strategy, 2013)

## Active Transportation

**Active transportation** refers to the transport of person(s) and or goods via non-motorized modes of transportation, including walking and biking. On September 26, 2013, Governor Brown signed legislation creating the Active Transportation Program (ATP) in the Department of Transportation (Senate Bill 99, Chapter 359 and Assembly Bill 101, Chapter 354). The ATP consolidates existing federal and state transportation programs, including the Transportation Alternatives Program (TAP), Bicycle Transportation Account (BTA), and State Safe Routes to School (SR2S), into a single program.

## Multimodal Safety

The community has repeatedly expressed concern about bicycle and pedestrian safety. The California Complete Streets Act (2008) requires cities in California to plan for a balanced, multimodal transportation system that meets the needs of bicyclists and pedestrians as well as vehicles. Initiatives such as Vision Zero similarly promote concrete options for increasing safety for all people using multi-modal roadways.

The Plan proposes that roadways be designed to reduce transportation-related fatalities and injuries, focusing on areas where improvements can be made through reduced roadway speeds, appropriate lane widths, compact intersections, methods to buffer pedestrian and bicycle exposure to vehicular traffic, and improved street markings, signals, and signage. Specific gaps in infrastructure—such as incomplete sidewalks, long pedestrian crossing distances, bike lane gaps, and sudden lane merges should be addressed to create safer continuous travel paths for pedestrians and cyclists. Potential bicycle and pedestrian safety improvements are shown in the Aptos/State Park Circulation Focus Area in Figure 7-14, and listed in Appendix B.

## Clean Environment and a Healthy Community

Promoting a clean environment goes hand-in-hand with promoting a healthy, active community. Encouraging active transportation and transit as a realistic and convenient travel option would positively contribute to human health and a clean local environment. Physical activity is good for health, while leading a sedentary lifestyle increases the risk of cardiovascular disease, stroke, and obesity. Research has identified a number of land use and design-related determinants of physical activity, including the presence of sidewalks, enjoyable scenery, neighborhood design features,

density, land use mix, the presence of other people who are physically active, and safe infrastructure.

Promoting active modes and transit also helps promote clean air and water. Promoting walking, biking, and transit rather than travel by automobile would reduce the amount of harmful air pollutants released into the atmosphere, which affects both local and regional air quality. In general, mobile sources are major contributors to air toxins. The higher the VMT, the greater the contribution to air pollution.



*A bioswale collects and infiltrates stormwater rather than directing it to a drainpipe, reducing run-off and improving water quality.*

Air pollutants decrease air quality also contribute to water pollution in the form of runoff from roadways and parking lots which contain oil, hydrocarbons, heavy metals and other pollutants. Reducing reliance on automobiles while encouraging active transportation and transit modes would improve air quality and reduce greenhouse gas emissions in the Plan area. In addition, how streets are designed can improve the environment. Using design features such as pavement and landscaping that retains, treats, or eliminates runoff at its source would improve water quality.

## EXISTING CIRCULATION NETWORK AND TRAVEL PATTERNS

The current circulation network in the Plan area is geographically oriented in an east-west direction, following Highway 1 and Soquel Drive. However, there is limited east-west street connectivity along the length of the Plan area due to topography such as creeks, gulches, and mountainous terrain. Highway 1 and Soquel Drive are the only continuous east-west oriented streets in the north part of the Plan area. East Cliff Drive, Portola Drive, Capitola Road, Park Avenue, and Brommer Street provide east-west connectivity south of Highway 1. North-South Roadway connectivity is constrained by Highway 1, which creates a major barrier for vehicles, bicycles, and pedestrians between the north and south portions of the Plan area. There are only six north-south connections across Highway 1 along its 8-mile route between Live Oak and Aptos, which are often spaced more than a mile apart. This creates connectivity difficulties for pedestrians and bicyclists trying to access goods, services, and employment. The railroad right-of-way also limits north-south connectivity with only seven crossings at select arterial or collector designated streets in the Live Oak and Seacliff neighborhoods.

Vehicle Level of Service (LOS) is a qualitative description of traffic flow based on factors such as speed, travel time, delay, and freedom to maneuver, that ranks roadway segments and intersections on a scale of A through F. In 2012, with the exception of Highway 1, all Plan area roadways operated at LOS D or better during daily and peak periods for a typical weekday (without an incident on Highway 1).

Average daily traffic (ADT) varies in the Plan area. Some roadway segments, such as Brommer Street between Darlene Drive and 20<sup>th</sup> Avenue, carry fewer than 20,000 vehicles per day. Others, such as several segments along Soquel Drive, 41<sup>st</sup> Avenue, and State Park Drive, carry between 20,000 and 40,000 vehicles per day. Highway 1 between Monterey Avenue and Porter Street carries approximately 46,000 to 48,000 vehicles per direction daily (almost 100,000 vehicles per day total) (Figure 5-1).

On a typical weekday, commute trips represent approximately 20 to 25 percent of all trips.<sup>1</sup> These trips have the longest average trip length compared to the 75 to 80 percent of daily non-commute trips. Non-commute trips are comprised of school, shopping, civic, and recreational trips. Santa Cruz County is a popular tourist destination that attracts tourists mainly during the spring and summer months, especially on weekends and holidays. These visitor recreational trips add considerable stress to already-constrained roadways.

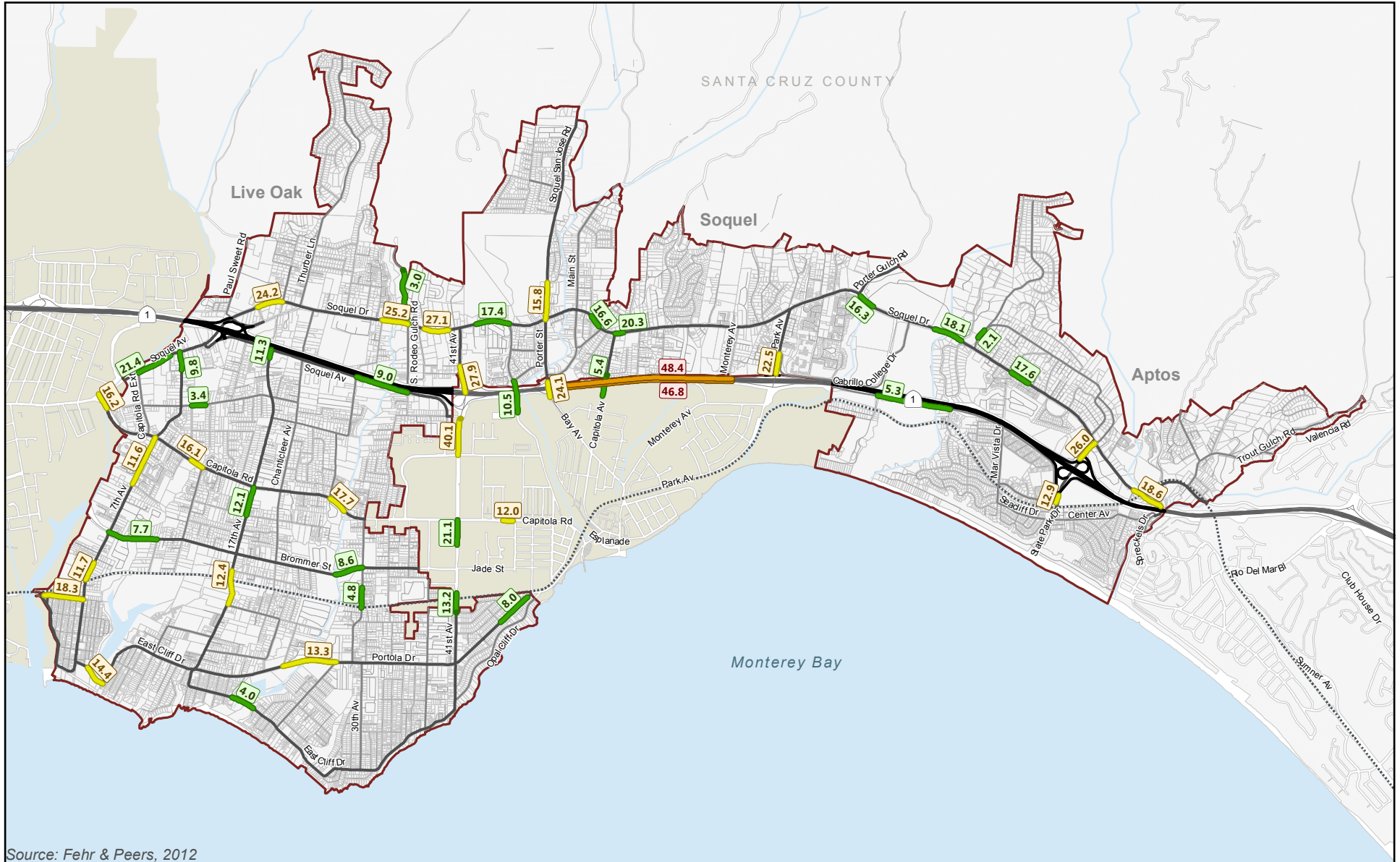
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<sup>1</sup> AMBAG Regional Travel Demand Model: Model Development Report 2005 Base Year Model (AMBAG, March 2011).

### Level of Service

**Vehicle Level of Service (LOS)** is a qualitative description of traffic flow based on factors such as speed, travel time, delay, and freedom to maneuver. Six levels are defined from LOS A, which reflects free-flow conditions where there is very little interaction between vehicles, to LOS F, where the vehicle demand exceeds the capacity and high levels of vehicle delay result. LOS E represents “at-capacity” operations. The 1994 County General Plan Policy 3.12.1 establishes LOS D as the minimum LOS standard.

**FIGURE 5-1 DAILY ROADWAY VOLUMES AND LEVEL OF SERVICE**



Source: Fehr & Peers, 2012

**Roadway Level of Service (LOS) and Average Daily Traffic (ADT)**

- x.x LOS A, B, & C with ADT (x1,000)
- x.x LOS D with ADT (x1,000)
- x.x LOS E with ADT (x1,000)
- x.x LOS F with ADT (x1,000)
- ..... Railroad
- Plan Area



## Monterey Bay Sanctuary Scenic Trail Master Plan

The Santa Cruz County Regional Transportation Commission (SCCRTC) has recently adopted a plan for the Monterey Bay Sanctuary Scenic Trail. The spine of this trail network will be built within the 32-mile Santa Cruz branch rail line right-of-way from Davenport, in northern Santa Cruz County, to Pajaro in Monterey County. The Plan calls for a new multi-use bicycle/pedestrian trail through Live Oak, Capitola, and Aptos parallel to the rail tracks. A narrow rail right-of-way in Live Oak east of 17<sup>th</sup> Avenue may require an alternative route along Brommer Street and/or Portola Drive in the short term. In the long term, rail track relocation will allow for the trail to coexist with the rail tracks. The Master Plan and Final Environmental Impact Report were adopted in 2013 (SCCRTC, 2013). Approximately \$7 million of local and federal funds have already been secured for construction of initial segments.

About 80 percent of Plan area residents commute to work within Santa Cruz County, while approximately 20 percent commute to work in other locations, including Santa Clara, Monterey, and San Benito counties. Approximately 75 percent of Plan area residents commute by driving alone in a vehicle or motorcycle, which is higher than in Santa Cruz County (71 percent) and the State (73 percent). Nine percent of workers in the Plan area commute by public transportation, walking, or biking, which is a lower rate than in Santa Cruz County overall and the State.<sup>2</sup>

The Plan area is served by the Santa Cruz Metropolitan Transit District (Metro) bus system, which provides bus service in Santa Cruz County. Metro operates approximately 30 year-round bus routes. Some additional routes operate seasonally according to UCSC school terms or the tourist high season. Metro operates regular bus service along Soquel Drive between Aptos and downtown Santa Cruz, which is the

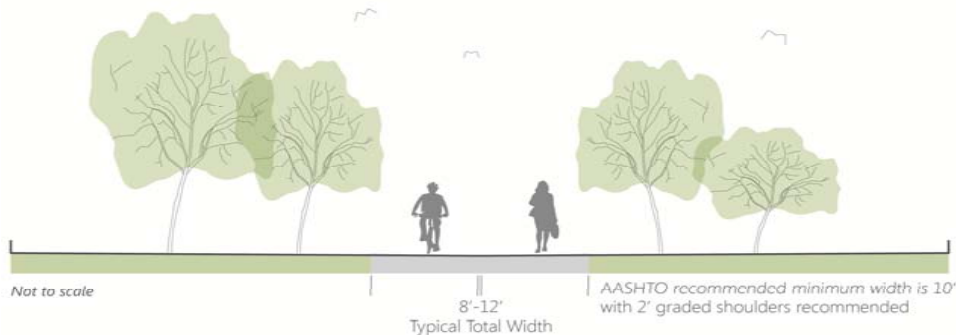
highest ridership route in the Plan area (Routes 69 and 71). Other Metro routes in the Plan area provide service between Capitola, Santa Cruz, Scotts Valley, and Watsonville. The Watsonville Transit Center located at Rodriguez Avenue and West Lake Avenue in Watsonville provides connections to Greyhound and Monterey Salinas Transit (MST). MST routes connect to numerous cities and points of interest including: Pajaro, Moss Landing, Castroville and Salinas, as well as other rural communities in Monterey County.



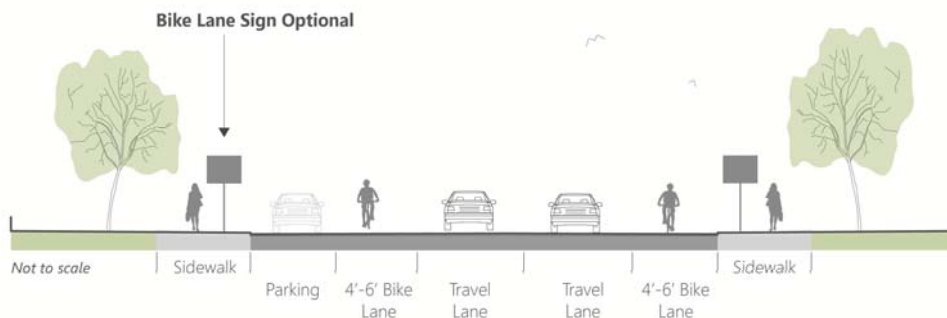
Monterey Bay Sanctuary Scenic Trail Study Area

<sup>2</sup> ACS, 2006-2010; BAE, 2012

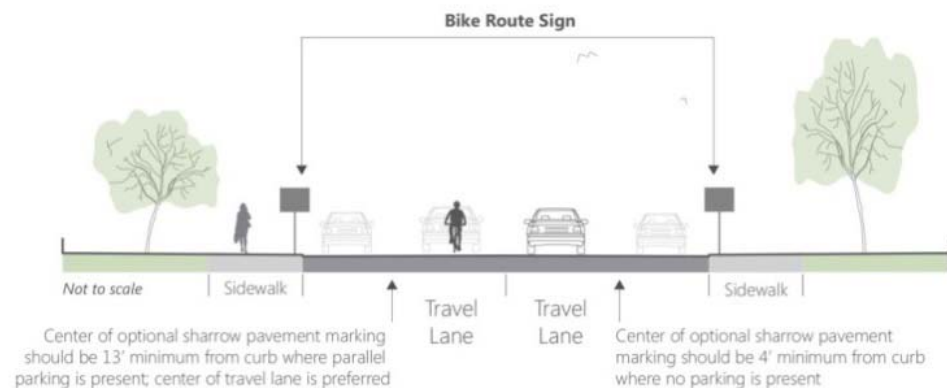




*Class I Bicycle Path*



*Class II Bicycle Path*



*Class III Bicycle Path*

Monterey-Salinas Transit offers twice-daily service with route 78 between Downtown Santa Cruz and Downtown Monterey, with several stops through the Plan area. In addition, Amtrak operates an express bus service, the Amtrak Thruway Motorcoach Highway 17 express bus, between the City of Santa Cruz and the San Jose Diridon Station in Santa Clara County. This express route mainly serves commuters who work outside of Santa Cruz County and need to make longer-haul trips to reach their workplaces. San Jose Diridon is a major transit hub in Santa Clara County with regional transit connections via a variety of rail transit and shuttle providers, including Caltrain, Amtrak, Santa Clara County Valley Transportation Authority, and Altamont Commuter Express.

Currently, less than 3 percent of residents in the Plan area commute to work by bus. Encouraging an increase in this ridership would go hand-in-hand with making it a more attractive choice for residents as more frequent service could be supported.

Bicycle facilities in the Plan area provide some east-west connectivity, as dedicated bicycle lanes are present on most major east-west streets. The bicycle facility network includes a variety of accommodations, including paths for exclusive use of bicycles and pedestrians (Class I), on-street bike lanes (Class II), and signed on-street bike routes (Class III). However, bicyclists face network constraints and challenges, including limited north-south connectivity due to Highway 1 and vehicular congestion on key roadways.

The Plan area walking environment is characterized by limited east-west connectivity, constrained north-south connectivity across Highway 1, and the inconsistent provision of sidewalks throughout. Natural geographic features also impose constraints. The Live Oak street

network in particular includes many cul-de-sac streets that interfere with connectivity for all vehicles, as well as pedestrians and bicyclists.

Parking is limited in high-employment and tourist destinations in the Plan area, such as near Dominican Hospital, Cabrillo College, and in Seacliff Village. In these areas, parking management strategies would help balance the utilization of existing parking and minimize spillover effects on adjacent neighborhoods.

## STREET TYPES

The transportation framework discussed in this chapter is focused on the development of a “layered” transportation network, a concept that envisions streets as systems, each street type designed to create a high quality experience for its intended users. A balanced transportation system is rooted in the understanding that it is difficult for a single roadway to meet the demands and expectations of all modes simultaneously. However, the various demands and expectations can be met overall if streets function as part of a multimodal network. In order to accomplish this, an interconnected, layered network of street “types” is proposed for the Plan area, in which key streets are designated to prioritize one or another form of travel. Overall, all modes would be served by the suggested transportation network.

In order to create a balanced transportation system, roadways that play key roles in how people travel are categorized into six street “types”, based on the forms of travel that are emphasized on the street. The characteristics of the street and surrounding area are taken into consideration when designating the type. Street types define the user priorities on each street and frame the planning context for infrastructure needs. Taken together, these

### Layered Network and Street Types

A balanced transportation system is based in the understanding that it is difficult for a single roadway to meet the demands and expectations of all modes simultaneously. The “layered” transportation network concept envisions streets as systems, each street type designed to create a high quality experience for its intended users. In order to create a balanced transportation system, streets that play key roles in how people travel in the Plan area are categorized into six street “types” explored in more detail in this Chapter.

designated streets create a livable, balanced transportation system.

The future layered network draws upon existing conditions and community vision. The existing conditions review of roadways in the Plan area included the design, use, infrastructure, operating characteristics, and surrounding land uses.

The key variables used in developing the street types are the following:

**Geographical Context:** What geographic context does the street exist in now? Is this context expected to shift in the future, and if so, how? What land uses and activity centers does it connect to now and where would it connect to in the future? Can bolstering access to activity

centers along a specific street improve connectivity in an east-west or north-south direction?

**Use and Access:** What form of travel do residents and visitors most use today? What safety concerns or challenges do travelers face on the street?

**Community Vision:** How does this street relate to the community's vision and goals for access, environmental stewardship, multimodal safety, and fostering a unique community character, especially near activity centers? Can a street connect a traveler from their home or workplace to activity centers within a 10- to 20-minute walk, bike, or transit trip?

**Consistency with Other Plans:** Are these street types congruent with street classifications in the General Plan, Village and area plans, the Capital Improvement Plan (CIP), County Bike Plan, Design Criteria and other County guidance and specifications? How do they differ, and would changes lead to better sustainability outcomes?

The locations and extent of these street types are displayed in Figure 5-2. The street types are described in Table 5-1. Each street type identifies prioritized and non-prioritized modes. For example, on "Transit Connector" streets, buses and pedestrians would be given priority status. Modes that are not emphasized would be provided for and given adequate space and necessary facilities, but non-priority users would not be the focus of the street's design. Consequently, automobiles, trucks, and bicyclists would be provided for, but not prioritized, on Transit Connector streets. Table 5-2 displays the relationship between the Street Types in this Plan and the Urban Street Classifications from the *Circulation Element of the 1994 County of Santa Cruz General Plan and Local Coastal Program*.

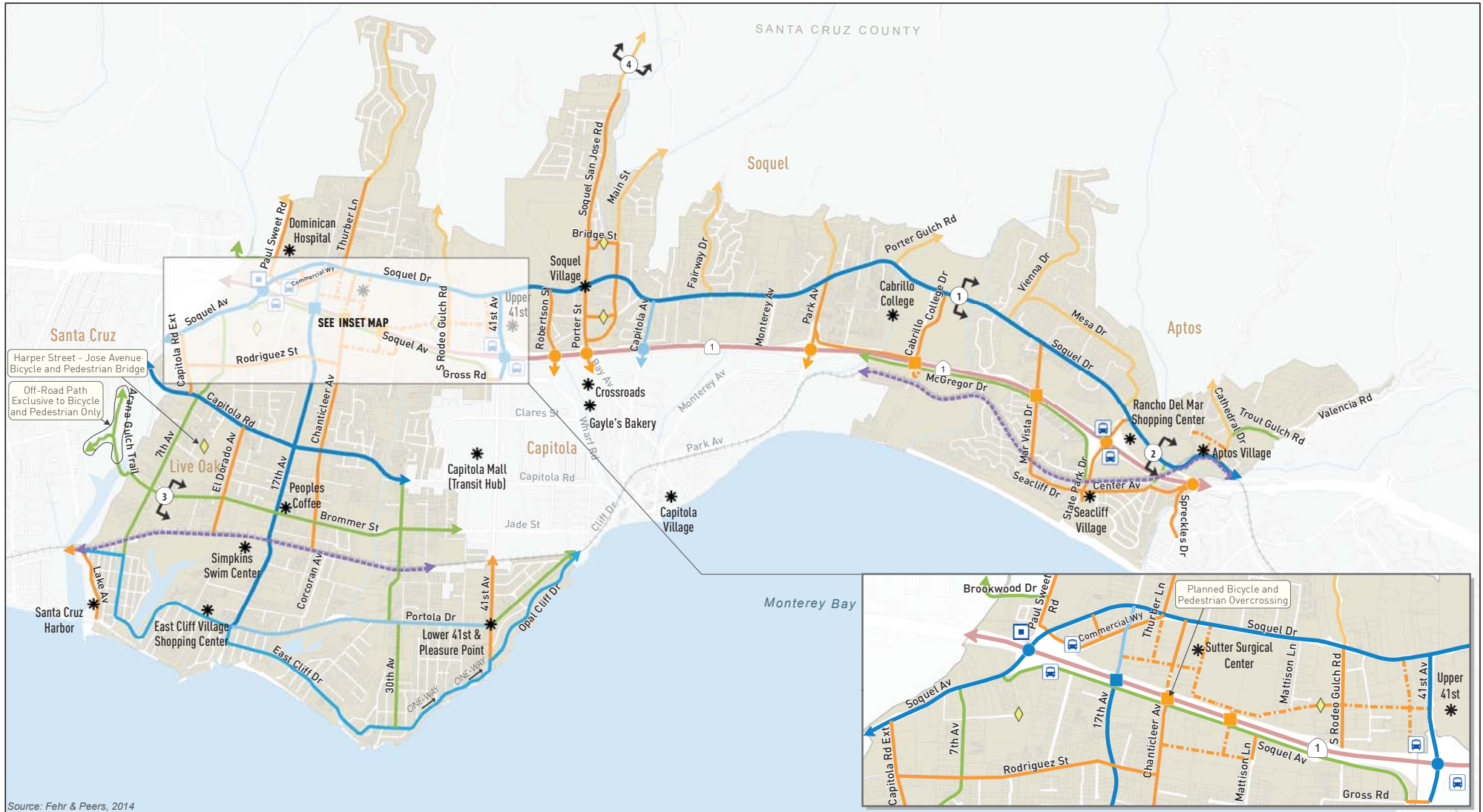
## Activity Centers

Activity centers are places to which people naturally gravitate for work, shopping and leisure purposes, and trips begin and end there. Activity centers range from major places of employment, retail centers, and educational institutions, to village-like neighborhoods with elementary schools, parks, restaurants, and commercial corners with gathering spots. Comfortable, direct walking connections to activity centers are essential for pedestrians. In order to encourage walking to activity centers, wide and complete sidewalks should be provided on the streets leading them with amenities and landscapes helping to create a pleasant walk. Additionally, in order to allow people to bike to activity centers, safe routes and secure bike parking should be provided. Bike parking facilities should be located in prominent, well-lit areas of an activity center to enhance security and ease of use.

### *Walkshed Analysis*












Five major activity centers were chosen to illustrate the concept of "walksheds" in the Plan area: Dominican Hospital, Soquel Village, Pleasure Point, Cabrillo College and Aptos Village. Figure 5-3 depicts a 10-minute walkshed and 20-minute walkshed around each of these five activity centers. A walkshed is a geographic area representing how far a person can walk in a certain time period—usually about 10 or 20 minutes, or about ½- to 1-mile in distance.

