

Sustainable Santa Cruz County Plan

Public Hearing Draft

September 2014



SUSTAINABLE SANTA CRUZ COUNTY
Environment • Neighborhoods • Economy



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PLACEWORKS

FEHR PEERS



The work upon which this publication is based was funded in whole or in part through a grant awarded by the Strategic Growth Council.

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Acknowledgements

The Sustainable Santa Cruz County Plan was prepared with the help and creative thinking of many people. Listed below are the names of members of the Board of Supervisors and Planning Commission, as well as the Advisory Group involved in the creation of this Plan.

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We would also like to acknowledge the over 450 community members who attended workshops, stakeholder focus groups, public meetings or who participated in our line forum during this planning process. Their input and participation was crucial to the success of this project.

Plan Overview 1

SUSTAINABLE SANTA CRUZ COUNTY

The Sustainable Santa Cruz County plan is a planning study that describes a vision, guiding principles, and strategies that can lead to a more sustainable development pattern in Santa Cruz County. The time horizon of the Plan is through 2035.

While a primary goal of the Plan is to reduce production of greenhouse gas emissions, which in Santa Cruz County are generated principally by the use of cars, the strategies can also positively affect many other aspects of community life:

- When housing, employment, and services are closer together the “walkability” and diversity of an area increases. When needs can be met within the neighborhood car trips are shorter and some trips can be made without a car.
- When development is directed into already developed areas and projects are designed to be compact, land is conserved and housing choices can increase.
- When certain streets give priority to pedestrians and bicyclists, rather than cars, active lifestyles are supported and it is easier and more pleasant to get around.
- When the local economy is strengthened, job opportunities increase. Well-paying jobs in the local area can reduce long commutes. Good local jobs can also increase expenditures in the local economy, which strengthens businesses and increases the fiscal health of public agencies.

This Plan was shaped by community input about the challenges that County residents currently face and the desires they have for the future. At more than sixteen

community workshops residents responded to questions about sustainability, neighborhoods, transportation, and more. Many residents expressed frustration with traffic congestion, lack of safe infrastructure that feels safe and inviting for biking and walking, limited transit options, housing that is not affordable for many, and lack of investment in commercial properties. Residents also expressed strong desire to preserve the natural environment and to have high quality neighborhoods. This Plan responds to that input by recommending strategies for improving community quality of life through coordinated land use and transportation policies.

The work upon which this Plan is based was funded in part through a grant awarded by the Strategic Growth Council (SGC). SGC grants help local government to plan for more sustainable communities, with an emphasis on reducing greenhouse gas emissions. Local government may decide on the contents of these grant-funded plans; no mandates or specific requirements are attached to the grant funding.

AN EVOLVING ENVIRONMENTAL ETHIC

Santa Cruz County is a place of great natural beauty. Mountains, forests, and valleys define the landscape and support ecosystems rich in biodiversity. Agricultural land adds open space and contributes to the local economy. Coastal habitat extends into the Pacific Ocean and the Monterey Bay National Marine Sanctuary, one of the world’s most productive ocean environments.

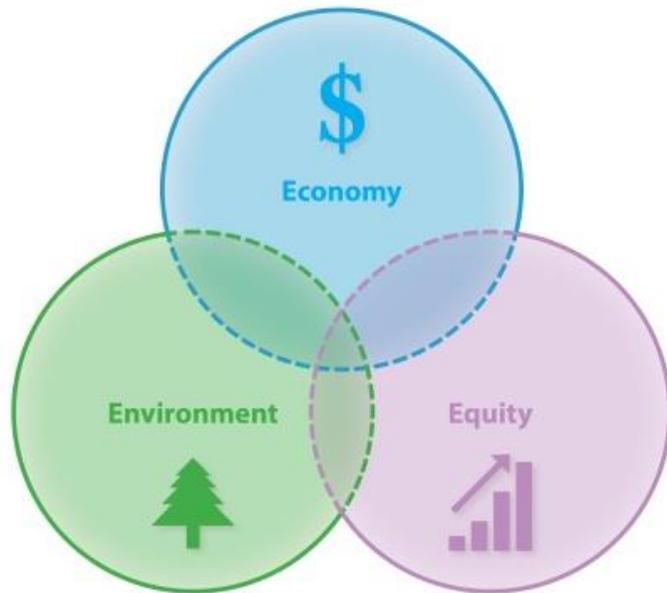
Santa Cruz County has been a national leader in the protection of these natural resources. In 1978, Santa Cruz County voters approved Measure J, which established an annual population growth goal intended to limit the rate of growth to manageable levels. Measure J

Community Voices

The Sustainable Santa Cruz County Plan is based on public input received at 16 community workshops. Direct quotes from these workshops are shown throughout this Plan in “Community Voices” text boxes such as this one.

also included agricultural preservation requirements, established an Urban Services Boundary to direct growth to the urban area, and created an affordable housing policy.

In recent years, environmental protection has increasingly been viewed through the lens of sustainable development. A common definition of sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development aims to promote environmental protection, a strong local economy, and social equity.



The Three E's of Sustainability

The concept of sustainability is broad, and can be defined in a variety of ways. For some, sustainability focuses on limiting human impacts on the natural environment,

maintaining a healthy ecosystem, and ensuring diverse and productive biological systems. For others, sustainability means improving human quality of life for all populations. Others see sustainability as respecting the carrying capacity of planet earth, which necessitates limits on population and economic growth.

The concept of sustainable development as used in this Plan links environmental protection to the wise use of urban land resources. In Santa Cruz County, this is particularly important given the relatively limited amount of urban land (see Figure 1-1). Long-term protection of natural resources depends on the efficient use of limited urban land in a manner that supports the County's social, environmental, and economic goals.

Within this framework of sustainable development, this Plan addresses questions such as:

- How can we utilize land resources more efficiently to protect open space and agricultural land?
- How can we provide housing that is more affordable for county residents?
- How can we increase transportation alternatives and reduce reliance on the automobile?
- How can land use and transportation infrastructure patterns help to reduce greenhouse gas emissions?
- How can we strengthen existing communities?
- How can we increase the supply of good jobs available to county residents?
- How can we ensure the fiscal health of governmental agencies so that adequate services are available to protect the public health, safety, and welfare?

PLAN AREA

The area covered by the Sustainable Santa Cruz County Plan is part of a larger regional context that will influence future growth and development within Santa Cruz County. As shown in Figure 1-1, the County is close to the economic engines of Silicon Valley and the San Francisco Bay Area. Immediately to the west is the City of Santa Cruz, home to the University of California Santa Cruz campus. The Plan area surrounds the City of Capitola and Capitola Mall, and the City of Watsonville is approximately 10 miles to the east.

Figure 1-2 shows the boundaries of the area studied as part of the Sustainable Santa Cruz County Plan. The area includes the parts of Live Oak, Soquel, and the northern portion of Aptos that are within the County's Urban Services Boundary. The Urban Services Boundary was first designated in the early 1980s and indicates the area within which an urban level of services, such as public water and sewer, are available.

Soquel Drive is the primary transportation corridor connecting the Plan area to Highway 1, the City of Santa Cruz, and Watsonville. Other corridors include Soquel Avenue fronting Highway 1 and the major arterial streets in Live Oak. The Santa Cruz branch rail line also crosses the Plan area through Live Oak and Aptos. The Plan area contains the Dominican and Sutter medical centers, Cabrillo College, numerous public schools, and the Soquel, Aptos, and Seacliff village centers.

The boundaries of the Sustainable Santa Cruz County Plan were chosen to include the portion of unincorporated Santa Cruz County with the greatest potential to achieve more sustainable land use and transportation patterns. This area has the highest concentration of jobs and

housing within unincorporated Santa Cruz County, the strongest connections to regional employment centers, and the most extensive transit, bicycle, and pedestrian infrastructure. There are a number of sizeable vacant and underutilized properties with access to water, sewer, and good roads. The Plan area represents the County's best opportunity to contribute to a new regional transportation and land use framework that prioritizes sustainable outcomes for the local economy and county residents.