**FIGURE 5-2 FUTURE STREET TYPES NETWORK**



Source: Fehr & Peers, 2014

**Features**





-  Express Bus Stop
-  Partial List of Activity Centers
-  Potential Enhanced Park-n-Ride
-  Existing Highway 1 Crossing
-  Site of Possible Future Highway 1 Crossing
-  Railroad
-  Plan Area
-  Neighborhood Path
-  Freeway
-  Monterey Bay Sanctuary Scenic Trail
-  Cross Section Location

**Street Types**





-  Multimodal Corridor
-  Transit Connector
-  Bicycle Connector
-  Active Connector
-  Coastal Street
-  Rural Connector
-  Future Bicycle Connector
-  Future Active Connector







**TABLE 5-1 STREET TYPES AND MODE PREFERENCE**

Prioritized Modes	Non-Prioritized Modes	Description and Preferred Attributes
<b>Multimodal Corridor</b>		
<p>Buses, Bicyclists, Pedestrians, Automobiles</p> 	<p>Trucks</p> 	<ul style="list-style-type: none"> <li>• The purpose of this street type is to provide a safe, continuous route for vehicles, transit users, pedestrians, and cyclists.</li> <li>• Buses, bicycles, pedestrians, and automobiles are prioritized on Multimodal Corridors. Trucks are provided for, but not prioritized.</li> <li>• Includes features like buffered dedicated bicycle facilities (cycle tracks), bus shelters and amenities, wide sidewalks to and from bus stops, and frequent and reliable bus service.</li> <li>• Access to multimodal corridors for pedestrians and bicyclists is key. This street type is complemented by Active Connector, Transit Connector, and Bicycle Connector street types, also explained in this section.</li> <li>• All Multimodal Corridors have existing bus service. Capitola Road currently has bus service running every 30 minutes. Soquel has buses running about every 15 minutes.</li> <li>• Sample Cross Section Locations:             <ol style="list-style-type: none"> <li>(1) Soquel Drive near Cabrillo College Drive: may include cycle tracks, bus shelter bulb-outs, landscaped and bioswale median, and widened sidewalks (suggest 6 to 8 feet wide).</li> <li>(2) Soquel Drive between Aptos Ranch Road and Aptos Wharf Road: may include colored bike lanes, transit shelters, and widened sidewalks (suggest 6 to 8 feet wide).</li> </ol> </li> </ul>
<b>Transit Connector</b>		
<p>Buses and Pedestrians</p> 	<p>Automobiles, Trucks, and Bicyclists</p> 	<ul style="list-style-type: none"> <li>• The purpose of this street type is to connect transit users and pedestrians to Multimodal Corridors.</li> <li>• Buses and pedestrians are prioritized on these streets. Automobiles, trucks, and bicyclists are provided for, but not prioritized.</li> <li>• Transit Connector streets are streets with existing Metro bus service.</li> <li>• All transit users are pedestrians at some point during a journey, as they walk to and from bus stops and wait at bus stops. Transit users, therefore, need safe routes to and from transit in both east-west and north-south oriented directions.</li> </ul> <p>2+</p>

**TABLE 5-1 STREET TYPES AND MODE PREFERENCE**

Prioritized Modes	Non-Prioritized Modes	Description and Preferred Attributes
<b>Bicycle Connector</b>		
<p>Bicyclists</p> 	<p>Automobiles, Trucks, Buses, Pedestrians</p> 	<ul style="list-style-type: none"> <li>• The purpose of this street type is to connect bicyclists to Transit Connector streets.</li> <li>• Bicycles are prioritized on these streets through dedicated bicycle facilities, such as bicycle lanes or cycle tracks.</li> <li>• Buses (where routes are currently in operation or will be in the future), automobiles, trucks, and pedestrians are provided for, but not prioritized.</li> <li>• Bicycle Connector streets provide safe bicycle routes to and from Multimodal streets. In addition, they provide safe routes to Highway 1 overcrossings, including the planned pedestrian/bicycle overcrossing at Chanticleer Avenue and Mar Vista.</li> <li>• Like Transit Connectors, Bicycle Connectors form a network of north-south and east-west oriented routes in order to strengthen access from all directions, typically on lower-volume and lower-speed streets</li> <li>• Sample Cross Section location at (3) Brommer Street between 7<sup>th</sup> Avenue and El Dorado Avenue: may include may include buffered bike lanes (bike lanes separated from automobile traffic by either a physical barrier or a wide, painted section of roadway) and street landscaping.</li> </ul>
<b>Active Connector</b>		
<p>Pedestrians and Bicyclists</p> 	<p>Automobiles, Trucks, Buses</p> 	<ul style="list-style-type: none"> <li>• The purpose of Active Connector Streets is to connect pedestrians and bicyclists to different activity centers and land uses in the Plan area.</li> <li>• Pedestrians and bicyclists are prioritized on Active Connectors, through wide sidewalks and high-visibility crosswalks, pedestrian-friendly intersection treatments, as well as dedicated bicycle facilities where possible. Buses (where routes are in operation), automobiles and trucks are provided for, but not prioritized.</li> <li>• Active Connectors streets tend to be north-south oriented in order to connect pedestrians and bicyclists to the east-west oriented transit street types.</li> <li>• This street type is a direct complement to Bicycle Connector Streets, as pedestrians and cyclists need safe routes to access transit in the Plan area.</li> </ul>

**TABLE 5-1 STREET TYPES AND MODE PREFERENCE**

Prioritized Modes	Non-Prioritized Modes	Description and Preferred Attributes
<b>Coastal Street</b>		
<p>Pedestrians and Bicyclists</p> 	<p>Automobiles, Trucks, Buses</p> 	<ul style="list-style-type: none"> <li>• The purpose of Coastal Streets is to provide high-quality, dedicated bicycle and pedestrian recreational paths with scenic views of the Monterey Bay and coastal areas.</li> <li>• Pedestrians and bicyclists are prioritized on Coastal Streets. Buses and automobiles are provided for, but not prioritized.</li> <li>• Some portions of Coastal Streets are one-way, thus the ability of trucks and larger buses to navigate Coastal Streets may be limited.</li> </ul>
<b>Rural Connector</b>		
<p>Automobiles and Bicyclists</p> 	<p>Trucks, Buses, and Pedestrians</p> 	<ul style="list-style-type: none"> <li>• The purpose of this street type is to provide automobile and bike connectivity and access in lower density, rural neighborhoods marked by dispersed land use and less developed streets.</li> <li>• A few rural connectors have regional transportation importance. In those cases, consider traffic mix and commuter use in road design.</li> <li>• Both bikes and automobiles are prioritized on Rural Connectors. Pedestrians and trucks are provided for, but not prioritized.</li> <li>• Due to the narrow right-of-way on some Rural Connectors, it may be difficult for buses and trucks to traverse, and slow speeds with deference to autos and bikes is advised.</li> <li>• Providing sidewalks along Rural Connectors is key. In some cases, providing a wider, well-marked paved shoulder can provide the safe buffer from automobile traffic that pedestrians need.</li> <li>• Sample Cross Section Location at (4) Soquel San Jose Road between Little Creek Road and Rancho Soquel Drive: may include sharrow markings in the downhill direction, buffered bike lanes in the uphill direction, maintained paved shoulder (for pedestrians).</li> </ul>

Note: Locations of street types are shown on Figure 5-2: Future Street Types Network.  
Sources: Fehr & Peers, 2014.

**TABLE 5-2 RELATIONSHIP BETWEEN PLAN AREA STREET TYPES AND URBAN STREET CLASSIFICATIONS FROM SANTA CRUZ COUNTY GENERAL PLAN (1994)**

Street Types (Sustainable Santa Cruz Plan)						
Urban Street Classifications (General Plan)	Multimodal Corridor	Transit Connector	Bicycle Connector	Active Connector	Coastal Street	Rural Connector
Major Arterials (3-6 lanes)						
Minor Arterials (2-4 lanes)						
Collectors (2 lanes)						
Select Locals (2 lanes)						
Locals (2 lanes)						

Sources: Fehr & Peers, 2014; County of Santa Cruz, 1994.

Walksheds can be used to “measure” or illustrate the connectivity of an area; that is, they describe the access residents, as pedestrians, would have to points of interest and goods and services. Walksheds can also be useful for evaluating how much connectivity is gained from a particular improvement to a pedestrian network.

In addition to employment, commercial and educational activity centers, a number of other points of interest exist in the Plan area including medical uses and parks. The majority of these points of interest are clustered along 17<sup>th</sup> Avenue and Soquel Drive. Both of these streets are suggested to be classified as Multimodal Corridor, with frequent bus service.

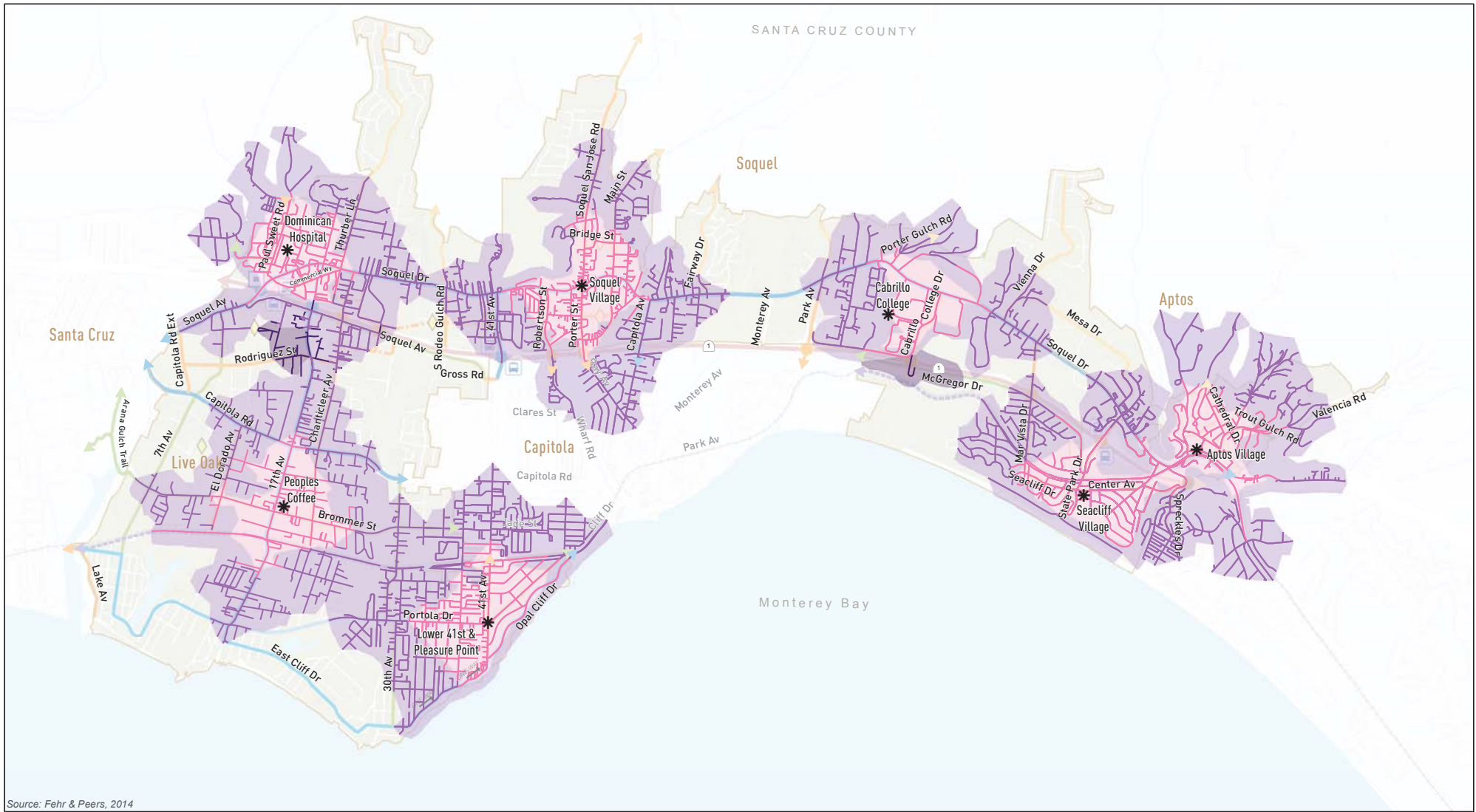
An analysis was conducted surrounding 17<sup>th</sup> Avenue and Soquel Drive corridors to determine what points of interest will be within a 10- and 20-minute walk from these corridors

in the future. The walkshed analysis resulted in the suggested connectivity improvements depicted in Figure 5-2. The analysis indicates that connectivity, in terms of distance to destinations, is relatively good. The majority of points of interest would be within a 10-minute walk of 17<sup>th</sup> Avenue or Soquel Drive if new connections and over crossings were in place and the remainder would be within a 20-minute walk.

However, north of Highway 1, Soquel Drive is the primary, if not the only, option for people moving east-west through the Plan area on foot. The high speed of traffic, narrow, obstructed, or missing sidewalks, inconsistent landscaping for shade and other design elements make walking here an unattractive choice. Key destinations are surrounded by residential uses, meaning there is great potential for future pedestrian demand if the walking routes can be improved.



**FIGURE 5-3 WALKSHED ANALYSIS**



Source: Fehr & Peers, 2014

**Features**

- \* Partial List of Activity Centers
- Existing Highway 1 Crossing
- Site of Possible Future Highway 1 Crossing

**Walkshed Analysis**

- +++ Railroad
- Plan Area
- Freeway
- 0 - 10 minute walk (includes possible Chanticleer Ave and Mar Vista Dr crossings only)
- 10 - 20 minute walk (includes possible Chanticleer Ave and Mar Vista Dr crossings only)
- Added walking distance (20 minutes) with all potential Highway 1 crossings included



The importance of future street connections and connections across Highway 1 is highlighted by the analysis. Near Dominican Hospital, south of Soquel Village, and between Seacliff and Aptos, Highway over- or possibly under-crossings, as feasible provide north-south access for pedestrians that would otherwise be cut off from the opposite side of the freeway. Crossings at Chanticleer, Mar Vista, and via the rail trail between Aptos and Seacliff are already planned by the Regional Transportation Commission and in various stages of planning and funding acquisition. This Plan suggests consideration of additional crossings at 17<sup>th</sup> Avenue, the former Skyview Drive-In/Flea Market parcel, and at Cabrillo College Drive. New crossings would be high cost investments and therefore are unlikely to be realized in the short-term. However, these improvements have a place in the Plan due to the strong potential to positively impact local access and reduce traffic congestion in the Plan area, and the long term nature of the goal of greater sustainability.

## Network Connectivity

An important principle supporting the selection and geographic spacing of the suggested Street Types and transportation improvements is network connectivity and access to transit. This section provides an overview of network connectivity from the perspective of all users—bicyclists, pedestrians, transit riders, and motorists.

### *East-West Roadway Connectivity*

There is limited east-west street connectivity along the length of the study area due to local topographic constraints such as creeks and gulches. Highway 1 and Soquel Drive are the only continuous east-west streets in the north part of the study area, and East Cliff Drive and Portola Avenue provide an east-west connection south of Highway 1. No local

neighborhood streets cross creeks. This often requires pedestrians and bicyclists to take indirect routes between neighborhoods and to cross these barriers by using higher volume streets. Further detail on existing conditions in the Plan area can be found in the Existing Conditions Report, Appendix E (County of Santa Cruz, 2012).

Lack of connectivity introduces both safety and travel time reliability concerns into trip planning. Having multiple east-west and north-south routes is important for distributing traffic, providing path options and reducing travel time and distance for everyone. Providing continuous routes for bicyclists and pedestrians with fewer detours (e.g., detours resulting from cul-de-sacs and sidewalk gaps) along low-volume streets would create comfortable and connected east-west and north-south oriented routes.

### *North-South Connectivity*

Highway 1 serves an important role in local and regional vehicle travel. However, it is also a major barrier for vehicles, and other transportation modes between the north and south portions of the Plan area. There are seven north-south connections across the 8-mile length of Highway 1 within the unincorporated area, at Soquel Drive, 41<sup>st</sup> Avenue, Robertson Street-Wharf Road, Porter Street-Bay Avenue, Capitola Avenue, Park Avenue, and State Park Drive (Figure 5-2). These crossings are often spaced more than a mile apart, which focuses local traffic at these crossings and increases travel times for vehicles and active transportation modes. Further, the bicycle and pedestrian facilities at the Highway 1 crossings vary in availability and condition.

## Vehicular Circulation

This section describes strengths and opportunities in the County roadway network and explains how vehicular traffic would fit into the suggested Street Types. High levels of motor vehicle travel result in increased congestion at locations where major streets intersect with freeways, cross geographic barriers, or run parallel to the congested highway. Establishing viable and safe transit and active transportation infrastructure throughout the network would help decrease automobile dependence and encourage people to take transit, walk, or bike for some trips. However, many trips would still be made by automobiles, both local and longer distance trips.

Improvements for automobiles on Multimodal Corridors would include Transportation System Management (TSM)/Intelligent Transportation Systems (ITS) measures, prioritized on some urban and on rural streets. On a Multimodal Corridor, TSM measures such as adaptive signal timing and ITS would be used to improve vehicle travel time reliability and help to optimize the steady, safe, and orderly flow of vehicle traffic on congested streets. These TSM measures are not typically considered capacity enhancements; rather, they are operational improvements designed to complement vehicle trip reduction strategies. Prioritizing automobiles on Rural Streets would help improve access between rural and urban parts of the Plan area. The roadways connecting rural areas tend to have steep grades and many curves.

The layered network concept described by the Street Types in this plan views streets as systems where each street type is designed to create a high quality experience for its intended users. There is a finite amount of space on roadways in the Plan area, due in part to the constraints of available road

right-of-way. In addition, decreasing budgets for the maintenance of roads, as well as recognition of the environmental impacts of adding lanes and new pavement, mean that adding capacity is not always a feasible or desirable option. Adding capacity to a congested roadway does not always lead to the traffic benefit people hope for, especially if traffic demand exceeds what a newly widened roadway can accommodate. However, in many cases existing space in a right of way can be reconfigured to provide infrastructure for active modes—such as wider sidewalks and wider, buffered bike lanes.

It is also important to “claim” public right-of-way areas and not allow adjacent private uses or landscaping to encroach upon and diminish the utility of rights of way for pedestrians and cyclists as well as for vehicles.

### *Goods Movement*

The main roadway in the Plan area is Highway 1. This regional roadway is used for longer-haul trips and conveys commercial goods throughout the region, in addition to accommodating resident and visitor trips to workplaces, community places, and visitor attractions. Trucks move most commercial freight in Santa Cruz County. Highway 1 serves as the main link that truckers can travel to bring regional, national, and international goods to consumers. The AMBAG Sustainable Communities Strategy identifies Highway 1 as a goods movement corridor of regional significance, especially for conveying agricultural goods from the Plan area to surrounding counties.<sup>3</sup>

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<sup>3</sup> 20135 MTP/SCS and RTSs for Monterey, San Benito, and Santa Cruz EIR, AMBAG, 2014; Central Coast California Commercial Flows Study, Cambridge Systematics, 2012.

## Transit Network

Multimodal Corridors and Transit Connectors would form a strong north-south and east-west oriented network of transit routes throughout the Plan area.

Soquel Drive has high-frequency bus service, with buses arriving at least every 15 minutes during AM and PM commute times (Metro routes 71, 69W, 91X, 55, 54). Capitola Road between Soquel Drive and 41<sup>st</sup> Avenue has service at least every 30 minutes, with potential for higher-frequency service in the future (Metro routes 69A and 69W). Portola Drive between 17<sup>th</sup> and 41<sup>st</sup> Avenue also has service at least every 30 minutes, with potential for higher-frequency service in the future (Metro routes 66 and 68). Other operational efficiency measures could be implemented on Soquel Drive bus routes in the future, including signal preference, queue jumping, off-bus ticketing, and real time bus information at bus stops and via web-enabled devices.

All transit users are pedestrians at some point during a journey as they walk to and from bus stops and wait at bus stops. Therefore, streets that lead to transit corridors would feature wider sidewalks on both sides of the street, bus and pedestrian-scaled lighting, and helpful maps and information about transit. Bus shelters would be safely buffered from automobile traffic with side medians or other design features.

## PEDESTRIAN CONNECTIVITY

Active Connectors and Coastal Streets would form the backbone of the pedestrian network in the Plan area. Active Connector streets tend to be north-south oriented in order to connect pedestrians and bicyclists to the east-west oriented street types. Coastal Streets are east-west oriented, following the coastline.



*Bus shelter with passenger amenities.*

Photo credit: Fehr & Peers, 2014

Enhanced pedestrian safety features should be provided on streets surrounding activity centers, to improve access to key locations within a 10- to 20- minute walking trip in the Plan area. These safety features include wider sidewalks that are



*Paved shoulders (6 feet preferred) provide safe walking areas for pedestrians along Rural Connectors and can also improve space for cyclists.*

Photo credit: Fehr & Peers, 2014



*A bicycle "leap frogs" with a bus blocking bicycle lane.*

Photo Credit: Fehr & Peers, 2013

ADA compliant with at least 4 feet of clearance. Where possible, sidewalks should be at least 6 feet wide on Active Connectors and Coastal Streets and buffered from traffic by landscape, preferably with trees. Sidewalks should also be smooth and level, compliant with ADA standards.

Some Active Connectors are narrow and have limited space for sidewalks. However, providing a paved shoulder (6 feet preferred) can provide a space for pedestrians to walk comfortable and more safely. This can create connections between close-in rural areas and the urban area, and also improve safety for cyclists. North-south pedestrian

connectivity would be improved by new multimodal and/or pedestrian/bike crossings of Highway 1. Possible new crossings are explored in more detail in the Walkshed discussion.

## BICYCLE NETWORK

Multimodal Corridors, Bike Connectors, Active Connectors, and Coastal Streets, in combination with other streets that have bicycle facilities, would form the bicycle network in the Plan area.

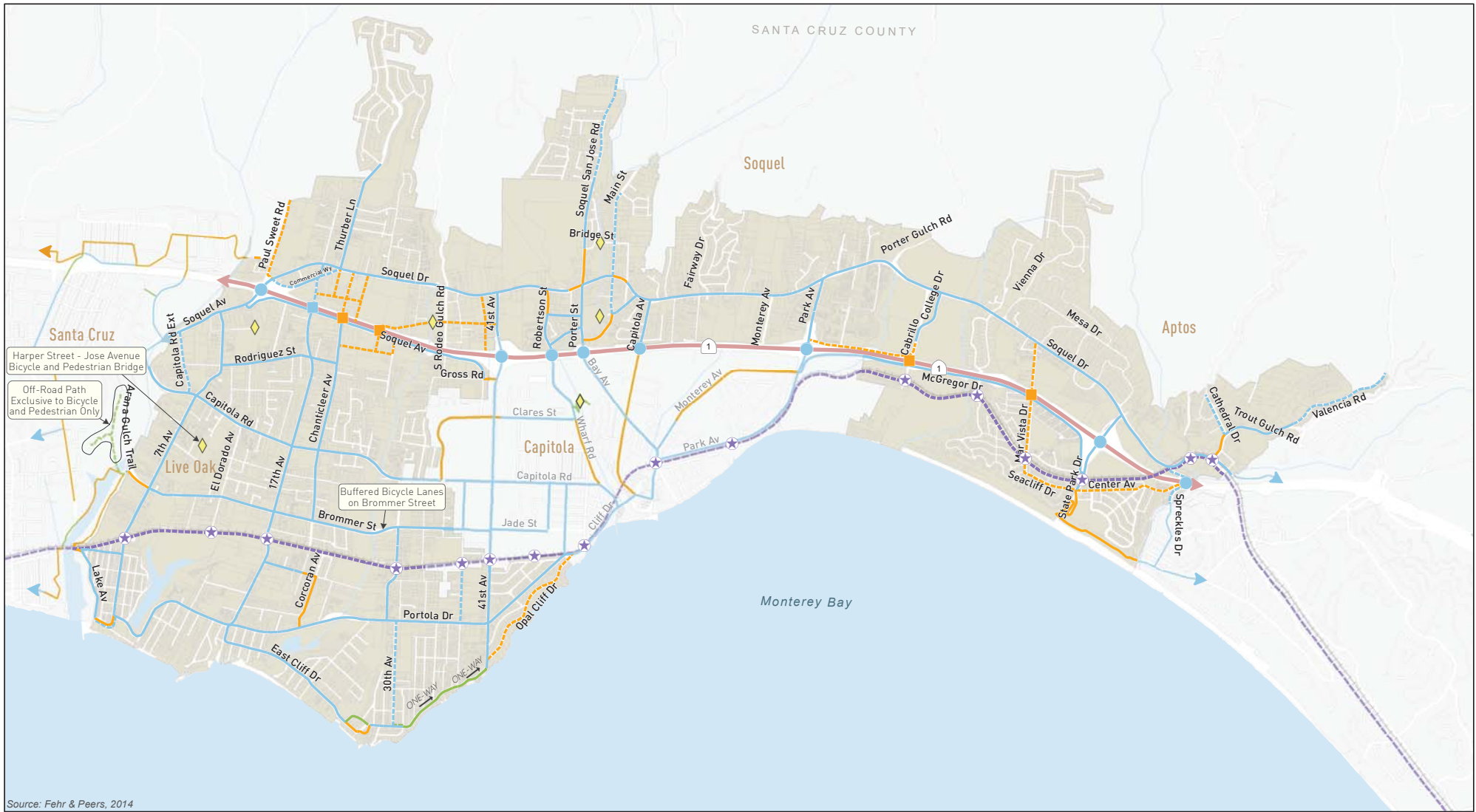
Bicycle facilities in the Plan area should provide strong east-west connectivity, with dedicated bicycle lanes present on most of the arterial streets. East-west connectivity is critically important for county bike commuters, and existing gaps and inconsistencies in this system make it unappealing, especially for less confident bike riders. The lack of connectivity on neighborhood streets, which would normally provide alternate routes for bicyclists, makes the need for prominent



*Buffered bike lane.*

Photo credit: Fehr & Peers, 2014

**FIGURE 5-4 MONTEREY BAY SANCTUARY SCENIC TRAIL CONNECTIONS TO OTHER BICYCLE AND PEDESTRIAN FACILITIES**



Source: Fehr & Peers, 2014

**Features**

- ★ Bicycle and Pedestrian Connection
- ⦿ Existing Highway 1 Crossing
- ⦿ Site of Possible Future Highway 1 Crossing
- ⦿ Neighborhood Path
- ⦿ Railroad
- ⦿ Plan Area
- ⦿ Freeway

**Existing Bicycle Facilities**

- Bicycle Path (Class I)
- Bicycle Lane (Class II)
- Bicycle Route (Class III)

**Planned Bicycle Facilities**

- Bicycle Path (Class I)
- Bicycle Lane (Class II)
- Bicycle Route (Class III)
- Monterey Bay Sanctuary Scenic Trail



## Cross Section

A **cross section** is a diagram that shows the layout and width of the different elements that make up a street, such as the roadway, sidewalks, bus stops, and bicycle facilities.



*Sharrow road markings.*

Photo credit: locallygrownorthfield.org

and complete bike facilities on major roadways a primary issue for transportation infrastructure spending in the County. The proposed MBSST would enhance east-west connectivity for bicyclists for trips within the Plan area and also for trips to nearby cities along the trail. Figure 5-4 shows points of connection to the trail from existing and planned bicycle facilities in the Plan area. Chanticleer Avenue, 17<sup>th</sup>



*Pedestrian refuge islands provide a protected resting place for pedestrians when crossing wider streets – approximately more than two lanes of traffic.*

Photo Credit: Model Design Manuel, 2010

Avenue, 30<sup>th</sup> Avenue, and 41<sup>st</sup> Avenue are all connectors that would strengthen north-south bike connectivity. Brommer Street was identified as being particularly valuable for bicycles during the visioning process. Brommer Street provides a lower stress biking environment than alternatives with higher traffic volumes and it connects the Arana Gulch bike path in the City of Santa Cruz to the City of Capitola.

Brookwood Drive is also an important bike connection that is suggested for improvement. It is a one-way street in the northwest edge of the Plan area, which connects the “Banana Belt” section of the City of Santa Cruz to the rest of mid-County.

Multimodal Corridor Soquel Drive has higher traffic volume, but is nevertheless well used by bicyclists. The safety and comfort of bicyclists would be improved with facilities such as a continuous cycle track and medians and bus bulb out islands that buffer bicyclists from buses and help prevent “leap-frogging” between riders and buses. Leap-frogging is the back and forth conflict of a bicyclist and a bus between successive bus stops.

Additional bike improvements that would increase network connectivity and close bike lane gaps are listed in Appendix B. These improvements are designed to complement the different street types with supportive infrastructure for the priority users.

## SAMPLE CROSS SECTIONS

The designation of priority modes for key streets guides the design of the street. Streets have limited space. In a layered network, it is important to dedicate space and amenities for modes according to the needs of the users of that mode. For example, on a Bike Connector street where bikes would be

prioritized, adequate space should be provided for bike lanes or cycle tracks in which bicyclists are buffered from vehicular traffic and pedestrians. This helps avoid conflicts between modes and bolsters multimodal safety. Four cross sections were developed to illustrate the suggested design features for the different street types. Together they represent a sampling of locations and street types in the Plan area. Sample cross sections can be found in Appendix A.

## PARKING MANAGEMENT

Most parking in the Plan area is located off-street and in parking lots associated with retail shops, residences, workplaces, and shopping centers. On-street parking is less common in the Plan area but does exist in some locations. On-street parking is available on both the north and south sides of Soquel Drive near Cabrillo College, although this could be refined to reduce potential for bicycle/auto conflicts. Very limited on-street parking is available along the south side of Soquel Drive between Daubenbiss Avenue and Main Street in Soquel Village. In the Village, where right of way is constrained, the on street parking spaces cause the bike lane to end abruptly, forcing bicyclists to merge into the traffic lane. The value of the parking spaces should be evaluated relative to the possible benefits of increased vehicular and bicycle mobility, safety, and pedestrian streetscape amenities when deciding whether the on-street parking should be retained. Limited on-street parking is also available on short stretches of Capitola Road, Brommer Street, Portola Drive, 41<sup>st</sup> Avenue, and 7<sup>th</sup> Avenue.

Parking districts can be helpful in areas where parking is challenging due to a mismatch between demand and supply. This can cause spillover daytime parking impacts on adjacent neighborhoods. Parking Districts can take many forms, but are typically defined as areas where special rules and fees

apply for people who use parking or the businesses that rely upon it. There are two existing parking districts in the Plan area: The Live Oak Parking District and the Soquel Village Parking and Business Improvement District. The Live Oak Parking District is located south of East Cliff Drive and Portola Drive. In the Live Oak Parking District, parked vehicles must display a valid parking permit issued to residents and available for purchase by visitors.

The Soquel Village Parking and Business Improvement District is located near Porter and Main Streets. Within the Soquel Village Parking and Business Improvement District there are four free, time-restricted public parking lots and time-restricted on-street parking spaces available on Soquel Drive, Walnut Street, and Main Street. When funds are collected from participants they are used to fund maintenance in the district, such as maintaining landscaping, lighting, parking enforcement and periodic sealing and striping. The funding mechanism may be modified in the future to respond to changes in State law regarding taxes and fees.

There are several areas in the Plan area where spillover parking is occurring in adjacent neighborhoods. Two of the most noticeable areas are the Dominican Hospital area (Focus Area 1) and Cabrillo College. Both of these activity centers attract many automobile trips. Dominican Hospital is a major employment center and health care provider in the County, and the Sutter Surgery Center and future Sutter/PAMF campus is located nearby. Cabrillo is a major educational institution with over 14,000 students enrolled. The spillover issues in these areas could be improved through focused parking management strategies. These may include new parking districts that would manage parking through permits, time limits, fees, valet services, or increased supply.

## Project Scale

Program-level investments include a series of actions that are consistent with a larger policy or planning effort, such as a Long Range Development Plan or a Bicycle or Pedestrian Master Plan. A project-level investment focuses on a single project, such as a new retail building or housing development.



Opportunities for shared parking should be explored where feasible, as discussed in Chapter 7.

## LIST OF RECOMMENDED IMPROVEMENTS

In order to bring the vision and goals for a Sustainable Santa Cruz County to life, transportation improvements are necessary. Several planning efforts have occurred recently that reinforce the need and desire for transportation improvements identified by community members involved in Sustainable Santa Cruz County workshops. Many of the improvements identified in this Plan respond to transportation needs that are also expressed in important guiding documents such as the 2014 Santa Cruz County Regional Transportation Plan, the Santa Cruz County Bicycle Plan (2011), and Monterey Bay Area Complete Streets Guidebook (2013). These commonalities indicate a shared understanding of the desired transportation network in the community.

A list of suggested transportation infrastructure improvement projects is presented in Appendix B. The list of improvements was compiled from ideas and suggestions gathered through the process of preparing this plan. The purpose of the list is to highlight improvements that will strengthen connectivity and multimodal transportation. The projects range from small to large investments, acknowledging that in the right locations relatively inexpensive improvements can contribute substantially to the comfort of pedestrians and bicyclists, and therefore to achieving the sustainability goals and objectives of the Plan (see Chapter 2, "Vision and Guiding Principles"). The largest capital cost improvements, such as new connections across Highway 1, that are discussed in this plan are not included in the list. This is because Appendix B focuses on the projects that are more likely to be able to be financed in the

timeframe of the Plan, which is 2014 - 2035. However, designs for Highway 1 and other major transportation improvements should consider these possible future multi-modal road connections, so that opportunities to increase local transportation options are not precluded.

The purpose of the list is also to document the most promising ideas that were gathered, and to position the projects for consideration when important transportation plans such as the Regional Transportation Plan (RTP), prepared by the Santa Cruz County Transportation Commission, and the Santa Cruz County Capital Improvement Program (CIP), Santa Cruz County Bicycle Plan, and Circulation Element of the General Plan are updated. The principles and goals in the 2014 RTP are well aligned with the goals of Sustainable Santa Cruz County Plan and projects on this list that are not in current planning documents should be considered for inclusion in the future. (Some of these improvements are already addressed in the RTP and County plans, often as part of larger, more general projects. Those projects are included here in more specific form to highlight their importance in achieving the sustainability goals for the Plan area.)

## PERFORMANCE MEASURES

Performance measures are used to evaluate how well the transportation network is functioning, to evaluate individual improvement projects, and to characterize the potential impacts of new development on the existing system. Currently the County relies heavily on vehicle Level of Service, or LOS, as a performance measure. Vehicle LOS focuses solely on automobile delay and is insensitive to walking, bicycling, and transit conditions. Traditional vehicle LOS analysis actually considers bicycles and pedestrians to be an impediment. Given that the purpose of measuring the

transportation system is to understand how well it is achieving the goals that are most valued by the users, expanding the measurement tools to include options that consider the needs of all users is important.

Performance measures are also the basis for determining which transportation projects provide the most positive change for the cost. Vehicle LOS has a place in this toolbox as well, but must be supplemented with other metrics in order to gain a complete picture of the effects of any particular transportation project on the multimodal transportation network and on the environment.

**TABLE 5-3 PERFORMANCE METRICS**

<i>Performance Metrics</i>
<i>Improves Overall Street Connectivity</i>
<i>Improves Pedestrian Safety and Access to Activity Centers (including schools, workplaces, commercial areas and public facilities)</i>
<i>Improves Bike Safety and Access</i>
<i>Creates Safe Routes to Transit and Increases Opportunities to Ride Transit</i>
<i>Improves Management of Parking Supply and Access to Park-and-Ride Lots</i>
<i>Creates Livable Public Spaces around Activity Centers</i>
<i>Reduces Vehicle Miles Traveled</i>
<i>Reduces Traffic Congestion</i>
<i>Consistency with Other Plans and Projects</i>

Sources: Fehr & Peers, 2014.

An explanation of each of the performance measures is discussed below.

### Improves Overall Street Connectivity

Street connectivity in the Plan area is limited in the east-west direction by topography, long blocks, and cul-de-sacs and there are limited north-south crossing locations across Highway 1. Improvements that add to overall street connectivity strengthen access to transportation choices in the Plan area. New connections, especially in the north-south direction, would meet or exceed this connectivity performance measure. Improvements that would add new streets, Highway 1 crossings, or bridges that offer people new, safer, and more direct ways of getting around the Plan area would meet or exceed this performance measure.

### Improves Pedestrian Safety and Access to Activity Centers

Through the visioning process, community members identified the need to improve pedestrian access to activity centers in the area. In terms of access, improvements that would increase the size of a 10- to 20-minute walkshed around an activity center would meet or exceed this performance measure. In addition, improvements that remove physical barriers for pedestrians make locations more accessible. Establishing and continuing Safe Routes to School Programs surrounding the numerous schools in the Plan area would improve safety for children. In terms of safety, improvements that provide sidewalks and trails of adequate width on both sides of the street (6 feet is most desirable), pedestrian-scaled lighting, and medians or landscaping that buffer pedestrians from traffic would meet or exceed this performance measure.



*Street furniture buffers pedestrians from vehicular traffic and makes streets more pleasant and inviting.*

Photo Credit: Fehr & Peers, 2014

### **Improves Bike Safety and Access**

As discussed earlier, the Plan area has strong bike connectivity on a variety of street types. Some streets have higher traffic volumes and are likely to attract more experienced bicyclists. However, all cyclists, regardless of their level of experience, need safe facilities. This can take the form of new facilities or improvements that provide adequate

space, street markings and design features that buffer cyclists from vehicles in the roadway. When planning or reviewing future development a good rule of thumb is to locate driveways on side streets rather than busier streets such as Soquel Drive or 41<sup>st</sup> Avenue. This minimizes conflict points between cars and can be especially helpful when many cars are waiting in the roadway to turn left or right into a driveway, which causes congestion for the through traffic behind them. Improvements that close gaps in the existing bicycle network would meet or exceed this performance measure.

### **Creates Safe Routes to Transit and Increases Opportunities to Ride Transit**

What encourages people to ride transit? Factors such as comfort (at bus stops and on-board), convenience, access, cost, safety, and travel time are all considerations. Improving upon these factors can encourage more people to ride transit. Improvements can be incremental or large-scale. Something as small as adding more lighting at a bus stop can make a person feel more comfortable using transit at night. Adding bus shelters on heavily used routes can encourage ridership, as people are likely to be more comfortable while waiting to board a bus, especially in rainy weather. In addition, adding service in the form of new routes along corridors with strong ridership potential that connect to activity centers, or adding more frequent service along heavily used routes (15- to 30-minute increments) during the busiest times of day will encourage use of transit. Increasing the coverage of the transit network and the frequency at which buses arrive would also encourage people to leave their cars at home for some trips. In combination with the land use and diversity changes suggested by this Plan, congestion can be lessened and quality of life improved.

## Improves Management of Parking Supply and Access to Park-and-Ride Lots

As discussed in the previous section, parking can be challenging in some parts of the Plan area, particularly where a busy activity center borders residential neighborhoods. In these cases, parking spillover is a main concern for the community. A Parking Master Plan would help to understand parking needs in more detail. Such a study would develop specific measures to improve how parking is provided and managed. In the near-term, establishing parking districts in areas where spillover is already known to be a challenge would meet this performance measure. The development of the specific characteristics and guidelines of each parking district should be a process that involves community members from the adjacent neighborhoods as well as property owners and business owners.

## Creates Livable Public Spaces around Activity Centers

Livable public spaces are attractive and accessible by foot. One of the goals of this plan is to encourage the creation of livable public spaces around activity centers as a way to encourage more people to walk, bike and take transit. Developments that fund amenities such as street furniture, vegetation strips lining sidewalks, sidewalk café spaces, and bike parking, would meet or exceed this measure. In many communities, there is a requirement for commercial development to include public art or to pay a fee that funds public art.

## Reduces Vehicle Miles Traveled (VMT)

VMT is a commonly used measure of how much people in a specific area travel by car. Improvements aimed at getting

people out of their cars to travel by active modes can help reduce VMT, which would reduce production of greenhouse gases, which relates to addressing climate change. Improvements aimed at reducing the number of miles people drive and the number of trips made by private automobiles would meet or exceed this performance measure.

## Reduces Traffic Congestion

Traffic congestion is a challenge for residents, workers, and visitors in the Plan area. People would like to be able to travel to destinations efficiently, without dealing with backups at high-volume locations, and with increased predictability.



*This photo shows pedestrian-scaled lighting in South Bend, Indiana. Overhead lighting on pedestrian-oriented streets should be low enough to the ground to illuminate walkways and the faces of pedestrians.*

Photo credit: SFMTA, 2013.

Improvements that help shift people from their cars to other modes for at least some trips would help reduce local congestion, and roadway improvements that make traffic flow better would also meet or exceed this measure. Examples include adding capacity to a roadway, restriping a roadway to add left-hand or right-hand turn-lanes that reduce backups for through traffic, signal coordination, new streets, and adding more locations for crossing Highway 1.

### **Consistency with Other Plans and Projects**

The Plan area intersects a number of neighborhoods and jurisdictions in Santa Cruz County. Many projects and planning efforts in Santa Cruz County are currently in process or have been recently completed. Improvements that are consistent with adopted policy guidelines and approved plans and projects from neighboring jurisdictions and regional governing bodies, including the Santa Cruz County Regional Transportation Commission and Association of Monterey Bay Area Governments (AMBAG), would meet this performance measure.

## **BALANCED TRANSPORTATION FRAMEWORK**

Taken together, the transportation strategies suggested in this chapter form a framework for a balanced transportation system that can meet the needs of residents, workers, and visitors in the Plan area. The community's transportation values establish a lens through which to view transportation opportunities that respond to the vision for reduced congestion, increased connectivity and improved mobility. The suggested street types would foster a network that would make walking, biking, and taking transit more viable options for getting around the Plan area. The sample cross

sections help to define and illustrate the types of design elements recommended for the different street types—including wider and safer sidewalks, buffered bicycle lanes, broader paved shoulders on rural roads, and more comfortable bus stops. The Performance Measures are included to help the community and decision makers understand how a new land use development or other project would affect the desired transportation network, and to guide the prioritization and implementation of programs and projects that work toward the well-connected, balanced transportation network that is described in “A Vision for Sustainable Communities in Santa Cruz County.”



# Natural Resources 6





Santa Cruz County has a rich history of environmental protection. Measure J, adopted by Santa Cruz County voters in 1978, established growth goals, an Urban/Rural Boundary to limit development in rural areas, and new agricultural preservation requirements. Under Measure J the County aims to accommodate growth in urban areas so that that open space and rural areas can remain undeveloped and protected.

The Sustainable Santa Cruz County Plan aims to build on this legacy by further promoting natural resource protection in urban areas. At community workshops, residents expressed a strong desire to increase residents' access to parks and open spaces in urban areas. Residents also envisioned a future of environmentally friendly development with green building practices and reduced consumption of resources such as water and energy. For many residents a sustainable community includes urban areas integrated into a larger sustainable system of food production with community gardens and urban agriculture.

The County can establish a clear vision for how private investment in urban areas can promote natural resource protection and increase access to parks and open space. This chapter provides an outline for this vision by focusing on four main goals:

- Access to public open space
- Water conservation
- Urban greening and urban agriculture
- Energy conservation and renewable energy

The sections below describe these goals and some of the specific strategies the County can use to help promote natural resource protection within urban areas.

## INCREASE ACCESS TO PUBLIC OPEN SPACE

At public workshops, residents said that all neighborhoods should be adequately served with parks and open space and that all residents should enjoy safe and convenient access to these amenities. Workshop participants highlighted Live Oak as an area where many residents feel they do not enjoy adequate access to parks and open space within their neighborhood.

How might Santa Cruz County increase resident access to parks and open space in urban areas? Local governments typically provide additional public parks and open space in a number of ways. Often public park space and/or a financial contribution to future park space is required as part of a new residential subdivision to serve the need for additional parkland created by new residents. Governments may also purchase or otherwise acquire land to establish a new public park. Sometimes governments also re-purpose existing publicly owned land for use as a park or open space.

These traditional methods of providing additional public parks will be challenging in the Plan area. While the County does currently have a parks impact fee that is charged to new development on a per bedroom basis, it is likely that there will be few if any residential subdivisions large enough to justify the requirement for parkland dedication. Santa Cruz County also has limited funds to acquire land for new parks and to maintain the parks once they are open. Use of public lands for new parks also may be limited due to competing demands for the use of these lands.

Given these constraints, the County could possibly leverage contributions from new development in a way that provides new community open space as part of development projects. Other cities in California have increasingly employed this strategy to meet growing needs for public spaces in urban areas. For example, the recent Alma Street mixed-use project in Palo Alto included a publicly accessible pocket park as part of the redevelopment of a shopping center. This park is used by residents, shoppers, employees, as well as the general public, and provides a new neighborhood gathering place valued by the community.

The County could also continue with the approach applied to the Aptos Village Planned Unit Development, which was to require that public access be provided to a “village square” park that is part of the project and which will be maintained by the property owners association. Proper nexus between the project and the project condition to require public access must exist for this approach to be used.



*Town Green provided as part of mixed-use development in Windsor*

Small public parks are often incorporated into commercial and mixed-use redevelopment projects in urban areas. New Town Center development in Windsor, for example, incorporated a number of green spaces for the use of residents and visitors.

Multi-family development projects also can incorporate parks and open spaces that are open to the public. Particularly in Live Oak, this strategy could increase the number of small public spaces that serve local residents and create new community gathering places.

An example of the successful application of this strategy can be found in West Hollywood. The Formosa 1140 project dedicated a third of its privately owned building site for a publicly managed pocket park. This new park added much needed green space in a neighborhood underserved with community amenities. The concept has been so successful that it has been replicated in other locations throughout the city.



*Small public park included in redevelopment of shopping center in Palo Alto*



*Public pocket park as part of a multi-family residential project in West Hollywood*

Santa Cruz County might consider encouraging this type of development by modifying existing open space requirements for multi-family housing. The County could enable publicly accessible park or open space to substitute for private open space in certain locations. The County should also establish design standards to ensure that the open space is functional for the general public and contributes to a sense of community.

Public spaces provided as part of private development projects can incorporate a variety of uses. These spaces could include urban farms, community gardens, parks, plazas, courtyards, trails, natural areas, and places for art. The County could encourage these amenities with incentive-based zoning. Many local governments offer developers a community benefits option through which project applicants receive bonuses in exchange for project amenities that benefit the larger community.

## WATER CONSERVATION

Santa Cruz County is facing serious water shortage due to over-drafted aquifers and ongoing drought. Currently, residents are subject to mandatory water restrictions. In the future drought conditions are likely to become more frequent and severe due to the effects of global climate change.

At community workshops for the Sustainable Santa Cruz County Plan, many residents wondered why the County would allow more housing and commercial development given scarce water resources.

As described in the introductory and “Next Steps” chapters of this Plan, the Plan sets out a vision for a more sustainable pattern of development. If policies and regulations to implement that pattern of development are approved, the County would be taking a pro-active approach toward sustainable land use regardless of when and to what extent individual developments occur over



*The County could encourage community gardens by offering developers a bonus for incorporating this amenity into proposed projects, under an “incentive zoning” approach*

time. Specifically regarding water resources, currently and in the future, new development cannot be approved in Santa Cruz County without demonstrated water supply to serve that development. The Soquel Creek Water District and City of Santa Cruz Water Department, suppliers in the Plan area, must issue letters indicating water supply is available before any project is approved.

In the meantime, the County can identify ways to increase water conservation and reduce per capita water use. As discussed below, this Plan describes three main ways that the County can do this:

- Require water efficient landscaping
- Promote compact development
- Encourage green stormwater systems

Further, an update to the Integrated Regional Water Management Plan (IRWMP, 2014) was adopted by the Regional Water Management Group and the County of Santa Cruz in August, 2014. The Plan promotes regional collaboration in managing water resources and identifies strategies and high priority water supply and conservation projects to address regional water needs.

### Require Water-Efficient Landscaping

In 2013, the County adopted a Water Efficient Landscaping Ordinance (County Code Chapter 13.13). This ordinance requires water-efficient landscaping for commercial development and larger residential projects. The County's Climate Action Strategy also calls for the County to consider expanding existing water conservation measures, adopting a water conservation impact fee, and promoting the use of residential greywater for irrigation.

The County could strengthen existing water-efficient landscaping regulations by requiring all residential and commercial development projects to comply with the Water Efficient Landscaping Ordinance. With this change, all new dwelling unit projects would be required to:

- Choose plants that are suitable for the climate of Santa Cruz County. Use native or other climatically appropriate and drought-resistant plants that can thrive with moderate irrigation once established.
- Further reduce the amount of turf in new landscaping and encourage turf alternatives. Turf lawns use significant amounts of water and have high maintenance demands that contribute to air pollution and greenhouse gas production. Consider not exempting "warm season" turf grass from turf limits.
- Limit the use of overhead irrigation spraying, requiring drip irrigation specifically directed to where water is needed.



*Water efficient landscaping*

## Promote Compact Development

Recent studies have shown that higher-density compact development reduces per-capita rates of water consumption<sup>1</sup> primarily because smaller commercial and residential lots require less water for landscaping. Compact development also requires shorter pipes that over time lose less water through leakage than water systems that serve a more dispersed development pattern.

In addition to conserving water, compact development reduces the cost of providing water infrastructure for water customers and local governments. Compact development reduces transmission costs, reduces energy required to pump water, and allows upgrades to existing systems rather than the construction of entirely new systems.

The pattern of development described in this Plan will consume less water per capita than lower density development. New development also can incorporate modern green building features such as water-efficient appliances and fixtures, drought-tolerant landscaping, and green stormwater management techniques.

## Encourage Green Stormwater Systems

In a typical urban storm sewer system, rainwater is transported off-site through a system of pipes that empty into creeks, rivers, and other water bodies. In contrast, green stormwater systems aim to capture, clean, and

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<sup>1</sup> *Growing Toward More Efficient Water Use: Linking Development, Infrastructure, and Drinking Water Policies.* United States Environmental Protection Agency. January 2006.



*Per capita water consumption for compact development (above) is considerably lower than for low-density development (below)*

recycle stormwater on-site. Components of a green stormwater system often include:

- Cisterns and rain barrels to capture, store, and reuse stormwater.



*Parking lot with permeable paving and rain gardens*

- Permeable paving materials for streets, sidewalks, parking lots, and driveways.
- On-site treatment of stormwater runoff from paved parking areas.
- Stormwater retention features to minimize runoff, including drainage swales, rain gardens, and retention basins.

Green stormwater systems help to conserve water by allowing for on-site recycling of water that can be used for landscape irrigation. They also help to recharge local aquifers by allowing more water to be absorbed into the soil. Green stormwater systems also help to protect water quality, reduce flooding hazards, preserve habitat, and reduce soil erosion. In addition to on-site recycling, it may be possible to identify areas appropriate for multi-site collection, detention, recharge, and recycling.

Santa Cruz County Code Chapter 7.79 (Runoff and Pollution Control) already requires new development to control the volume, runoff rate, and potential pollutant

load of stormwater runoff. The County could strengthen these regulations to require the use of green stormwater systems in more instances. The County could also codify recommendations in the Resource Conservation District's "Homeowner's Guide to Greening Stormwater Runoff" into required standards that conserve water and provide a variety of other environmental benefits.



*Rain garden*

## URBAN GREENING

At community workshops for the Sustainable Santa Cruz County Plan many residents described increased access to nature as an important component of a sustainable community. One way to increase access to nature in urban areas is through “urban greening.” Urban greening is the practice of protecting and enhancing the quantity and quality of trees, vegetation, and habitat within urbanized areas.

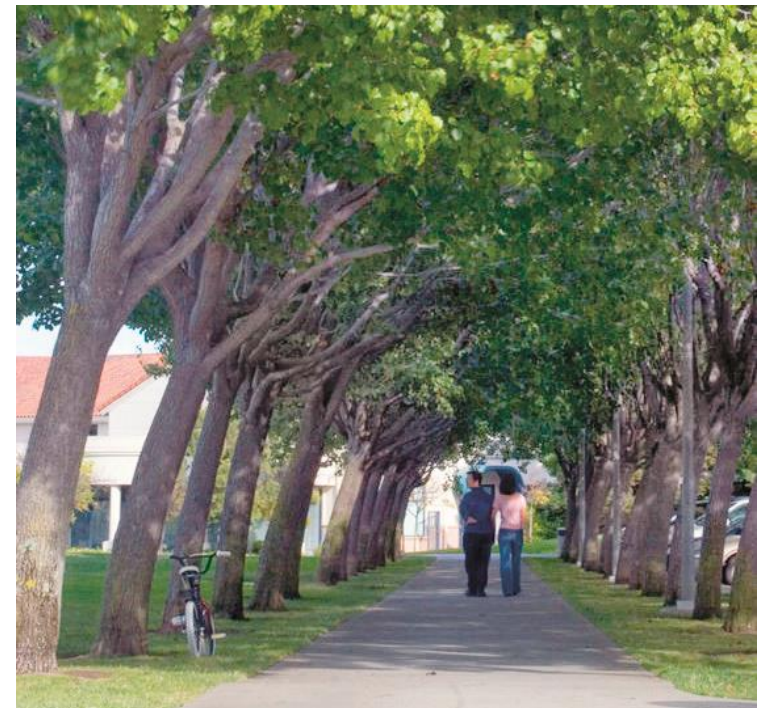
Urban greening offers many benefits to the community. It provides social benefits by creating aesthetically pleasing and comfortable environments, which contribute to the character of a community. It provides economic benefits by enhancing the vitality of commercial areas and increasing property values. Urban greening also provides numerous environmental benefits, including decreasing energy usage by increasing shade, addressing climate change by sequestering carbon dioxide, and creating habitat for animals within urban environments.

The County can improve the contribution of existing and new development to urban greening. Specific methods include:

- Requiring street tree planting and maintenance as a condition of all development and renovation projects, including tree planting, staking, and irrigation.
- Preserving and integrating significant existing landscape elements into new development and landscape plans.
- Requiring the installation of larger, more mature plant materials.



*Trees in parking lot*



*Urban trees*

## Green Roofs

Green roofs are an effective stormwater management tool that provide multiple environmental benefits, including carbon sequestration; reduction in pollutants and stormwater surges from roof runoff; energy conservation; heat island reduction; and creation of wildlife habitat. While green roofs have higher installation costs than a standard roof, they also have lower lifecycle costs. When their long-term benefits are considered, including increased lifespan of the roof, greater insulating properties and reduced heating and cooling costs, the cost savings from a green roof can be considerable.

After a green roof has been installed and its plants are established, maintenance requirements are usually minimal. Typical maintenance of a green roof includes trimming and weeding of plants; monitoring the irrigation system; and inspecting the roof to check for blocked drainage channels and leaks in the waterproof membrane.

- Designing landscaped areas to reconnect fragmented vegetation and help establish networks to surrounding natural areas.
- Encouraging existing developments to transition unused and/or landscaped areas to food-producing gardens, drought-tolerant plantings, and other green spaces.

The County frequently requires greening improvements as part of new development projects. The County should be careful that these requirements do not discourage private investment in urban areas, particularly in neighborhoods where it is most needed. One way to address this issue is through adopting an incentive-based system to encourage urban greening to encourage developers to incorporate significant urban greening features into projects. This would help to encourage both the infill development and the urban greening that many residents desire.



*Green roof at the California Academy of Sciences in San Francisco*



## URBAN AGRICULTURE

At community workshops participants also expressed a strong desire to see more urban agriculture in Santa Cruz County. Participants described a vision for sustainable communities with community gardens and urban farms that sell their produce at local markets. Participants saw this as part of a larger sustainable agricultural system with a greater diversity of local organic crops and increased food security.

As described by workshop participants, urban agriculture includes a range of food growing practices, including:

- Community gardens where individuals and families grow food primarily for personal consumption or donation.
- School gardens on school property used primarily by students, teachers, and others affiliated with the school.
- Urban farms where food is grown by an organization or private enterprise, which often include entrepreneurial opportunities such as growing food for sale.

The benefits of urban agriculture are numerous. Some key benefits include:

- Creating new community gathering places that foster resident interaction
- Improving community health by expanding residents' access to fresh, nutritious food and by decreasing hunger.
- Increasing food security.
- Reducing greenhouse gas emissions from transporting food over long distances.



*Community garden*

There are a number of vacant and underutilized properties in the Plan area where new community gardens and urban farms could be established as an interim use until permanent development is established. Another option is to encourage urban agriculture as part of multiple-unit residential projects. For example, the County could allow publicly accessible gardens to count towards required on-site open space.

Within the Plan area there is an opportunity to integrate new urban agriculture with the Monterey Bay Sanctuary Scenic Trail (MBSST), popularly known as the rail trail. The property at the intersection of El Dorado and the rail line in Live Oak is one example. This property is currently vacant and may be recommended for moderate density residential development. As part of development on the site, a community garden or pocket park could be established next to the rail trail. This garden and park

could become a new neighborhood activity center and provide a valued amenity for the neighborhood.

Figure 6-1 presents a conceptual plan for a community garden and pocket park along the rail trail. A multi-use trail runs along the west side of the block. Pedestrian paths connect the residential uses to the west with the multi-use path as well as the park and community garden areas. A narrow orchard creates a buffer between the residential uses and the park and garden.

Currently, existing County regulations could be interpreted to limit the establishment and expansion of urban agriculture. The County could adopt the following strategies to reduce these barriers:

- Establish new General Plan goals and policies to encourage urban agriculture.
- Ensure that General Plan land use designations and zoning districts allow a full range of urban agricultural activities in appropriate residential, commercial, public, and open space areas.

Establish a streamlined permit and approval process for permitting urban agriculture uses on priority site, if any permits are determined to be needed.

- Consider zoning regulations that allow agriculture as a temporary use on vacant urban parcels.
- Establish regulations and operating standards in the Zoning Code to regulate the safety and aesthetics of urban agriculture sites. This could include allowing on-site sale of fresh produce and allowing animal keeping in urban farms and gardens.
- Work with local farmers and gardeners to identify preferred management models for urban agriculture sites. Create a lease template that promotes public benefit from such activities.
- Develop a strategic action plan to promote establishment of urban agriculture at appropriate locations. Identify and prioritize available public sites for privately operated urban agriculture.

## ENERGY CONSERVATION AND RENEWABLE ENERGY

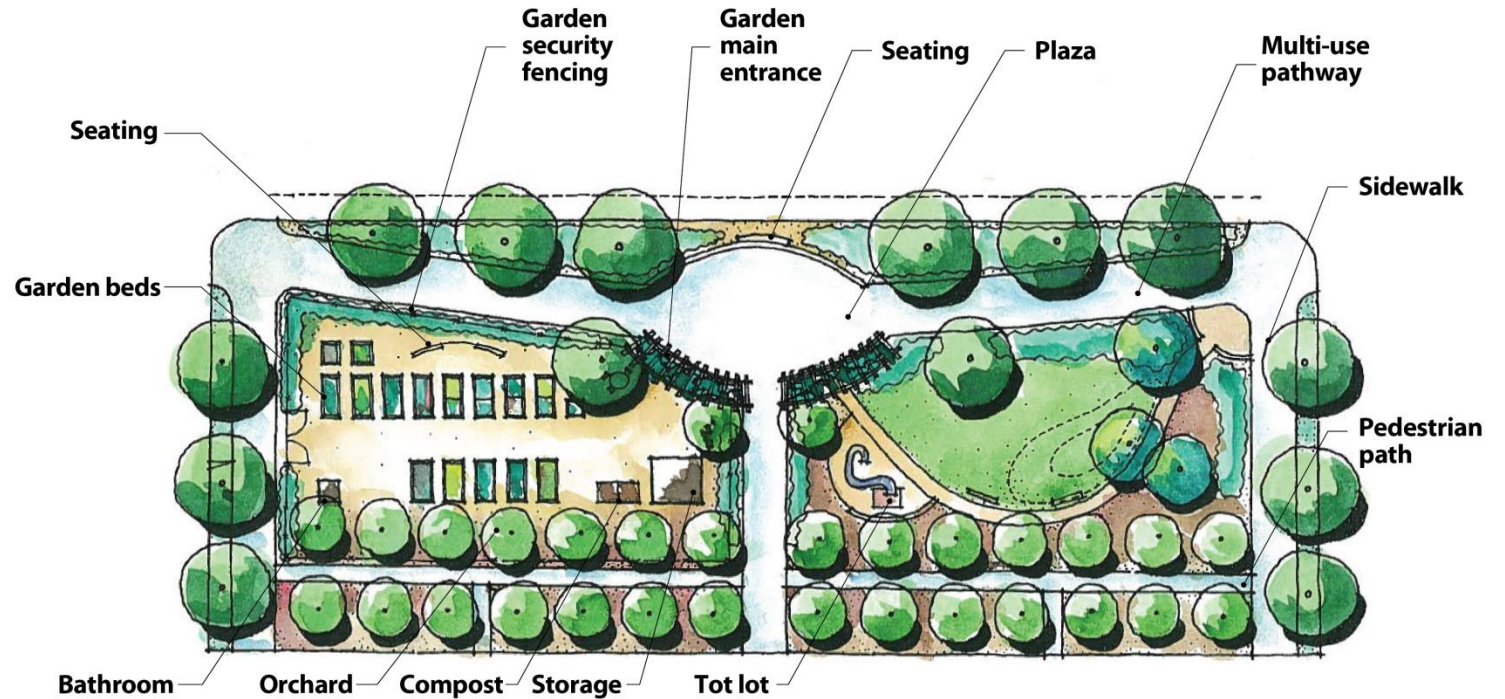
Santa Cruz County already has strong policies and regulations relating to energy conservation and renewable energy:

- **General Plan** – establishes policies and programs to promote energy conservation and renewable energy.
- **Measure C** – establishes basic principles and policies related to environmental protection.
- **County Code Chapter 12.28 (Solar Access Protection)** –prohibits shading of solar energy



*Solar panels on structures covering surface parking lot*

FIGURE 6-1 URBAN GARDEN ILLUSTRATION



system by vegetation and requires that new structures minimize obstruction of solar access to greatest extent possible.

- **Chapter 12.24 (Wind Energy)** – establishes permit requirements and development standards for wind energy conversion systems (WECS).
- **Zoning Ordinance (multiple sections)** – allows exceptions to setback requirement to accommodate active and passive solar facilities.

The County's Draft Climate Action Strategy also contains a number of strategies to promote energy conservation

and renewable energy sources. For example, the Climate Action Strategy calls for the County to remove barriers to the installation of renewable energy systems and to consider incentives for new parking lots to be covered with structures that support solar production systems. The County will soon allow property assessed financing of energy efficiency systems, including solar energy systems.

Overall, the County has already taken important steps to minimize regulatory barriers to the installation of renewable energy systems in urban areas. The Zoning Code allows for flexibility in required structure height,

setbacks, and required permits to accommodate these systems.

One additional step the County could take would be to clarify rules for small WECS in urban areas. The County also could consider incentives for on-site generation of renewable energy. These incentives could dovetail nicely with the goal of establishing new neighborhood activity centers. Examples of local incentive for renewable energy include:

- Reducing permitting and impact fees.
- Expediting reviews and approvals.
- Offering bonuses for projects generating more than 50 percent of their energy used on site.
- Providing special staff assistance.
- Awarding points in green building recognition programs.
- Offering solar rebates and tax credits.

## SUMMARY RECOMMENDATIONS

The sections above discuss a number of ways in which the County can promote natural resource conservation and access to open space in urban areas. As the County moves forward with the implementation of this Plan, the County can consider the following amendments to the General Plan and Zoning Code:

- Amend the General Plan and Zoning Code to encourage development projects to include publicly-accessible open space and community amenities into their project designs.
- Modify existing open space requirements for multi-family housing so that publicly-accessible parks or open space can substitute for private open space.

Establish design standards to ensure that open space is functional for the general public and contributes to a sense of community

- Strengthen existing water-efficient landscaping regulations in the County Code by requiring all residential and commercial development projects to comply with the County's Water Efficient Landscaping Ordinance.
- Strengthen County Code Chapter 7.79 (Runoff and Pollution Control) to require the use of green stormwater systems for a broader range of development projects.
- Adopt an urban greening incentive program to encourage developers to incorporate significant urban greening features into projects.
- Encourage urban agriculture by allowing publicly accessible gardens to count towards required on-site open space for multi-family residential projects.
- Encourage urban agriculture in the County's General Plan and Zoning Code by allowing a full range of urban agricultural activities in appropriate residential, commercial, public, and open space areas. Amend the Zoning Code to allow urban agriculture as a temporary use on vacant urban commercial parcels.
- Adopt incentives for on-site generation of renewable energy.

# Focus Areas 7



This chapter presents land use and transportation concepts for five “focus areas” within the Plan area. These focus area concepts present a detailed vision for how specific areas could change over time to support the County’s sustainability goals.

Figure 7-1 identifies the location of the four land use focus areas and the one circulation focus area. These areas were selected to reflect a broad range of conditions within urban areas of Santa Cruz County. Other criteria considered when selecting focus areas were:

- Presence of vacant and underutilized sites.
- Economic development potential.
- Proximity to major corridors.
- Suitability for commercial and residential development.
- Need for improved transportation facilities

The focus areas were used as “test cases” to see how the ideas from Chapters 2 through 5 could function in particular locations. The Aptos/State Park Circulation Focus Area was also analyzed for a detailed assessment of circulation issues and options. Recommendations for this area are found in Chapter 5 of this Plan.

The process to create options for each focus area and develop a final concept involved many public meetings and workshops. Final concepts reflect input received from residents, property owners, County officials, and other government agencies.

Discussion of focus areas allowed for a more detailed analysis of land use, urban design, and transportation issues within the Plan area. Focus area concepts address the design of buildings, including height, mass,

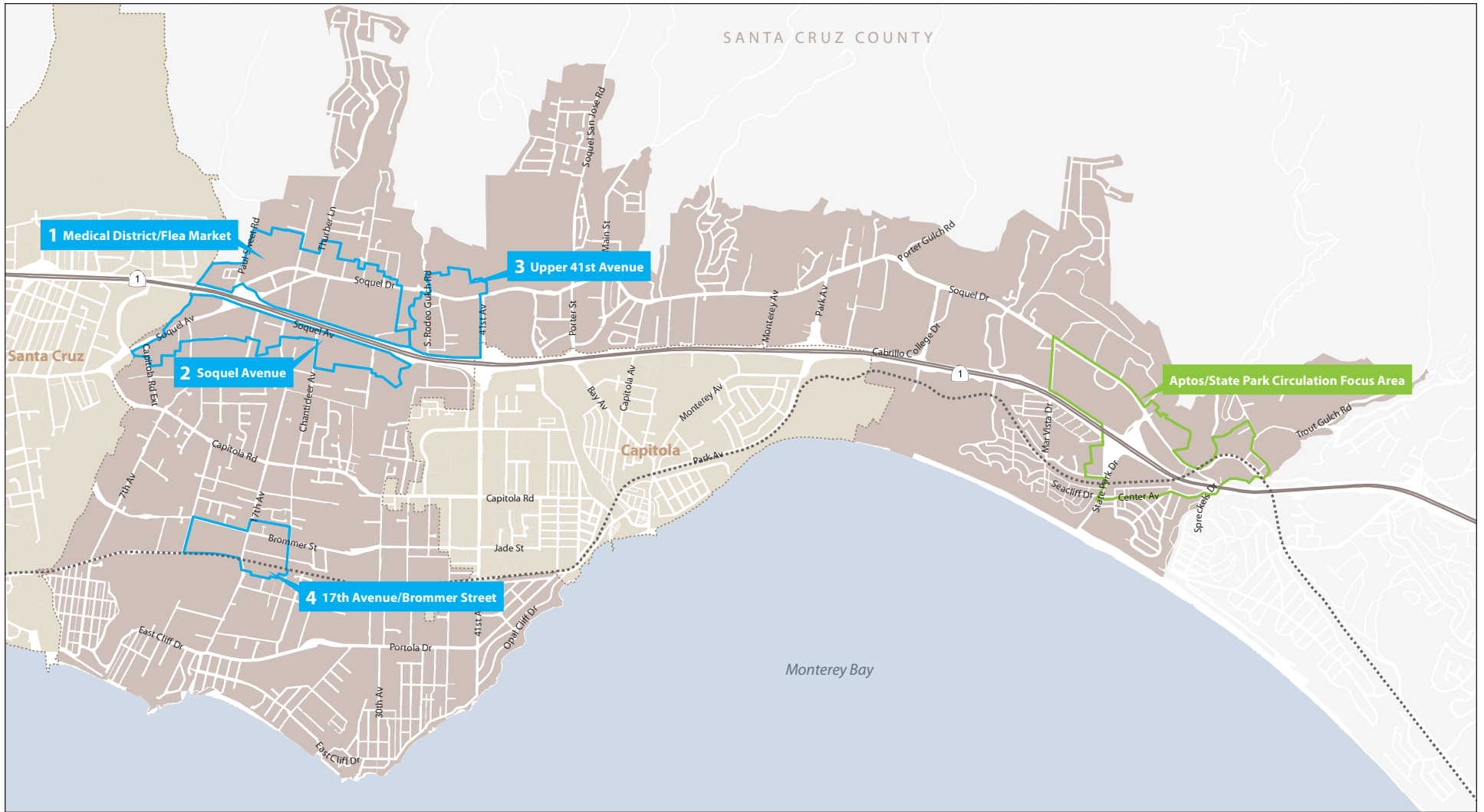
placement, and orientation. Concepts also support a parcel-specific assessment of General Plan land use designations. The smaller geographic scale also allows for consideration of transportation improvements, such as introduction of new streets, enhanced transit facilities, and new bicycle and pedestrian connections.

For each land use focus area, this chapter contains the following information materials:

- A general description of the concept for the area.
- A concept diagram that communicates the overall vision for the focus area in general terms.
- A land use map that shows changes to General Plan land use designation to be consistent with the concept diagram.
- A circulation diagram that shows more detailed circulation improvements to support the focus area vision.

The concept for the Aptos/State Park Circulation Focus Area shows recommended physical improvements for all modes of travel within this area.

**FIGURE 7 - 1 FOCUS AREAS**



- Plan Area
- Land Use Focus Area
- Circulation Focus Area
- Rail Line





## Focus Area Workshops

In May of 2013 county residents attended four community workshops to provide input on focus areas concepts. Approximately 160 residents attended these workshops. At the workshops residents learned about options for each focus area and provided input on their preferred options. The focus area concepts in this Plan reflect the consensus opinion received at these workshops

At the workshops residents also discussed options for addressing circulation issues in the Aptos town center area. Recommended circulation improvements for this area are also discussed in Chapter 5 of this Plan.



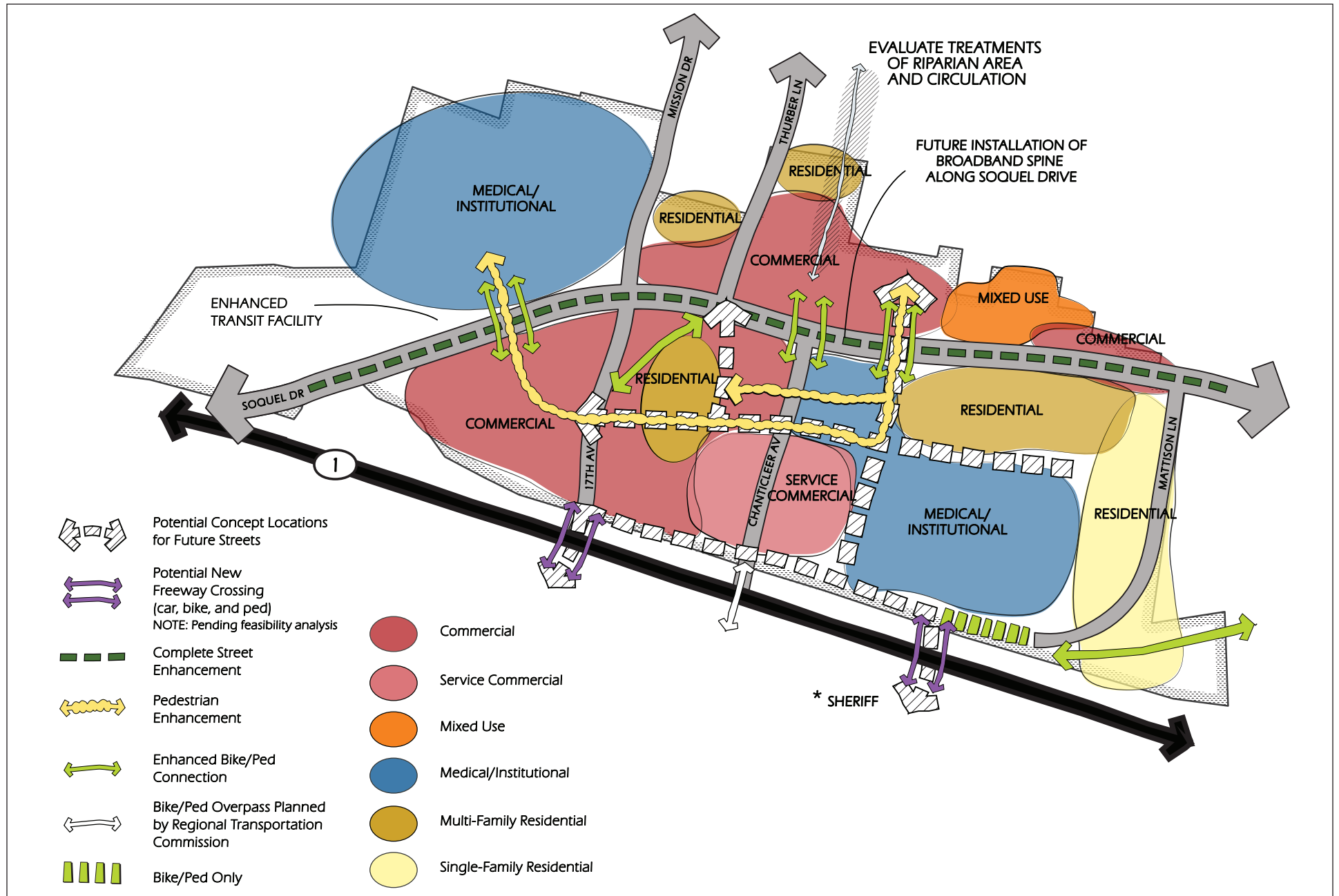
## FOCUS AREA 1: MEDICAL DISTRICT

Figure 7-2 presents a concept plan for the Medical District Focus Area (Focus Area 1). This concept envisions Soquel Drive as a mixed-use corridor anchored by Dominican Hospital and Sutter Medical Center. Commercial, office, and residential uses along Soquel Drive complement medical uses and increase opportunities for employees and visitors to walk to stores, restaurants, and services. Enhanced commercial uses south of Soquel Drive support a modern medical district and help connect the Sutter and Dominican campuses. New streets south of Soquel Drive improve access to properties, circulation within the focus area, and connections to the larger community. Bicycle and pedestrian enhancements improve access to destinations and activity centers within the focus area. Figures 7-3 and 7-4 show possible General Plan land use designations and specific transportation improvements for this area.

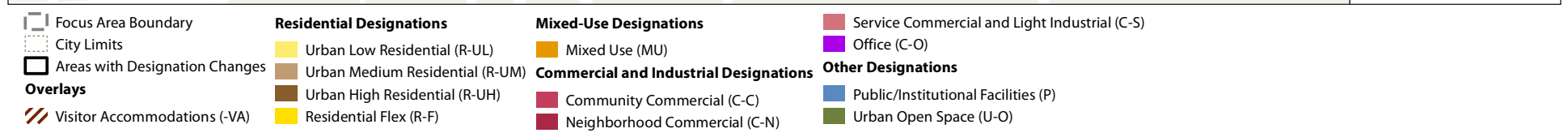
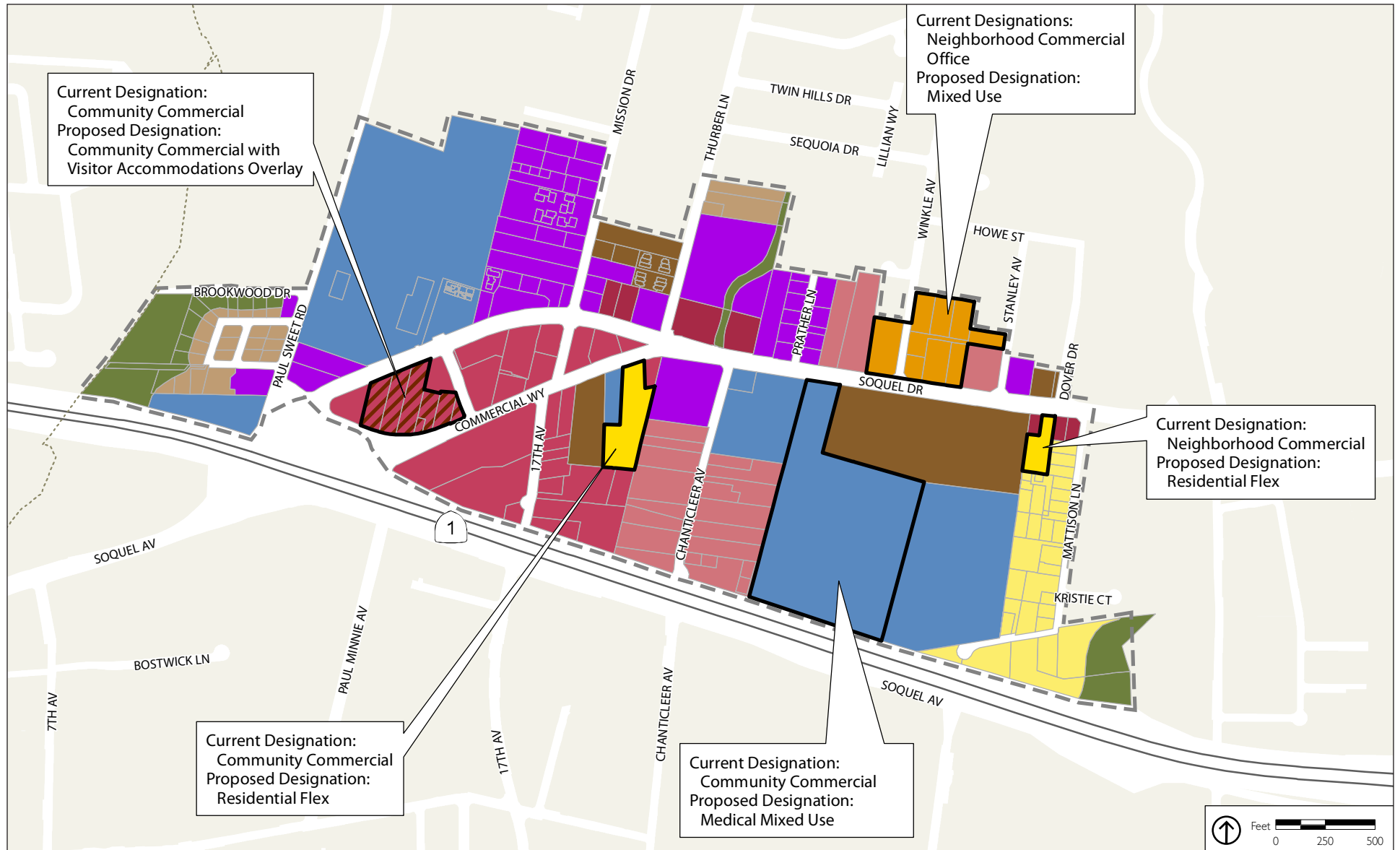


*Mixed-use development along Soquel Drive (top) complements new medical uses (bottom) to enhance a dynamic employment center*

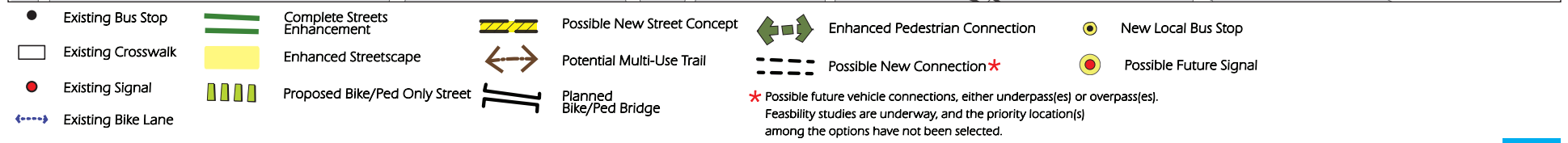
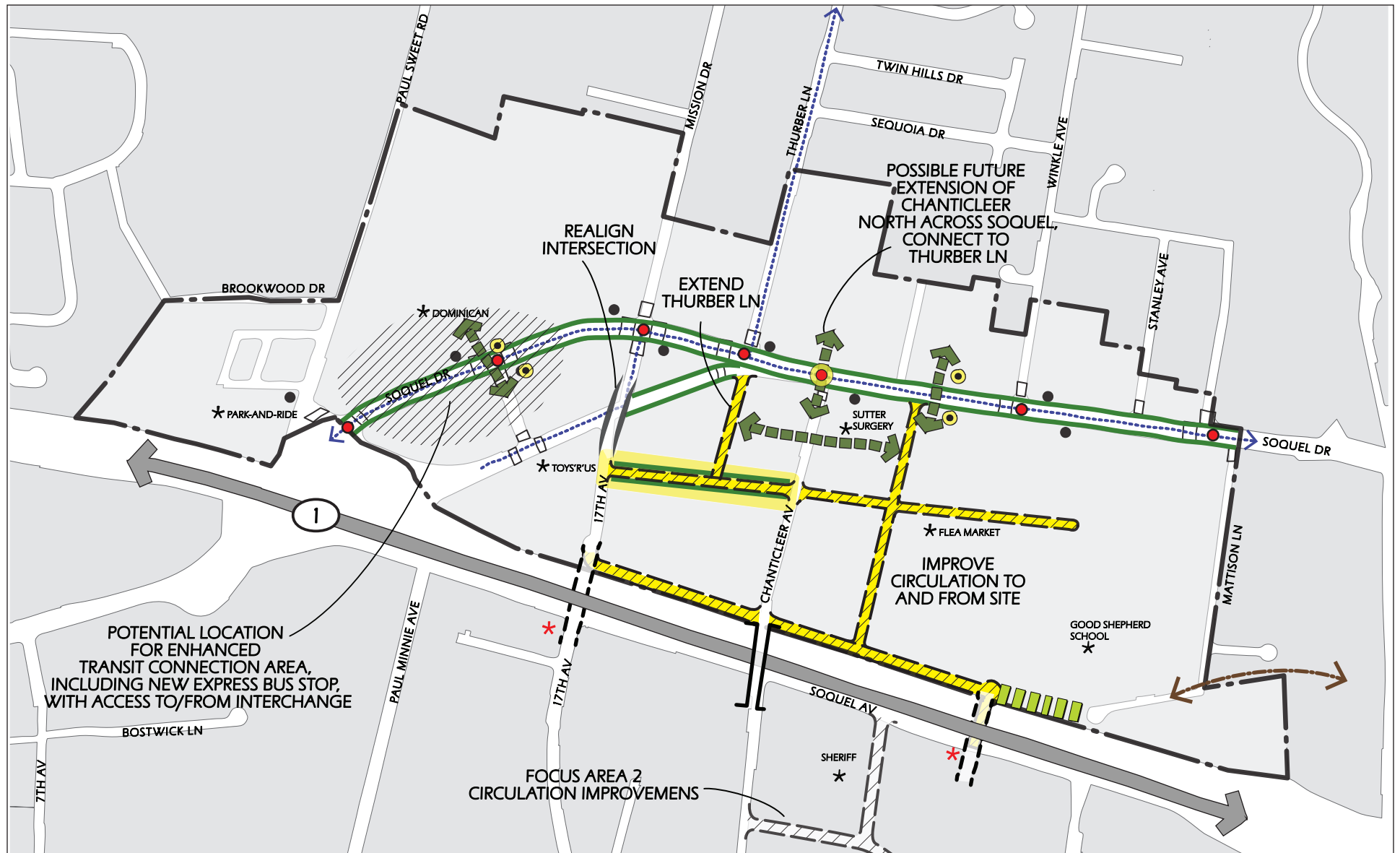
**FIGURE 7 - 2 MEDICAL DISTRICT CONCEPT DIAGRAM**



**FIGURE 7 - 3 MEDICAL DISTRICT/FLEA MARKET GENERAL PLAN LAND USE DESIGNATIONS**



**FIGURE 7 - 4 MEDICAL DISTRICT CIRCULATION IMPROVEMENT**



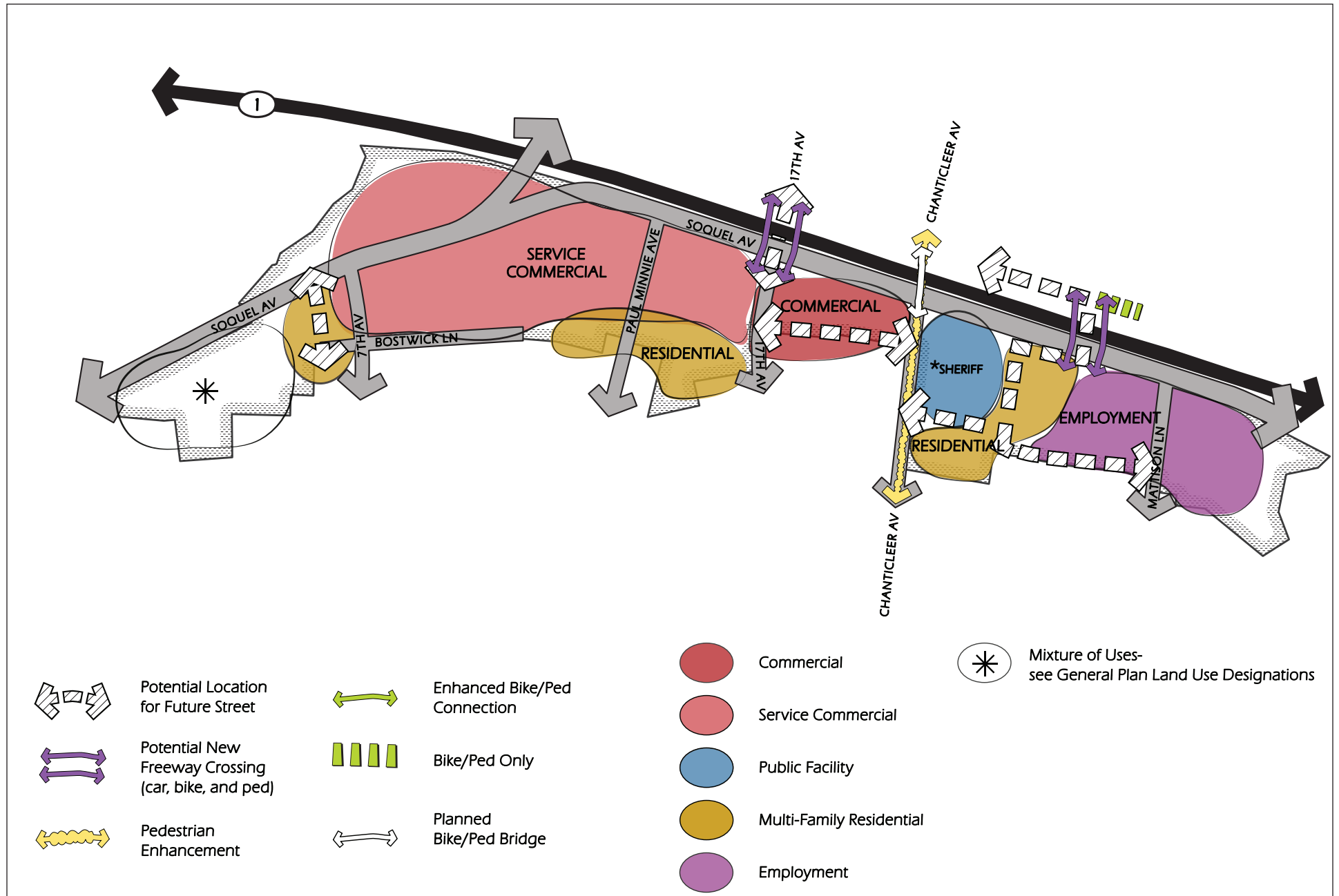
## FOCUS AREA 2: SOQUEL AVENUE

Figure 7-5 presents a concept plan for the Soquel Avenue Focus Area (Focus Area 2). In this concept, Soquel Avenue functions as a key location for service commercial uses to serve Santa Cruz County. Existing service commercial uses are maintained and enhanced, and vacant and underutilized properties accommodate new and expanded employment uses along Soquel Avenue. New multi-family residential uses buffer commercial uses from existing residential neighborhoods. New streets and connections across Highway 1 improve access to the area and to businesses along Soquel Avenue. Figures 7-6 and 7-7 show possible General Plan land use designations and specific transportation improvements for this area.

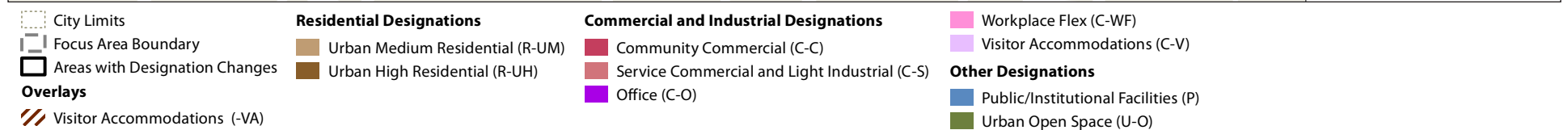
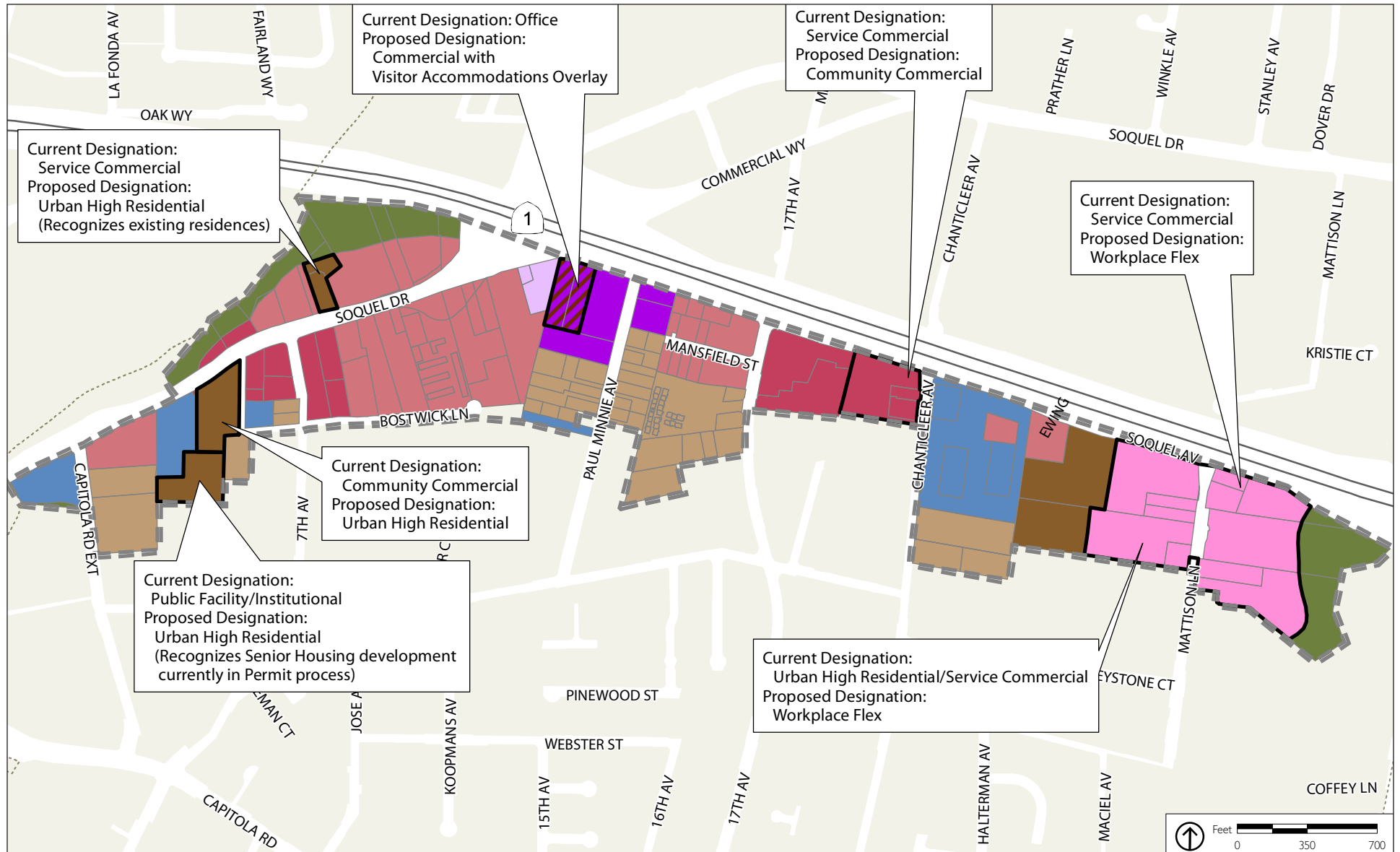


*New multi-family housing (top) buffers enhanced service commercial uses (bottom) from adjacent residential neighborhoods.*

FIGURE 7 - 5 SOQUEL AVENUE CONCEPT DIAGRAM

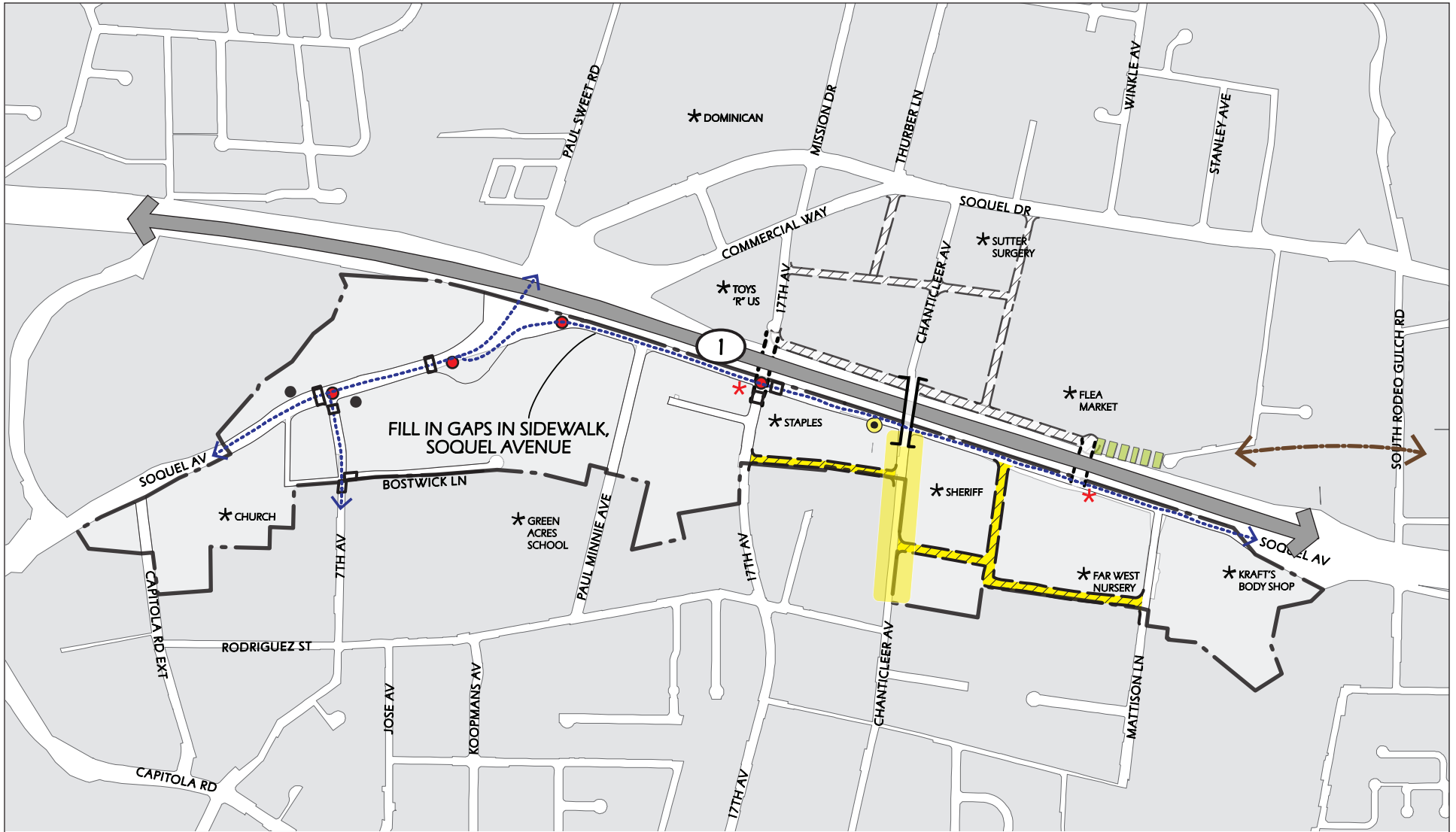


**FIGURE 7 - 6 SOQUEL AVENUE GENERAL PLAN LAND USE DESIGNATIONS**





**FIGURE 7 - 7 SOQUEL AVENUE CIRCULATION IMPROVEMENT**



- Existing Bus Stop
- ◄---► Existing Bike Lane
- New Local Bus Stop
- Possible New Connection
- ▭ Existing Crosswalk
- ▨ Possible New Street
- ▬ Proposed Bike/Ped Only Street
- ✳ Possible future vehicle connections, either underpass(es) or overpass(es). Feasibility studies are underway, and the priority location(s) among the options have not been selected.
- Existing Signal
- Enhanced Streetscape
- ↔ Potential Multi-Use Trail
- ▬ Planned Bike/Ped Bridge

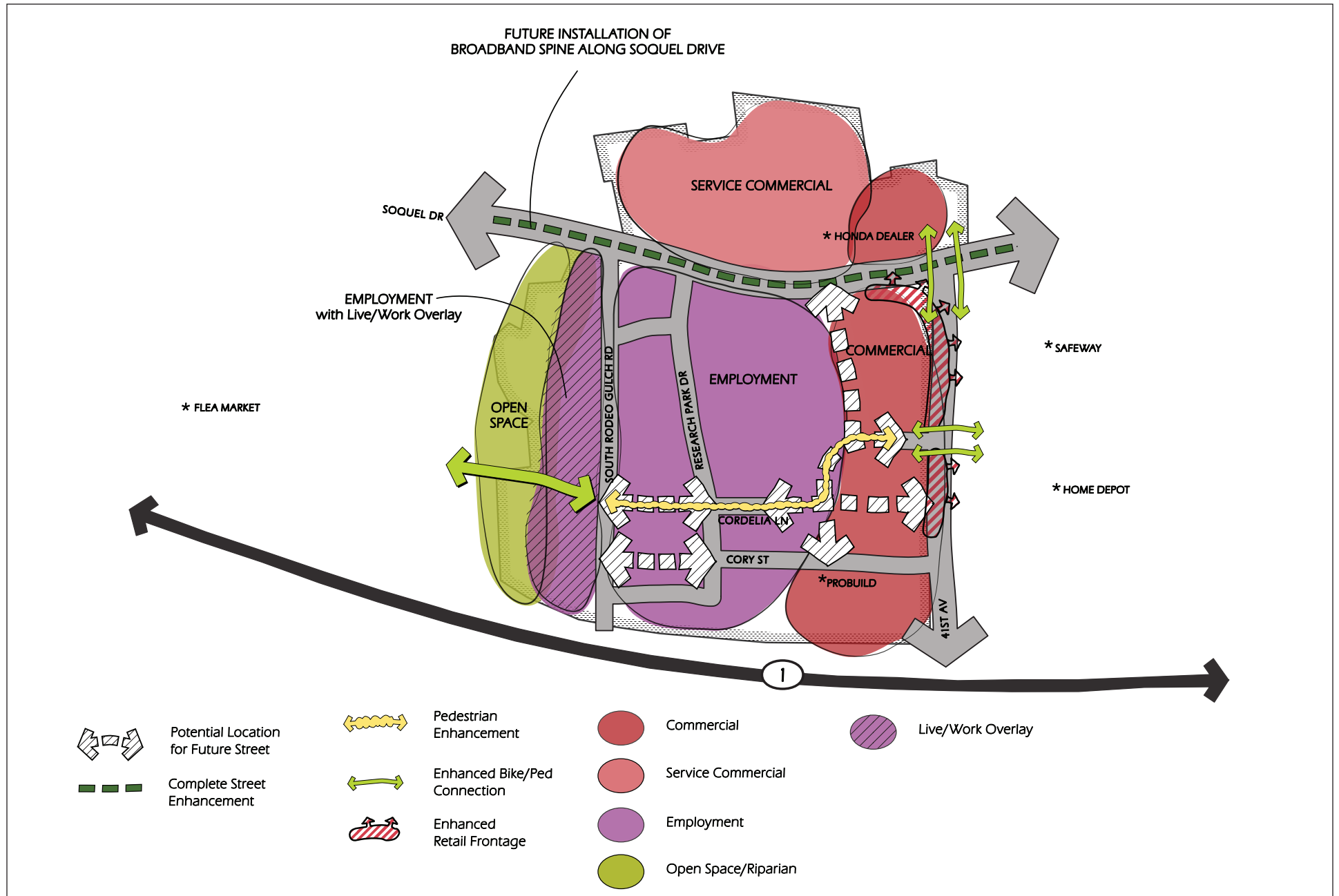
## FOCUS AREA 3: UPPER 41<sup>ST</sup> AVENUE

Figure 7-8 presents a concept plan for the Upper 41<sup>st</sup> Avenue Focus Area (Focus Area 3). This concept envisions upper 41<sup>st</sup> Avenue as a modern employment district with a variety of commercial, office, light industrial, and live/work uses. Retail uses that support a pedestrian-friendly environment front 41<sup>st</sup> Avenue. The interior of the focus area accommodates a diversity of uses, with well-designed buildings supporting a walkable and inviting urban environment. Some new streets improve access to properties, and establish a connected grid block pattern that supports human-scale development. This concept balances desires for revenue-generating commercial uses with employment and housing opportunities to serve county residents. Figures 7-9 and 7-10 show possible General Plan land use designations and specific transportation improvements for this area.

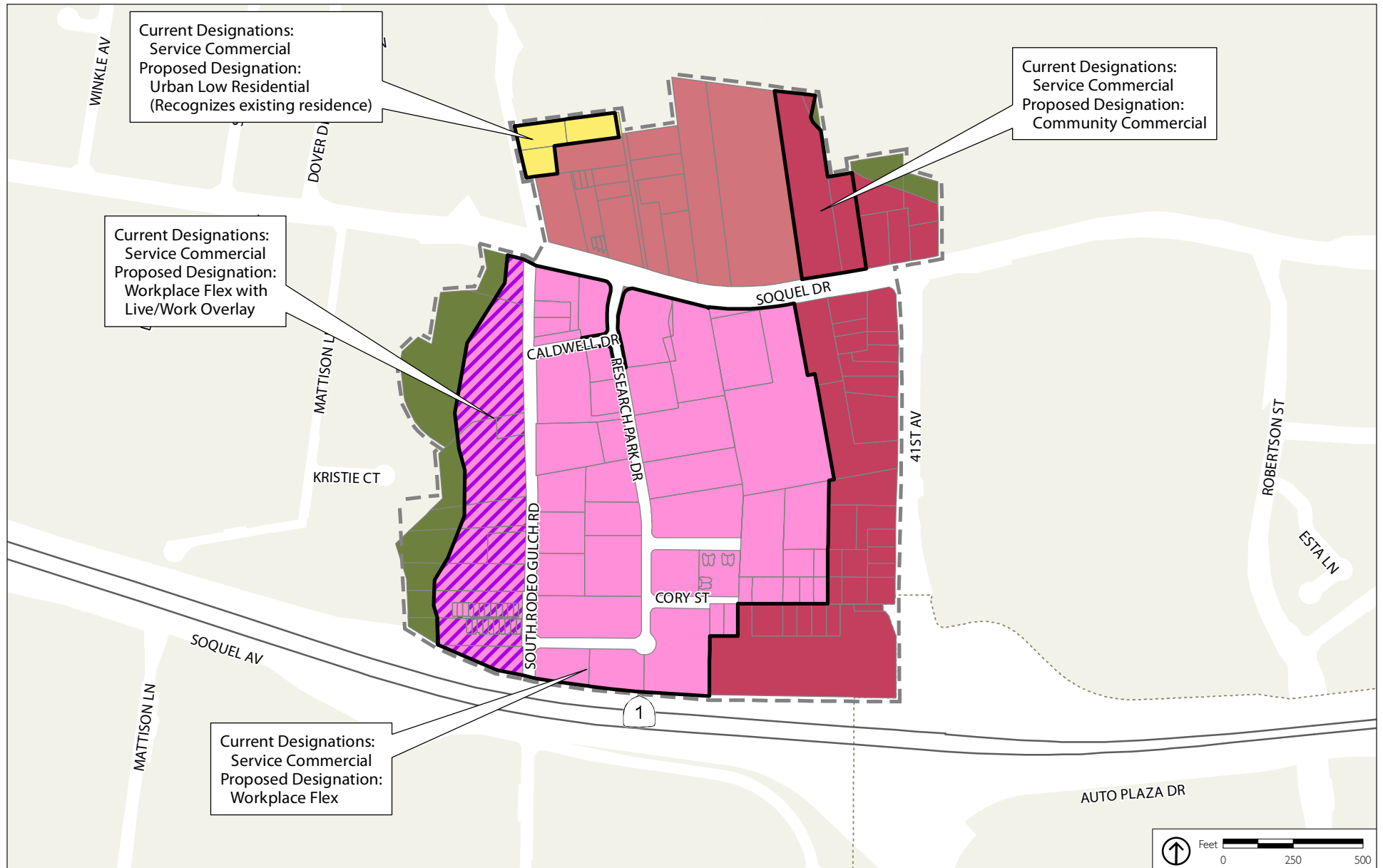


*Pedestrian-friendly retail fronting 41<sup>st</sup> Avenue (top) serves visitors and employee of new office park development (bottom)*

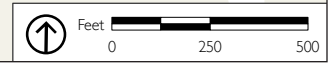
**FIGURE 7 - 8 UPPER 41ST AVENUE CONCEPT DIAGRAM**



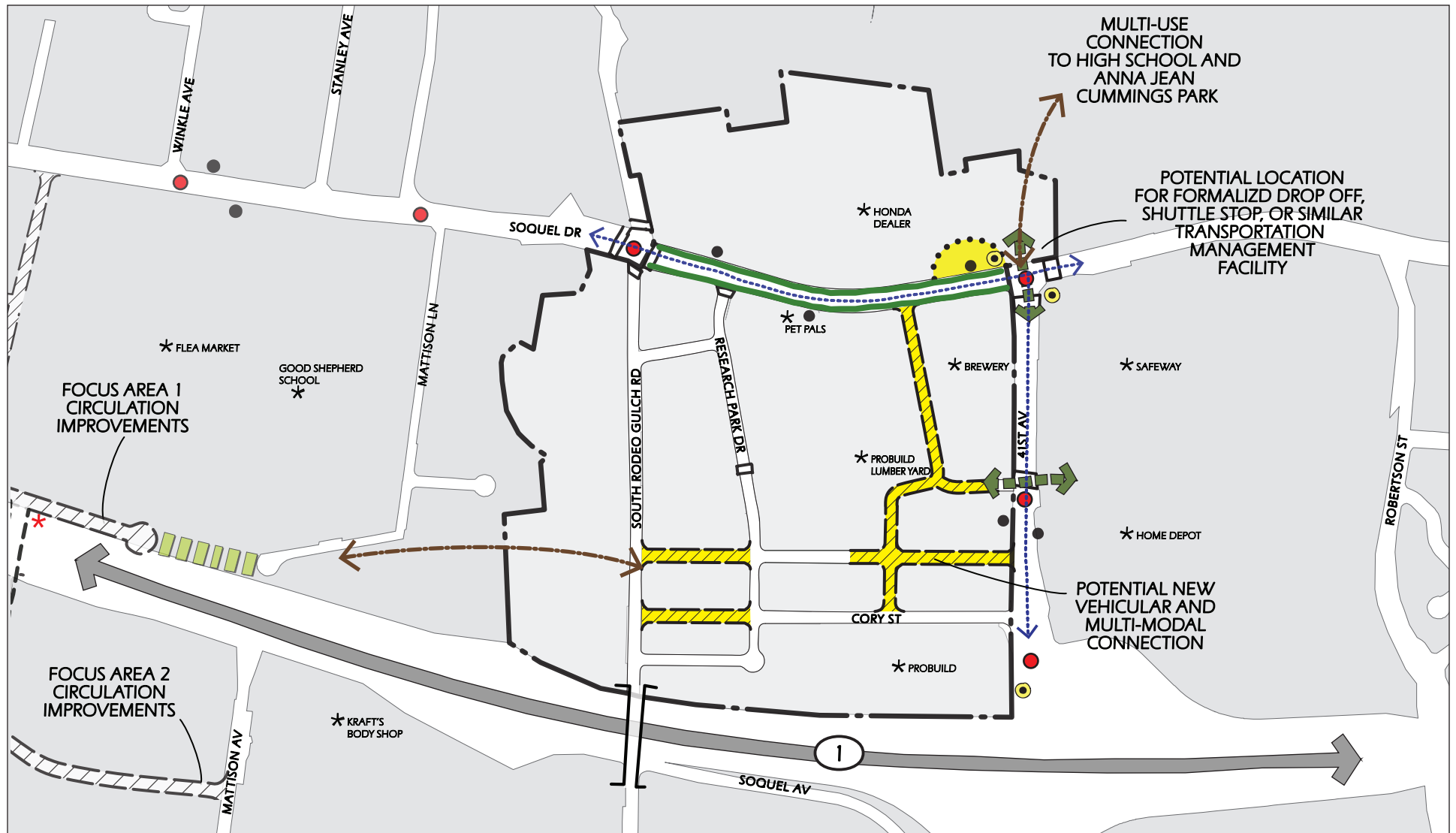
**FIGURE 7 - 9 UPPER 41ST AVENUE GENERAL PLAN LAND USE DESIGNATIONS**



- |   |   |   |   |
|---|---|---|---|
| <ul style="list-style-type: none"> <li> Focus Area Boundary</li> <li> Areas with Designation Changes</li> </ul> | <p><b>Residential Designations</b></p> <ul style="list-style-type: none"> <li> Urban Low Residential (R-UL)</li> </ul> <p><b>Commercial and Industrial Designations</b></p> <ul style="list-style-type: none"> <li> Community Commercial (C-C)</li> </ul> | <ul style="list-style-type: none"> <li> Service Commercial and Light Industrial (C-S)</li> <li> Workplace Flex (C-WF)</li> </ul> <p><b>Other Designations</b></p> <ul style="list-style-type: none"> <li> Urban Open Space (U-O)</li> </ul> | <p><b>Overlays</b></p> <ul style="list-style-type: none"> <li> Live/Work (-LW)</li> </ul> |
|---|---|---|---|



**FIGURE 7 - 10 UPPER 41ST AVENUE CIRCULATION IMPROVEMENT**



- Existing Bus Stop
- ◻ Existing Crosswalk
- Existing Signal
- ◄---► Existing Bike Lane
- |||| Proposed Bike/Ped Only Street
- ▨ Possible New Street
- ↔ Potential Multi-Use Connection
- ➡ Enhanced Pedestrian Connection
- ☀ Potential Bus Pullout
- ▬ Complete Streets Enhancement
- - - Possible New Connection\*
- ⊥ Potential Future Bicycle and Pedestrian Crossing, Feasibility Not Yet Studied
- \* Possible future vehicle connections, either underpass(es) or overpass(es). Feasibility studies are underway, and the priority location(s) among the options have not been selected.

## FOCUS AREA 4: 17<sup>TH</sup> AND BROMMER

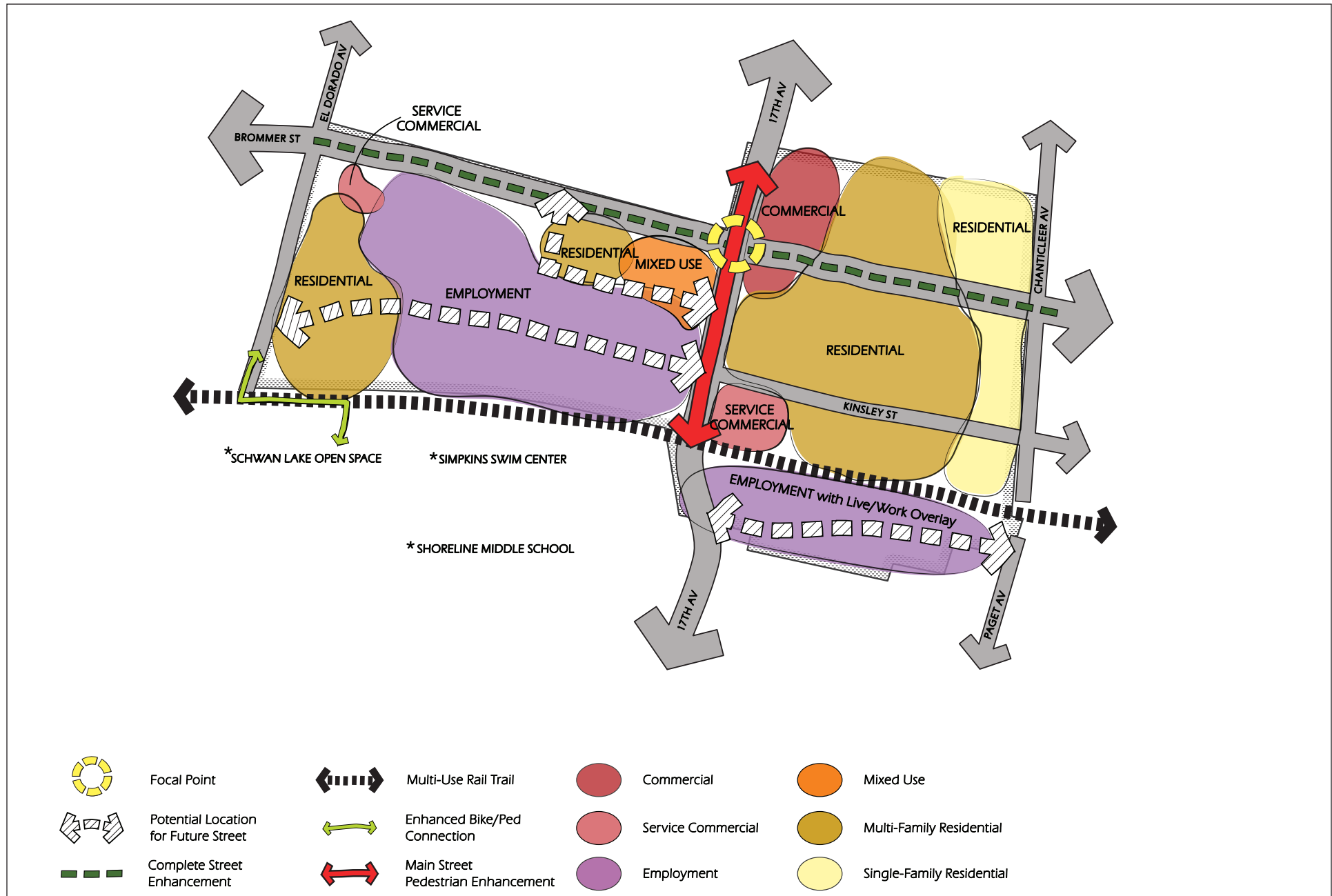
Figure 7-11 presents a concept plan for the 17<sup>th</sup> and Brommer Focus Area (Focus Area 4). This concept aims to create a complete neighborhood focused around a mixed-use activity center on 17<sup>th</sup> Avenue. New multi-family and single-family housing west of 17<sup>th</sup> Avenue provide additional housing choices and support local commercial uses. Existing service commercial uses are maintained, though new live/work housing is allowed along the rail line to support the emerging artist studio space in the area. New streets enhance connections for all modes of transportation and help to create a more human-scale block pattern for new residential development. Figures 7-12 and 7-13 show possible General Plan land use designations and specific transportation improvements for this area.



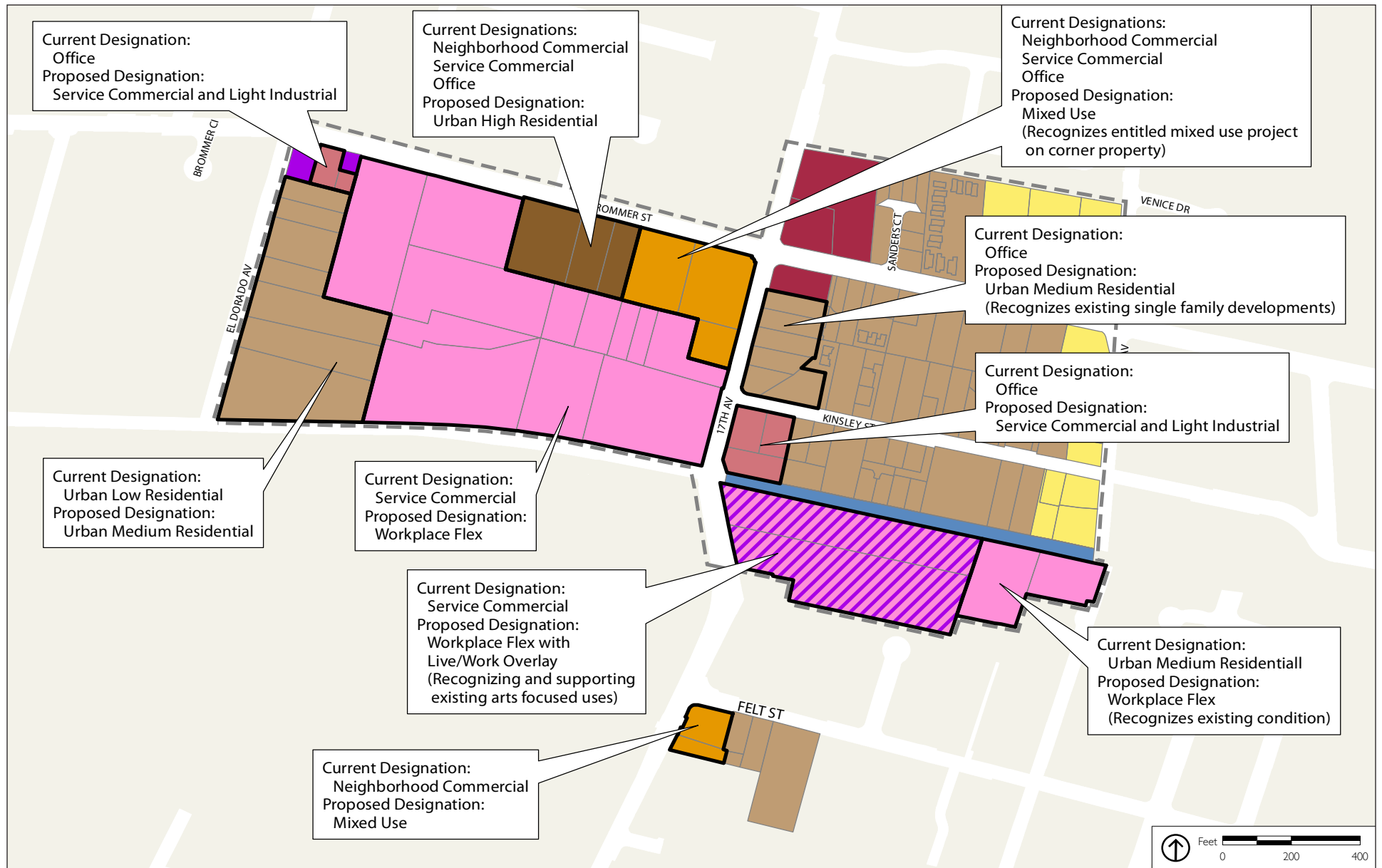
*A new mixed-use center at 17<sup>th</sup> and Brommer (top) is supported by new multi-family housing along Brommer Street and El Dorado Avenue (bottom)*

FIGURE 7 - 11

17TH AVENUE/BROMMER STREET CONCEPT DIAGRAM



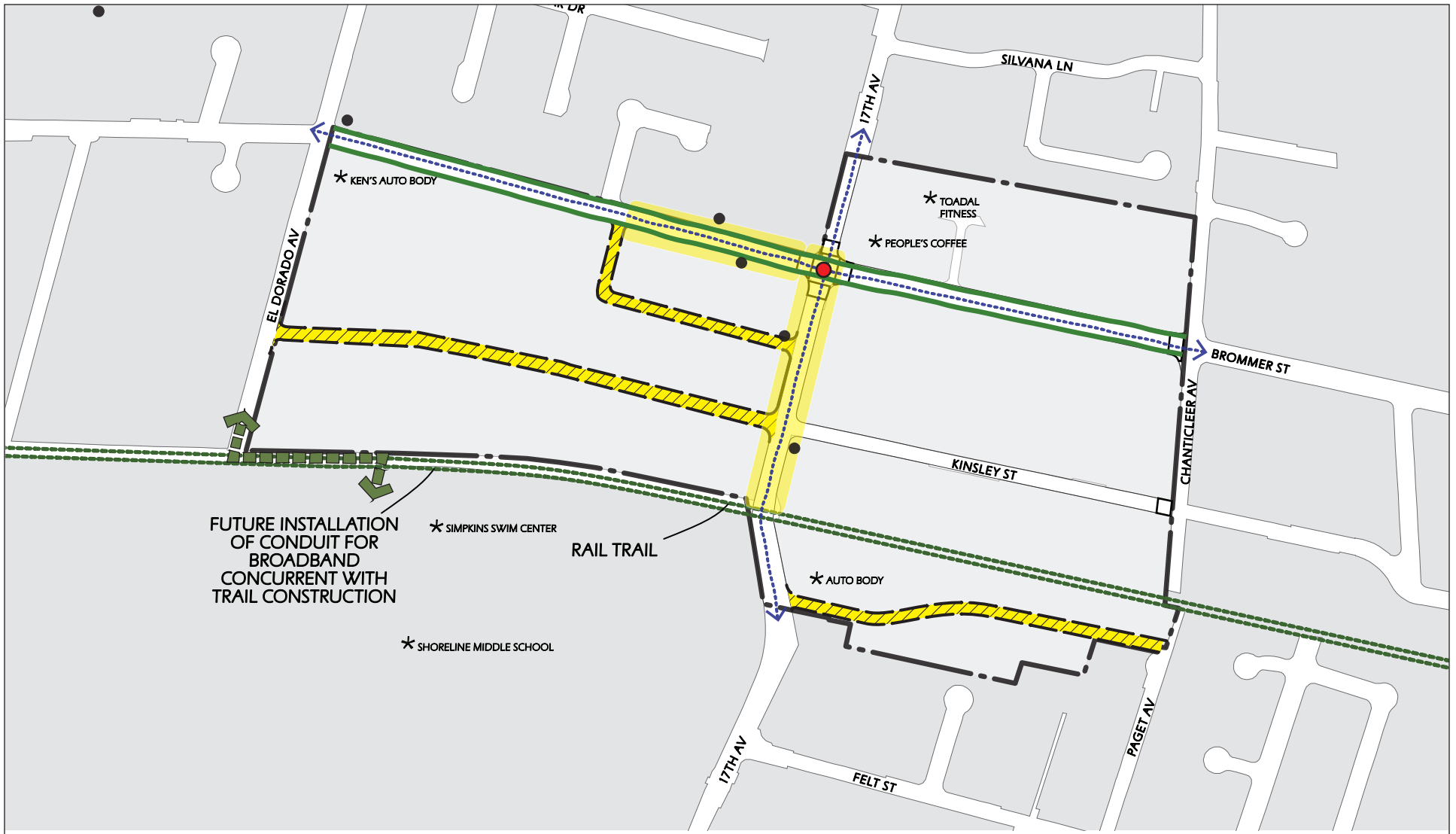
**FIGURE 7 - 12 17TH AVENUE/BROMMER STREET GENERAL PLAN LAND USE DESIGNATIONS**



<ul style="list-style-type: none"> <li> Focus Area Boundary</li> <li> Areas with Designation Changes</li> <li><b>Overlay</b></li> <li> Live/Work (-LW)</li> </ul>	<p><b>Residential Designations</b></p> <ul style="list-style-type: none"> <li> Urban Low Residential (R-UL)</li> <li> Urban Medium Residential (R-UM)</li> <li> Urban High Residential (R-UH)</li> </ul>	<p><b>Mixed-Use Designations</b></p> <ul style="list-style-type: none"> <li> Mixed Use (MU)</li> </ul> <p><b>Commercial and Industrial Designations</b></p> <ul style="list-style-type: none"> <li> Neighborhood Commercial (C-N)</li> </ul>	<ul style="list-style-type: none"> <li> Service Commercial and Light Industrial (C-S)</li> <li> Office (C-O)</li> <li> Workplace Flex (C-WF)</li> <li><b>Other Designations</b></li> <li> Public Facility (P)</li> </ul>
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**FIGURE 7 - 13 17TH AVENUE/BROMMER STREET CIRCULATION IMPROVEMENT**

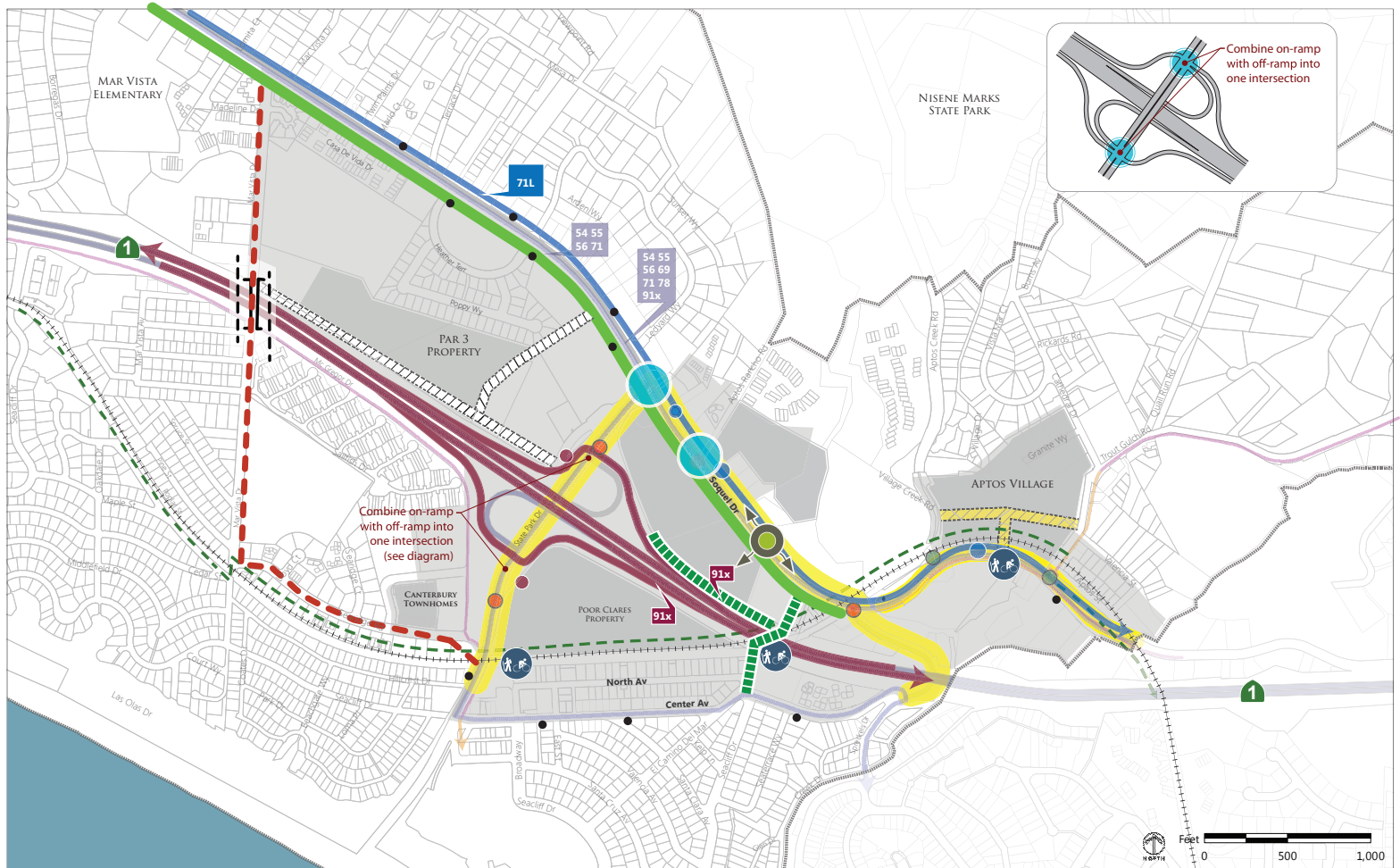


- Existing Bus Stop
- ◻ Existing Crosswalk
- Existing Signal
- ←---→ Existing Bike Lane
- ▨ Possible New Street
- ↔ Enhanced Pedestrian Connection
- Future Rail Trail
- Complete Streets Enhancement
- Enhanced Streetscape

## FOCUS AREA 5: APTOS/STATE PARK CIRCULATION PLAN AREA

Figure 7-14 presents a concept plan for Aptos/State Park Circulation Plan Area (Focus Area 5). This concept aims to provide a safer and more pleasant environment for pedestrians and bicyclists through physical intersection improvements, enhanced bicycle lanes/cycle tracks, new pedestrian/bicycle connections, express bus stops, interchange modifications, and new street connections. The Circulation Focus Area (see Figure 7-1) includes the Aptos Village, Rancho Del Mar shopping center, and a portion of Seacliff. The surrounding area is mainly residential uses with local commercial uses in Aptos Village, which also serves as the gateway to the Nisene Marks State Park. The creation of new street connections with signalized intersections and reconfigured street geometry on specific streets are some of the physical street improvements included in Figure 7-14. Sample photos of each physical improvement are shown in Figure 7-15.

Figure 7-14 Aptos/State Park Circulation Plan Area



**Concept:**  
Provide a safer and more pleasant walking and bicycling environment through intersection improvements, transportation facilities upgrades, and new street connections.

- LEGEND**
- Aptos Circulation Focus Area
  - Plan Area
- Existing and Planned Facilities**
- Railroad
  - Street (Aptos Village Plan)
  - Bus Route
  - Bus Stop
  - Bicycle Lane
  - Bicycle Route
  - Existing Signal
  - Planned Signal
  - Future Rail Trail
- Recommended Improvements**
- Rail Trail Connection
  - Multimodal Intersection Improvements
  - Complete Street Improvements (Photos #6-8)
  - Bicycle & Pedestrian Trail Connection (Photos #4a & 4b)
  - Planned Bike/Ped Crossing (Photo #10)
  - Possible New Connection
  - New Bus Stop (New Route - 91 Express) (Photo #5)
  - Improved Bus Stop (New Route - 71 Limited) (Photo #5)
  - Proposed Bicycle Facility (Photo #1)
  - Proposed Cycle Track (Photo #2 & 3)
  - Roundabout or Traffic Circle (Photo #11)

Note: Photographs and concept maps are for discussion and illustration purposes only. Concepts reflect ideas for transportation improvements and are not site specific, and have not been engineered, designed, or formally analyzed for feasibility.

Figure 7-15 Recommended Bicycle and Pedestrian Improvements

1. Bike Route with sharrows



4a. Shared pedestrian/bike path



6. Sidewalk with landscaping



9. HWY1 / Rio Del Mar Diamond Interchange



2. Green striping on a Bike Lane



4b. Shared pedestrian/bike path



7. Brick crosswalk



10. Bike/Ped Bridge



3. A buffered Cycle Track



5. Enhanced bus stop



8. Sidewalk furniture and landscaping



11. Roundabout



# Next Steps 8



As described in the Plan Overview, the Sustainable Santa Cruz County Plan is a planning study that suggests a vision, guiding principles, and strategies that over time could lead to a more sustainable development pattern in Santa Cruz County. Completion of the Plan is an important first step. Many other steps will need to be taken by the County in the future in order to identify whether and how to move forward with the suggestions in this Plan. Each of the earlier chapters of this Plan have presented many suggestions for actions the County could consider to better support a sustainable future for Santa Cruz. As a first “next step,” the County will need to select which of the ideas to pursue, analyze these approaches, and carry out environmental review before any of the ideas could be adopted as new General Plan policies or County Code amendments.

It is anticipated that the County will develop a proposed set of General Plan Sustainability Updates involving the Land Use, Circulation, and Community Design Elements of the General Plan, along with implementing code amendments. Identification of which ideas to pursue is expected to occur during Summer 2015, and then work on the details of the proposed regulations would commence. Once adopted after CEQA review, which could occur by Fall/Winter 2016, the County regulatory framework would support implementation of this Plan’s vision by the County, property owners, and agencies involved with land use, transportation, and public infrastructure. Continued coordination with other governmental agencies, such as the Santa Cruz Regional Transportation Commission (SCCRTC) and Santa Cruz Metro, as well as water and sanitation districts, will be needed.

In many ways the policies and regulations in the County’s existing General Plan and County Code support the broad vision of this Sustainable Santa Cruz County Plan. In some ways, however, certain policies and standards of the existing

regulatory framework do not support the overall vision. Other chapters of this Plan have discussed suggested changes. In this chapter, there is a focus on identifying possible new planning policies and “tools” that the County could incorporate into its General Plan and County Code to support the sustainable land use, transportation, and urban design goals described in this Plan.

## GENERAL PLAN SUSTAINABILITY AMENDMENTS

The County’s General Plan and County Code designate the types of land uses that are allowed on properties located in the unincorporated area. The General Plan and County Code land use designations identify permitted land uses and maximum permitted development intensity. Intensity is typically expressed as dwelling units per acre for residential uses, but sometimes also by floor area ratio (FAR). FAR is an expression of the percent of lot area that is allowed to be developed in terms of square footage on the parcel. For example, a 5,000-square-foot lot with an FAR of 0.5 (50% of lot size) allows a maximum of 2,500 square feet of structure on the lot, while a FAR of 1.5 (150% of lot size) would allow up to 7,500 square feet on the lot, allocated among the number of stories allowed by the zoning district. For example, under an allowed FAR of 1.5 on a 5,000-square-foot lot, in a zoning district that allows three-story development, a three-story building could be arranged with 3,200 square feet per floor on the first and second stories, and up to 1,100 square feet on the third story. The third story would be smaller, and feature greater setbacks designed into the massing of the structure.

FAR standards can also be used for non-residential development. Development standards such as maximum height, minimum setbacks, and parking requirements also

affect how much square footage may be developed on a piece of property.

The process of preparing the Sustainable Santa Cruz County Plan revealed that the County does not currently include in its General Plan or County Code all of the land use designations or regulatory approaches that would be needed to implement the vision of this Plan. In particular, the County lacks regulatory approaches for modern forms of mixed-use development. Currently, residential uses are allowed in commercial areas provided that the residential component of a mixed-use project is less than 50 percent of the total project square footage. This requirement prevents most forms of mixed-use development, which requires a greater proportion of residential development in order to be financeable and economically viable.

The County also lacks a residential zoning designation that would incentivize creation of smaller units in appropriate areas, which is a needed housing type that is generally more “affordable by design.” A new approach based on a maximum square footage (FAR) on a site, rather than a maximum number of dwelling units, should be considered. Such developments would still need to meet applicable parking standards, setbacks and other regulations, but would be able to divide the allowed square footage of development into the number and type of dwelling units that respond to market demand and can be accommodated on the site and still meet those other development standards.

### **New Land Use Policies and Regulatory Tools**

The following policies and regulatory tools to accommodate the types of development envisioned by this Plan should be included in the County General Plan/Local Coastal Program (GP/LCP):

#### *Mixed-Use Development Policies and Regulatory Framework*

Mixed-Use development can support an efficient use of land resources, promote transportation choices, and provide for a greater range of housing choices. Policies supportive of Mixed-Use developments in appropriate locations and zoning districts should be included in the GP/LCP, in order to allow for residential and commercial development as part of a single development project. Uses could be combined within a single structure, “vertical mixed-use,” or on a single property in separate structures, “horizontal mixed-use.” The County should allow a higher proportion of a mixed-use development project to be residential in order to ensure the feasibility of such projects.

However, it will be important to ensure that commercial lands and uses needed to serve the community are not inappropriately converted to mostly residential use. Therefore, the County will need to develop criteria for how much residential space to allow, for whether and how to allow rezoning of non-residential land to residential or mixed-use designations, and to ensure that areas appropriate and needed for ground floor commercial use continue to serve that purpose while also accommodating office and residential development as appropriate on upper floors. To better support a neutral or positive fiscal impact, three stories of residential space and/or office space above ground-floor commercial should be considered for appropriate areas, limited to key travel corridors or activity nodes. Policies, standards, and design guidelines to ensure appropriate massing, setbacks, buffering, and transitions between taller developments and nearby neighborhoods and single-family residential areas will need to be included within any proposed regulatory approach.



As described in Chapter 3, policies encouraging mixed-use development could be created to encourage and guide private redevelopment or renovation of existing shopping centers such as East Cliff Village, to address underutilized sites located along transit corridors where new mixed-use activity nodes could be created, and to identify appropriate possible improvements within existing historic village centers to encourage revitalization of these areas. Chapter 7 recommends some specific sites where mixed-use projects could be encouraged within the Focus Areas, such as on Soquel Drive near the Dominican campus (Focus Area 1) and on the corner of 17<sup>th</sup> and Brommer (Focus Area 4). Within the Medical Focus Area, a new “Medical Mixed-Use” designation should be considered, as described below.

#### *Medical Mixed-Use Designation*

The Medical Mixed-Use designation would include a range of allowable uses including hospitals, medical clinics, laboratories, medical offices, and other medical-related or support services. It would allow four-story buildings of up to 60 feet subject to design review to ensure appropriate massing. It would be applied to the 14.5-acre former Skyview Drive-In/Flea Market parcel that will be the future Sutter/PAMF campus, to the Dignity Health/Dominican Hospital campus, and possibly other key medical use sites within the area.

#### *Residential Flex Designation*

The “Residential Flex” designation is envisioned as a land use designation that would allow greater density than currently allowed by the Santa Cruz County General Plan/Local Coastal Program, although predominately within the current maximum three-story height and minimum setback regulations of the existing County Code. A Residential Flex

designation could allow multi-family housing with the number of units governed by development standards such as maximum height, FAR, setbacks, and parking requirements rather than by a set maximum number of units per acre. The Residential Flex designation would promote more affordable housing choices by encouraging the construction of smaller units within a given size structure and other sustainability goals by encouraging infill development. Parking requirements, maximum height, and setback requirements would continue to restrict the size, bulk, and massing of structures. Additional building height could be considered where there is a Height Overlay zoning on a parcel. Placing a height overlay zoning on a parcel is a Board of Supervisor’s level decision. See also Height Overlay section, page 8-5.

The Residential Flex designation could be applied where multi-family housing with higher density and smaller units are desired, in particular to meet the housing needs of “singles, seniors, and students.” As discussed in Chapter 4, this includes areas that are close to major employment centers, near Cabrillo College, or that have access to transit that serve these areas. Chapter 7 identifies a property on Commercial Way in Focus Area 1 as a possible location for the Residential Flex designation.

The Residential Flex designation could also be applied in areas close to neighborhood-serving stores and services outside of existing single-family residential neighborhoods. Possible areas for the Residential Flex designation include vacant and underutilized parcels along the Soquel Drive transit corridor (such as the Attilia’s Antiques site), and certain sites in Aptos.

### *Workplace Flex Designation*

The “Workplace Flex” designation would allow a range of modern employment uses, including offices, research and development, and high tech uses; in a manner that also allows for employee-serving uses such as coffee shops and cafes, delis and restaurants, FedEx/UPS Store businesses, and other similar small commercial service uses. This designation would provide flexibility within employment areas and non-residential buildings to accommodate changes in the economy, growth of local businesses, and demand for a flexible range of commercial, office and light industrial uses in locations that also offer nearby opportunities for employees and businesses to walk or bike to lunch or access other business services needed during the workday.

The Workplace Flex designation could be applied in locations where the County wishes to encourage new employment uses and the creation of high paying jobs. This includes areas along Soquel Avenue south of Highway 1, the Research Business Park at Soquel Drive along South Rodeo Gulch and Research Park Drive, and existing heavier commercial areas in Live Oak such as near the intersection of 17<sup>th</sup> Avenue and Brommer Street along the rail corridor. Chapter 7 identifies several specific sites where the Workplace Flex designation could be applied within Focus Areas.

### *Master Plan/Specific Plan Approaches*

In certain areas, a Master Plan/Specific Plan approach should be pursued, ideally through a public-private planning approach. One key area that would benefit from such an approach is the Medical Focus Area, which contains several large opportunity sites that are ripe for change. This area includes the Sutter/PAMF former drive-in site, the Dignity Health/Dominican Hospital/medical office buildings area, the

Rittenhouse site at Soquel Drive and Thurber Lane, the Bei parcels, and other nearby underutilized lands. A Master or Specific Plan for this area would greatly assist with planning for transportation access to the development that is expected to occur in this area, particularly for the future Sutter/PAMF campus and the Rittenhouse property, but also considering trips between Dominican Hospital and the surrounding medical uses. Such a plan could also address longstanding parking difficulties in the area.

It is expected that Caltrans will at some point in the future close off the Commercial Way connection to the Soquel Drive freeway off-ramp, which does not meet current Caltrans safety standards, which could lead to County/Caltrans abandonment of Commercial Way land area between the off-ramp and Commercial Crossing. In that case, that area could be consolidated with adjacent private properties in a manner that would increase re-use options on certain underutilized properties. The County should work with adjacent property owners to discuss the possibility of this future Caltrans action. As discussed below, additional height on certain sites that could be designated “Medical Mixed-Use” in the Medical District would be appropriate in order to facilitate appropriate public transportation access and desirable land uses within this Medical District area (also see *Visitor Accommodation Overlay* discussion below).

### **New Zoning Overlays**

The suggested new Zoning Overlay Districts described below are examples of incentive zoning. The first four (Live/Work, Visitor Accommodation, Arts, and Neighborhood Commercial) would not mandate these uses, but would be applied to convey what is desired on identified properties, and what the County’s General Plan policies, designations and regulatory framework would allow through flexible

incentive zoning approaches. The goal would be to foster greater land use diversity and public infrastructure and amenities. The County could designate and rezone a limited number of select sites with the overlays in order to lay the groundwork. Following that action, property owners could submit applications to be rezoned with the overlays on a case-by-case basis.

#### *Live/Work Overlay*

The Live/Work overlay would allow residential and commercial or light industrial uses to occupy a single space. The live/work overlay could be used to accommodate shared artist residences and studio space in areas such as near 17<sup>th</sup> and Brommer in Focus Area 4, or within employment centers such as the Research Business Park in Focus Area 2 where start-up businesses may desire a live/work arrangement.

#### *Visitor Accommodation Overlay*

The Visitor Accommodation overlay could be applied to commercially zoned sites to identify areas where new hotels, motels, and other visitor uses are desired. The Visitor Accommodation overlay could offer development incentives such as additional height for desired hotel uses. For additional height to be considered the parcel would also have to carry a Height Overlay zoning. See also Height Overlay section, page 8-5. Chapter 7 suggests applying a Visitor Accommodation Overlay to the area bounded by Commercial Way, Soquel Drive, and the Highway 1 interchange to encourage the establishment of a new hotel to serve Dominican Hospital, Sutter/PAMF medical campus, and other medical uses in Focus Area 1, as well as to serve other travelers who would be able to see a hotel from Highway 1.

#### *Arts Overlay*

The Arts overlay could be applied to sites to identify where artists' studios, gallery spaces, residences for artists, and other arts-related uses are desired. This overlay could be structured to provide incentives for such uses, and applied in locations that currently do not have a residential character but are attractive for artists and arts related uses. The site bounded by 17<sup>th</sup> Avenue and the rail line in Focus Area 4 is one possible location for the Arts Overlay.

#### *Neighborhood Commercial Overlay*

The Neighborhood Commercial overlay could be added to the County Code to provide a way for property owners to propose rezoning their sites so that neighborhood-scale and neighborhood-serving commercial uses could locate at appropriate neighborhood locations, such as at street intersections. Examples include small markets, small fitness studios, and small co-working spaces that users could walk or ride a bicycle to. This type of overlay would need to be carefully crafted to ensure that the types and scale of uses are appropriate to a neighborhood and do not create impacts. The intent would be to offer convenient locations for residents to be able to walk or bike to corner grocery stores or other sites for quick trips without driving.

#### *Height Overlay*

The Height overlay would allow increased building height in select locations where the increased building height would allow for better use of land resources in a manner that also provides some type of public benefit, such as a new public road, new public plaza or other public amenity. For example, larger sites along and near the Soquel Drive and Soquel Avenue corridors, such as the Kraft Auto Body Repair site or other freeway frontage parcels, may be appropriate to be rezoned with the height overlay in order to allow for high

quality development projects consistent with the goals in this Plan, and appropriately buffered, screened, and setback from existing structures to ensure minimal impact to surrounding neighborhoods..

The Height Overlay would be subject to approval by the Board of Supervisors through a rezoning process, and likely only be approved for areas where increased building height would not negatively impact adjacent residential properties. Increased height allowed by this overlay would be subject to identified criteria and findings, including some type of public benefit. Examples of possible locations include properties within the Research Business Park at Soquel Drive and 41<sup>st</sup> Avenue, and large properties along or near the Soquel Avenue frontage road. Such an incentive zoning strategy may make it more feasible to construct the road infrastructure “retrofitted” that are highly desired by the public in order to improve connectivity and travel choices, and reduce congestion.

Height that is increased from the current maximums in the County Code could also be considered through other regulatory approaches, such as through new General Plan/zoning designations, Master Plans or Specific Plans, or Planned Unit Developments. Each of these approaches would require approval by the Board of Supervisors. The suggested new Medical Mixed-Use designation would allow four stories by right (up to 60 feet, with appropriate massing) on the Sutter/PAMF campus and the Dignity Health/Dominican Hospital campus.

It should be pointed out that most future development in the unincorporated area is expected to occur as one-, two-, or possible three-story developments. Four-story development is not a development type that is anticipated to be requested, needed or appropriate in the vast majority of situations.

However, from time-to-time a four-story development may allow for desired uses or desired arrangements of uses. For example, allowing a four-story hotel at an appropriate location with an appropriate design may allow less coverage of land in a manner that allows for public plazas or more open space, while generating Transient Occupancy Taxes (TOT) that support public sector fiscal health and the ability to provide desirable public services. Allowing a four-story medical building may serve its users more compassionately, allowing for more direct access via elevators rather than longer hallway journeys to doctors’ offices or laboratory services. This is becoming a more relevant consideration as ADA requirements and an aging population bring these issues to light.

#### *Agricultural Support Overlay*

The Agricultural Support Overlay would allow uses such as tractor, truck and heavy equipment storage, tree removal and landscaping businesses, and agricultural support or technology buildings to be located on Agricultural or Commercial Agricultural lands within a certain distance of designated arterial roads serving agricultural areas. For example, perhaps the first 200 feet of land along arterial roads could be eligible for the agricultural support overlay zoning. Greater extents of coverage could require the applicant to submit a master plan that would demonstrate need and no net impact on prime agricultural lands.

The idea behind this suggestion is to create a mechanism for farmers and agricultural/landscaping support businesses to efficiently manage storage and land-intensive activities, as well as other agricultural support uses that require that land be covered, in areas that are close to key roadways yet out of areas that are served by urban infrastructure. Areas with urban infrastructure such as water and sewer lines, sidewalks

and transit service, would be prioritized for more intensive urban housing or employment uses, rather than uses that do not particularly rely on such urban infrastructure. Uses that take a lot of land, have few employees, and do not require urban services would be located out of urban areas, such as along selected arterial roads in agricultural and rural areas.

Figures 8-1 and 8-2 illustrate the type of development envisioned by many of these new designations and overlays.

FIGURE 8 - 1 RECOMMENDED NEW GENERAL PLAN POLICIES/ZONING APPROACHES (1 OF 3)

# C-WF

## Workplace Flex

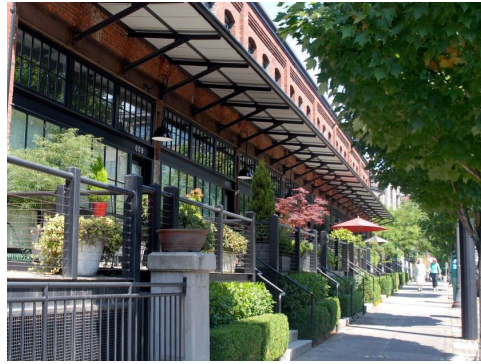
### Purpose:

To allow for dynamic employment districts to serve existing, growing, and new businesses. Allow for a mixture of office, commercial, and research-oriented uses; provide flexibility for existing businesses.

### Type of Development:

Office, commercial services, research and development, limited retail and personal services, food establishments, and public/quasi-public facilities.

### EXAMPLES:



Commercial in Portland, OR



Sash Mill in Santa Cruz



Live Oak Business Park



Office in Livermore

FIGURE 8 -1 RECOMMENDED NEW GENERAL PLAN POLICIES/ZONING APPROACHES\* (2 OF 3)

# MU

## Mixed Use

### Purpose:

To create lively and welcoming places that increase housing, employment and transportation choices; and support economic growth consistent with the County's sustainability goals. The designation will be implemented by flexible zoning that allows residential development at various intensities.

### Type of Development:

Retail, restaurants, personal services, professional offices, medical offices and clinics, public and quasi-public uses, multi-family residential, townhomes, vertical and horizontal mixed use, live/work units, and apartments for families, seniors, students, and singles. Typical arrangements include ground-floor commercial with residences above, or separate commercial and residential buildings on one property.

### EXAMPLES:



Mixed Use in Santa Cruz



Mixed Use in Santa Cruz



Mixed Use in Santa Cruz



Mixed Use in Santa Cruz

\*Including a "medical mixed use" designation

FIGURE 8 - 1 RECOMMENDED NEW GENERAL PLAN POLICIES/ZONING APPROACHES (3 OF 3)

# R-F

## Residential-Flexible

### Purpose:

To accommodate greater intensity of residences using a flexible approach along and near transit corridors, to create opportunities for infill in areas with good transit and in proximity to nodes along corridors, and to provide a more complete range of housing choices for local workforce and all income levels.

### Type of Development:

Residential development including townhouses, smaller units for seniors, students and singles, and apartments.

### EXAMPLES:



Multi-family homes in Pasadena



Multi-family homes in Chico



Multi-family homes in Richmond



Apartments in Santa Cruz



FIGURE 8 - 2 RECOMMENDED NEW ZONING OVERLAYS (1 OF 3)

# -VA Visitor Accommodations Overlay

**Purpose:**

Encourage the establishment of visitor accommodations to enhance the economic vitality of commercial and employment districts.

**Permitted Uses:**

Hotels, motels, bed and breakfasts, and other similar visitor accommodation establishments.



FIGURE 8 - 2 RECOMMENDED NEW ZONING OVERLAYS (2 OF 3)

# -LW Live-Work Overlay

**Purpose:**

To allow residential uses within commercial areas to create active and vibrant employment and retail districts.

**Permitted Uses:**

Live/work units with non-residential uses integrated into dwelling units; multi-family housing accessory to a principal commercial use.



FIGURE 8 - 2 RECOMMENDED NEW ZONING OVERLAYS (3 OF 3)

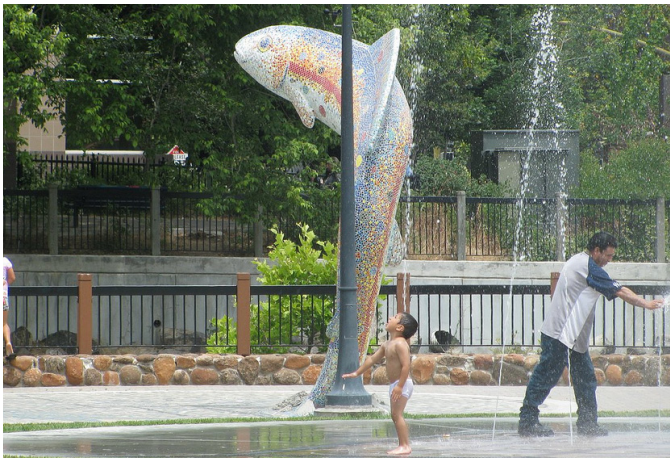
# -A Arts Overlay

**Purpose:**

Support the arts by allowing for artist studios, gallery spaces, residences for artists, and other arts-related uses.

**Permitted Uses:**

A range of uses associated with commercial artistic activities.



## NEW SUSTAINABILITY GOALS AND POLICIES

New goals and policies that relate to the guiding principles of the Sustainable Santa Cruz County Plan could be added to the General Plan/Local Coastal Program and land use regulations.

Examples of new or amended sustainability goals include:

- Focus development in urban areas and utilize resources efficiently.
- Provide flexibility within land use designations and development standards to support economic vitality and creation of needed types of workforce housing.
- Encourage a land use pattern that supports transportation choices.
- Maintain and enhance the character of existing communities.
- Incentivize creation of a range of housing types to provide more choices.
- Ensure transparent decision-making.
- Coordinate decision-making between governmental agencies and other stakeholders.

Examples of new policies might include:

- Recognizing the possibility that churches and other places of worship that are located in urban areas may change location in the future, consider a new policy stating that all or a portion of these sites may be appropriate for reuse for other urban purposes. The sites could be rezoned with the Residential Flex zoning overlay or other overlays to indicate the

preferred future use of such sites if and when they transition.

- Consider a new policy stating that the Nigh/Protiva R-Combining housing site along the Soquel Avenue frontage road could be considered for rezoning to a Workflex or Commercial designation, if a substitute approach is concurrently identified to accommodate the housing capacity that the site currently accommodates with its current 20 units per acre zoning.
- Explore opportunities for shared-use parking structures on existing large surface parking lots located in areas with high employment and housing density.
- Explore opportunities for park-and-ride locations, with structures or facilities to increase capacity for both vehicles and bicycles adjacent to or near the rail corridor and Highway 1, such as at nearby schools and churches.
- Explore the potential for accommodating student housing on the Cabrillo campus site, or nearby locations.
- Consider a “Park and Ride” parking lot in the southernmost portion of the O’Neill Ranch/Anna Jean Cummings Park property at Upper 41<sup>st</sup> Avenue, to provide “park and walk or bike” users with a connection from Soquel Drive/41<sup>st</sup> Avenue to Soquel High School and Anna Jean Cummings Park, with a particular goal to shift some school trips away from the congested Soquel/Porter village intersection.
- Consider installation of an appropriately coordinated and time traffic signal at Soquel Drive/Robertson (Wharf Road) to replace the three-way stop signs, to

reduce traffic congestion within the Village, which currently extends through the Soquel Drive/41<sup>st</sup> Avenue intersection.

- Consider removing on-street parking spaces on the south side of Soquel Drive in Soquel Village so that right-of-way can be used instead for bike lanes as a priority to widen sidewalks and improve streetscapes, and/or to accommodate restriping and lengthening the vehicular turning pockets for turns onto both Soquel-San Jose Road/Porter Street, and Main Street, in order to increase safety and reduce congestion at the Soquel/Porter village and Soquel/Main intersections. The goal would be to reduce the dominance of vehicular congestion within the center of Soquel Village and better accommodate cyclists and pedestrians.
- Continue to explore opportunities for multi-modal crossings (including vehicles) of Highway 1, particularly between the 7<sup>th</sup> Avenue/Highway 1 interchange and 41<sup>st</sup> Avenue/Highway 1 interchange, such as at 17<sup>th</sup> Avenue and between the future Sutter/PAMF campus and Protiva/Nigh housing site; and between Park Avenue/Highway 1 interchange and State Park/Highway 1 interchange, such as with a crossing to connect Cabrillo College Drive to McGregor Drive at the lands owned by the State of California. Compare costs and benefits of bike-pedestrian only bridges with multi-modal bridges. Connections between large properties located across Highway 1 from each other may be most feasible. Recognize that such Highway 1 crossings would involve funding requirements that are not currently within feasible funding levels to 2035, but study and plan future Highway 1 auxiliary lane or other widening improvements so as to not preclude these

local multi-modal transportation connectivity improvements in the future.

- Consider extending the Soquel Avenue frontage road between 17<sup>th</sup> Avenue and 41<sup>st</sup> Avenue so that it connects due east to 41<sup>st</sup> Avenue rather than turning south onto Gross Road before it adjoins 41<sup>st</sup> Avenue. This strategy may require land trades or acquisition from the State to use right-of-way adjacent to the off-ramp, and/or from an existing office building owner, to reconfigure parking and access.
- Create Design Guidelines that illustrate desired scale and massing for various development types, especially for mixed-use and taller buildings, to show stepped back upper floors.

## OTHER RECOMMENDATIONS

The County should consider the following additional recommendations when updating the General Plan Land Use and Circulation Elements:

### General Plan Organization

- Consider reorganizing or combining the General Plan elements to reflect the sustainability focus. For example, the County's existing Land Use, Community Design and Circulation Elements could be combined into one element as was done in the Santa Monica Land Use and Circulation Element.
- Consider organizing the General Plan around basic themes of sustainability, as opposed to topical areas. For example, the award-winning Marin County General Plan is organized around the concept of the Three E's of Sustainability: Economy, Environment, Equity.

## Element Organization

- Revise the introduction to emphasize sustainability goals.
- Revise the goals to reflect the ideas in the Vision and Guiding Principles for urban areas of County.
- Nest policies and actions under individual goals.
- Integrate policies from the Climate Action Strategy into the General Plan.
- Separate general county policies from area-specific policies (e.g., revise Policy 2.8.4).
- Organize countywide policies around themes, not single land use types. Move descriptions of land use designations to the General Plan Land Use Map section.

## Minimize Redundancy and Repetition

- Minimize text by presenting standards in tables instead of text (e.g., Policy 2.7.1).
- Eliminate duplication of policies (e.g., Policies 2.7.2 and 2.8.2).
- Avoid re-stating permitted land uses for designations in policies; state it once in the description of the land use designation.
- Avoid stating where designations should be applied (e.g., Policy 2.13.1). The Land Use Map serves this function.
- Use more general references to exceptions to permitted uses on individual parcels, permits required, and special development requirements; leaving greater specificity to be provided by the Zoning Code (2.13.7, 2.13.8). If references to specific

parcels are kept in the General Plan, show their locations on a map.

- Avoid stating that a project must comply with an adopted ordinance.

## ZONING CODE AMENDMENTS TO DEVELOPMENT STANDARDS

Additional amendments to the County Code, including some changes to existing zoning districts, are suggested in order to further the goals of this Sustainable Santa Cruz County Plan.

### Floor Area Ratio

The existing FAR allowed in the County's multi-family zoning districts is too low to make development of multi-family units feasible. Currently the maximum FAR for RM multi-family districts is the same (0.5) as for single-family zoning districts. It is recommended that the FAR for RM districts increase to at least 1.5 FAR.

### Height

The County Zoning Ordinance currently allows a maximum height of 28 feet for single-family and multi-family development. Under certain conditions building height may be increased to 33 feet for single-family homes and to 35 feet for multi-family development. In commercial districts, the maximum permitted height is three stories not to exceed 35 feet, and with design review, a height exception can be approved to allow up to 40 feet.

These existing height limits would not allow for the types of multi-family, commercial, and mixed-use projects illustrated in Chapter 3 and described in this chapter. To achieve this vision of this Plan, the County should increase the base

height limit in commercial, multi-family and mixed-use districts to 40 feet, with an additional 5 feet allowed with design review (which can allow for varied roof designs and other architectural features that don't usually provide additional leased or habitable area).

As discussed earlier, the County should also allow for a "by right" maximum building height of four stories and 60 feet on properties within a designated Medical Mixed-Use activity center and certain opportunity sites, such as at the future Sutter/PAMF medical campus. In a medical building context, a two-story building could be 30 to 40 feet tall, and three- and four-story buildings could require heights within the 50- to 60-foot range, depending on mechanical and other design features of the buildings.

The suggested 40-foot (or 45 feet with design review) maximum heights for three-story mixed-use and "regular" commercial areas would allow for 15- to 20-foot ceilings on the ground floor as desired by retailers, generous modern ceiling heights for upper story residential units or office spaces, as well as interesting roof architecture and other design elements.

A four-story/50-foot residential height limit (where permitted through a height overlay zoning) would accommodate modern residential ceiling heights and variation in roof forms, and allow for more creative building design where multi-family units are desired and site circumstances are appropriate. Placing a height overlay zoning on a parcel is a Board of Supervisor's level decision. See also Height Overlay section, page 8-5.

A four-story/60 foot non-residential height limit (where permitted through the Medical Mixed-Use Designation, Master/Specific Plan, or Planned Unit Development zoning

approaches) would also allow for market-based, economic vitality, and quality design considerations when approved for appropriate locations by the Board of Supervisors. Height overlay zoning, Master Plan/Specific Plans and Planned Unit Developments must each be approved by the Board of Supervisors.

Figure 8-3 illustrates one example of a mixed-use development within commercial areas or along key transportation corridors such as along the Soquel Drive frontage. To minimize visual impacts from increased height, these standards also include upper-floor step backs and increased setbacks from adjacent residential properties.

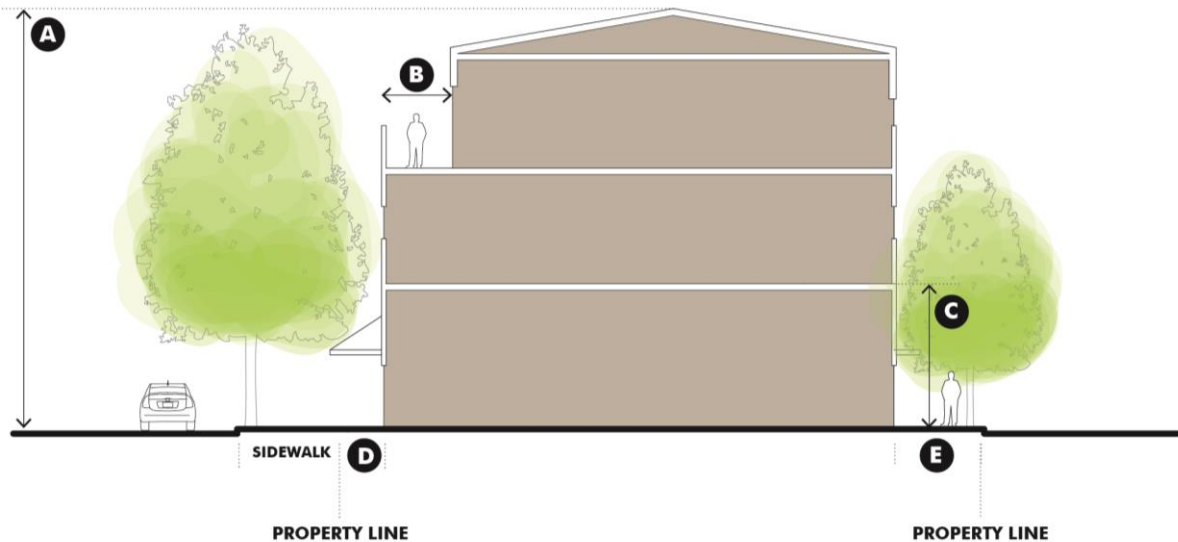
Note that the suggested maximum heights, if approved by the Board of Supervisors for specific sites or areas, would be 50 feet for residential, and 60 feet for non-residential development such as for hotels and/or medical district uses—within the new zoning districts that are contemplated for certain limited areas. Such heights would not be allowed within areas where it is not suggested that the County consider amending zoning designations. Any newly designated areas would be selected and regulated to ensure that uses transition to and are compatible with adjacent areas, in the limited locations where such heights might be considered.

**TABLE 8-1 EXAMPLE STANDARDS FOR MIXED USE DEVELOPMENT ALONG TRANSIT CORRIDOR**

Building Height	<b>A</b>	40 ft. (3 stories) plus 5 additional ft. with design review
Upper Floor Stepbacks	<b>B</b>	10 ft. min. above the second floor
Ground floor Ceiling Height, Minimum	<b>C</b>	15 ft. minimum
Floor Area Ratio		1.75
Residential Density		20 du/acre; selected sites have no maximum
Setbacks		
Front and Street Side	<b>D</b>	5 ft. minimum or as required by a Town or Village Plan
Interior Side		10 ft. minimum for parcels adjacent to a residential zone; 5 ft. required interior side rear setback for all other parcels
Rear	<b>E</b>	10 ft. minimum for parcels backing into a residential zone; 5 ft. required rear setback for all other parcels

\* Maximums for non-residential to be determined through Plan implementation process; up to 4 stories and 60 feet in specific selected locations such as the Medical District should be considered.

**Figure 8-3 Example Mixed Use Development along Transit Corridors**





The following text is included in the SSCC to show an example of how another California jurisdiction has adopted regulations to incentivize desirable development types and patterns.

### Incentives for Community Benefits

The County should consider the following example of an Incentive Zoning approach that provides substantial benefits to the community.

- A. Incentives Restricted to Added Benefits.** The County may grant additional incentives when the community benefits or amenities offered are not otherwise required by the Zoning Code or any other provision of local, state, or federal law. The County is not required to grant incentives; the County will decide if a project should receive an incentive on a case-by-case basis.
- B. Allowable Benefits – All Districts.** A proposed project in any district that provides one or more of the following benefits is eligible for an incentive:
  - 1. Sustainable development features, including on-site renewable energy generation and green roofs.
  - 2. Design improvements to increase transit accessibility, including installing additional transit stops or facilities around proposed development.
  - 3. Commuter trip reduction measures, such as providing transit passes to employees, for office or employment center development proposals.
  - 4. Features that increase the community's ability to access healthy, fresh foods, such as providing space for community gardens, farmers' markets, or grocery stores.
  - 5. Building and site design features that help to reduce the fear and incidence of crime.
  - 6. Development of a blighted property, or a vacant property in a blighted area, as determined by the Planning Commission.

- C. Allowable Benefits – Mixed-Use Districts.** A proposed project in a Mixed-Use district that provides one or more of the following benefits is eligible for an incentive:
  - 1. Improved bicycle and pedestrian facilities, including wider sidewalks, street furniture, and direct pedestrian or bike connections to destinations.
  - 2. Public outdoor gating places, including parks and plazas.
  - 3. Measures to expand arts and entertainment facilities in the Downtown Mixed-Use district.
  - 4. Installation of informational kiosk to improve way finding for residents and visitors in the Downtown Mixed-Use district.
- D. Available Incentives – All District.** A proposed project in any district providing benefits is eligible for the following incentives:
  - 1. A reduction in the minimum required number of off-street parking spaces up to 25 percent.
  - 2. The waiver, reduction, or deferral of planning, plan check, and building permit fees up to 25 percent.
- E. Available Incentives – Mixed-Use District.** A proposed project in the Downtown Mixed-Use district providing benefits is eligible for an increase in the maximum permitted FAR of up to [insert]. This incentive is in addition to the incentives for all districts listed in section (D) above.
- F. Relationship to State Density Bonus Law.** The incentives allowed by this section are in addition to any development incentive required by Section 65915 of the California Government Code or Section 26-22 (Residential Density Bonus) of Oroville's Zoning Code.
- G. Permits Required.**
  - 1. A Conditional Use Permit is required for an applicant to receive incentives in exchange for benefits. The County recommends that an applicant requests a pre-application hearing with the Planning Commission to receive non-binding input as to whether the request for incentives is worthy of consideration.

2. Applicants requesting incentives shall submit the following information as part of the Conditional Use Permit application:
  - a. A description of the proposed amenities and how they will benefit the community.
  - b. All information needed by the Planning Commission to make the required findings described in Section F below, including a pro forma analysis demonstrating that the economic value of the proposed amenities is equal to or greater than the economic value of the requested incentives.

**H. Findings.** The Planning Commission may approve the requested incentives only if the following findings can be made in addition to the findings required for a Conditional Use Permit:

1. The proposed amenities will provide a substantial benefit to the community and advance the goals of the General Plan.
2. There are adequate public services and infrastructure to accommodate the increased development potential provided by the incentive.
3. The economic value to the community of the proposed amenities is equal to or greater than the economic value of the requested incentive.

## PARKING

Table 8-2 and 8-3 show existing on-site parking required by the County Zoning Code. The County may approve reductions to the required number of on-site parking spaces for shared parking arrangements, housing for the elderly, employers with transportation demand management programs, and uses with approved parking plans. The County also allows payment of in-lieu fees for uses within the boundaries of business improvement districts or parking and business improvement areas, which provide for shared, managed, and/or public parking.

Even with these reduction opportunities, the County’s existing parking requirements may constrain development of

the types of mixed-use infill development envisioned by this Plan. The number of required on-site parking spaces could render desirable projects economically infeasible, and could also result in use of land for parking lots that could better be used to accommodate jobs, housing and other uses.

The County should consider a variety of tools to better manage parking supplies to support infill mixed-use development. These tools introduce greater flexibility and reflect the reduced parking demand that results from mixed-use development. These tools could be adopted by the County through both General Plan and Zoning Code amendments.

**TABLE 8-2 EXISTING RESIDENTIAL PARKING REQUIREMENTS**

Bedrooms	Required Parking Spaces	
	Single-Family Dwelling and Mobile Homes	Multi-Family Dwellings*
1	2	2
2	3	2.5
3	3	2.5
4	3	3
Additional	1 each	0.5 each

\*Additional guest parking is required in an amount equal to 20 percent of the required resident parking

**TABLE 8-3 EXISTING NON-RESIDENTIAL PARKING REQUIREMENTS**

Land Use	Required Parking Spaces
Retail and service	1 per 300 square feet of gross floor area
Restaurants	1 per 100 square feet (9.3 square meters) of gross floor area, and 0.3 per employee
Business offices	1 per 300 square feet of gross floor area
Medical offices	1 per 225 square feet of gross floor area; 2 minimum

Table 8-2 describes current county residential parking requirements. In particular, the county should consider reductions of the requirements for studio, 1-bedroom, and 2-bedroom units.

Of the non-residential requirements above, the County should in particular consider more flexible requirements for restaurant and food uses.

Some parking tools the County may consider include the following:

- Establish new parking districts in the Dominican Hospital and Cabrillo College areas. Within these new parking districts, manage parking through permits, time limits, fees, valet services, or increased supply (see Chapter 5, Transportation).
- Increase the maximum distance for shared parking from 300 feet to 500 feet or 1,000 feet.
- Allow additional reductions in required on-site parking in transit priority areas for:
  - Projects with a parking demand study that demonstrates the land use will not utilize the required number of spaces
  - Commercial or multiple-family development projects within 500 feet of a bus stop.
  - Commercial or multiple-family development projects which participate in a car- or bike-sharing program, and provide dedicated on-site spaces for the program with the approval of a Minor Use Permit.
  - Mixed-use projects with residential and commercial or office uses.
- Establish maximum parking in transit priority areas.

- Specifically allow for tandem and valet parking.
- Unbundle parking spaces from the cost of leased commercial space and residential rent or purchase.
- Require shared parking as part of large development projects.
- Require on-site car-sharing vehicles in larger residential developments and non-residential developments once a provider is present in Santa Cruz County.
- Require participation in transportation demand management (TDM) programs for large employers.
- In transit-priority areas the County may also consider reduced on-site parking minimum and maximum parking requirements, as shown in Table 8-4. Reduced parking standards would need to be combined with aggressive parking demand management programs and shared parking arrangements to reduce spillover effects on adjacent neighborhoods.

**TABLE 8-4 EXAMPLE RESIDENTIAL PARKING REQUIREMENTS FOR HIGH LAND USE DIVERSITY OR DESIGNATED TRANSIT-PRIORITY AREAS**

Land Uses	Minimum Required Spaces
<b>Single-Family and Two-Family</b>	
Units less than 1,500 sq. ft.	1.5 spaces per dwelling unit
Units 1,500 sq. ft. to 2,200 sq. ft.	2 spaces per dwelling unit
Units over 2,200 sq. ft.	3 spaces per dwelling unit
<b>Multi-Family*</b>	
Units less than 750 sq. ft.	1 space per dwelling unit
Units 750 to 1,250 sq. ft.	1.25 space per dwelling unit
Units greater than 1,250 sq. ft.	1.5 spaces per dwelling unit

\* One additional guest parking space required for every four units for projects greater than 10 units.

## TRANSPORTATION NEXT STEPS

The Sustainable Santa Cruz County Plan is the basis of a potential update to the General Plan Circulation Element to promote a balanced and sustainable transportation system. The County will need to explore potential multi-modal level of service (MMLOS) methods to plan and implement the transportation vision. Below is a summary of key components that could serve as a new Countywide Street Types Network with a combination of system-wide and multimodal performance measures. This is a comprehensive transportation planning approach that builds on the Sustainable Santa Cruz County Plan, with potential benefit including CEQA streamlining, balanced transportation system planning, and enhanced community benefits.

### Planning a Countywide Multimodal Transportation System

As the County updates its General Plan policies, the County will continue to monitor and manage traffic operations along streets and intersections as individual development occurs to ensure that the street system is optimized for steady, safe, and orderly traffic flow and is balanced for each mode of travel. Next steps that the County can take toward implementation of a County-wide balanced transportation system would include the following components, listed in suggested chronological order:

#### 1. Prepare a Countywide Street Type Network and Impact Fee

The expectations for a balanced transportation network should also reflect expectations of funding availability to build and maintain the transportation system. Identifying the mode preference for specific streets will further reflect the community values. This would be an expansion of the Street Types network within the Sustainable Santa Cruz County Plan

Area that defines the mode preference and attributes for each street and functional classification.

#### 2. Develop a System-wide Performance Measure(s) for Program/General Plan Level Analysis

Using the performance measures described in the Sustainable Santa Cruz County Plan as a starting point, the County would refine and adopt system-wide performance measures such as vehicle miles traveled (VMT) to determine consistency with the goals of the land use and transportation elements and evaluate cumulative traffic and transportation related conditions. Using VMT as a program-level performance measure would take advantage of potential CEQA streamlining of projects within the Metropolitan Transportation Improvement Plan and Sustainable Community Strategy (MTP/SCS) transit priority areas and be a helpful metric to evaluate cumulative future conditions.

#### 3. Develop a Multimodal Connectedness Checklist for Project Level Analysis

To complement the Street Types Network and program level performance measures, the County would prepare a multimodal connectedness checklist of basic and enhanced design features associated with land use and transportation projects. This checklist could vary based on the street user priorities and may include a mixture of quantitative and qualitative performance measures described above. To address a spectrum of transportation and land use projects, a combination of a built environment check list, tiered level of service policy, and person delay analysis would be beneficial.

#### Multimodal Connectedness Checklist

At a minimum, a transportation and/or land use project would be evaluated relative to basic and enhanced built environment factors near a project site (perhaps within a 10-

to 20-minute walking and bicycling distance). The main idea is to evaluate activity centers and destinations around projects to ensure that walk times to necessary destinations are minimized and the walking experience is comfortable. This multimodal connectedness checklist would inventory existing pedestrian and bicycle facilities near the site and identify potential enhancements to achieve the desired Street Type mode priority near the project site. Using geographic information systems, travel time for each mode (e.g., walking, bicycles, transit, and vehicles) between the project and surrounding land uses can be used to gauge the degree of accessibility for a project. The County desires to minimize travel time to necessary destinations while minimizing unnecessary vehicle travel.

#### Tiered Vehicle Level of Service and Person Delay

At hot-spot locations or corridors where vehicle congestion occurs, vehicle LOS may be used; however, careful consideration should be given to how vehicle LOS is used, especially in transit priority areas. Specifically, with a greater emphasis on transit and active modes, it is recommended that other performance measures, such as person delay, that can more accurately evaluate the effects of transportation system on person mobility at a specific location, be considered.

In some locations of Santa Cruz County it may be possible to adopt a vehicle level of service policy of LOS E (with LOS F permissible at locations within transit priority areas and hot spot locations approved by the Board of Supervisors). This tiered LOS policy could support County General Plan objectives, utilize public investment to its full potential, and provide a quantitative performance metric to monitor system performance. However, the overall priority of the Sustainable Santa Cruz County Plan is focused on person delay. Funding

and constructing a system that is substantially underutilized most of the day and encourages higher vehicle speed, has secondary effects that degrade the mobility of pedestrians and bicyclists.

#### *4. Update Guidelines and Programs*

Update the appropriate County Design Criteria, and other existing documents, to reflect the Street Types network. These updates should reflect a Complete Streets approach where all modes of travel are routinely accommodated. Other policy guidance documents that should be created or updated include a Parking Master Plan and Street Design Guidelines. In addition, the County should consider establishing both a Safe Routes to School Program and a Transportation Management Association.

#### *5 Prepare Transportation Demand Management (TDM) Program*

To provide guidance and articulate expectations, a TDM program should be established, including modification of the Trip Reduction Ordinance (Chapter 5.52 of the Zoning Code). The purpose of the TDM program is to reduce vehicle trips and provide transportation options to achieve the Sustainable Santa Cruz County Plan vision to improve the environment and quality of life for residents and employees. Santa Cruz County should encourage firms located within the County to use flexible work hours and other traffic demand management strategies to reduce traffic congestion during typical commute periods.

To the extent possible, companies should also be encouraged to share parking facilities with other adjacent uses through easement agreements. The County should also encourage residential developers to design and build project elements that support TDM, such as car-share and bike-share facilities, neighborhood electric vehicle (NEV) operation,

transit stop amenities, and neighborhood transportation centers. School day start and end times should also be considered for change and/or staggering, especially those in or near Soquel Village.

#### 6. *Prepare Transportation Impact Analysis (TIA) Guidelines*

Develop and adopt transportation impact study guidelines that specify the process by which impacts due to new developments are identified. These guidelines should include specific performance measures and thresholds for the identification of impacts and mitigation measures in accordance with the General Plan objectives, including person mobility, the reduction in VMT, and the development of a balanced transportation network for all modes. Roadway widenings should be evaluated in the context of potential impacts to community character, convenience for non-auto modes, safety, and cost/benefit.

#### 7. *Circulation Plan for Commercial Way/Soquel Drive/Thurber Area*

The existing configuration of intersections in the Medical District Focus Area will need to be further studied in order to accommodate multiple travel modes and serve the future needs of the area. This area is also identified for a possible new multi-modal connection over Highway 1. The Circulation Plan, which could be included within a Master or Specific Plan for the area, should look at various options and assumption, with the goal of establishing and implementing a long-term infrastructure improvement plan for the area.

#### 8. *Community Review*

This complement to previous steps would involve the presentation of process/methods to decision makers and the public for comment. The presentation would be based on the project-specific examples and include the data needs,

information provided and criteria used for determining impacts.

#### 9. *Adoption*

If the new techniques produce the desired results in terms of evaluating the transportation system, at a reasonable level of effort, the County could adopt a multi-modal level of service for project-level analysis.