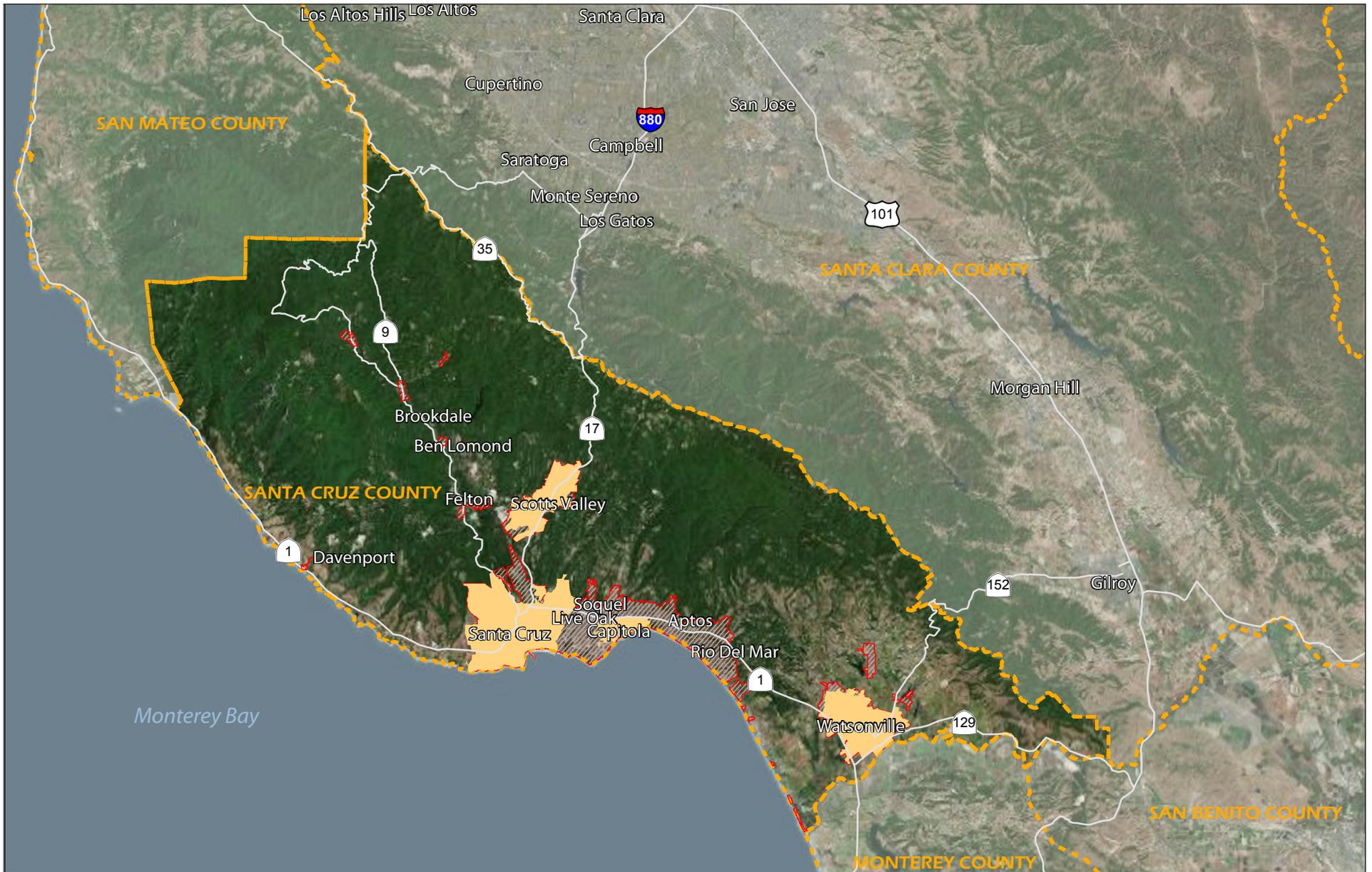
While this Plan focuses on the urbanized areas, certain of the strategies will be applicable in rural areas of the County, especially those strategies related to increasing the types and safety of transportation choices. The future circulation Element Update is expected to transfer ideas and strategies of this planning study to both urban and rural areas.

RELATIONSHIP TO EXISTING PLANS AND POLICIES

Land use and transportation are regulated by a number of different plans and ordinances in Santa Cruz County. The Sustainable Santa Cruz County Plan reflects the contents and requirements of these documents. Among the most important are the following:

- General Plan and Local Coastal Program
- Climate Action Strategy
- Zoning Ordinance (County Code Chapter 13.10)
- Growth Management System (Measure J)
- Economic Vitality Strategy (in public draft form, July 2014)
- Town and Community Plans (Aptos, Soquel, Seacliff and Pleasure Point)

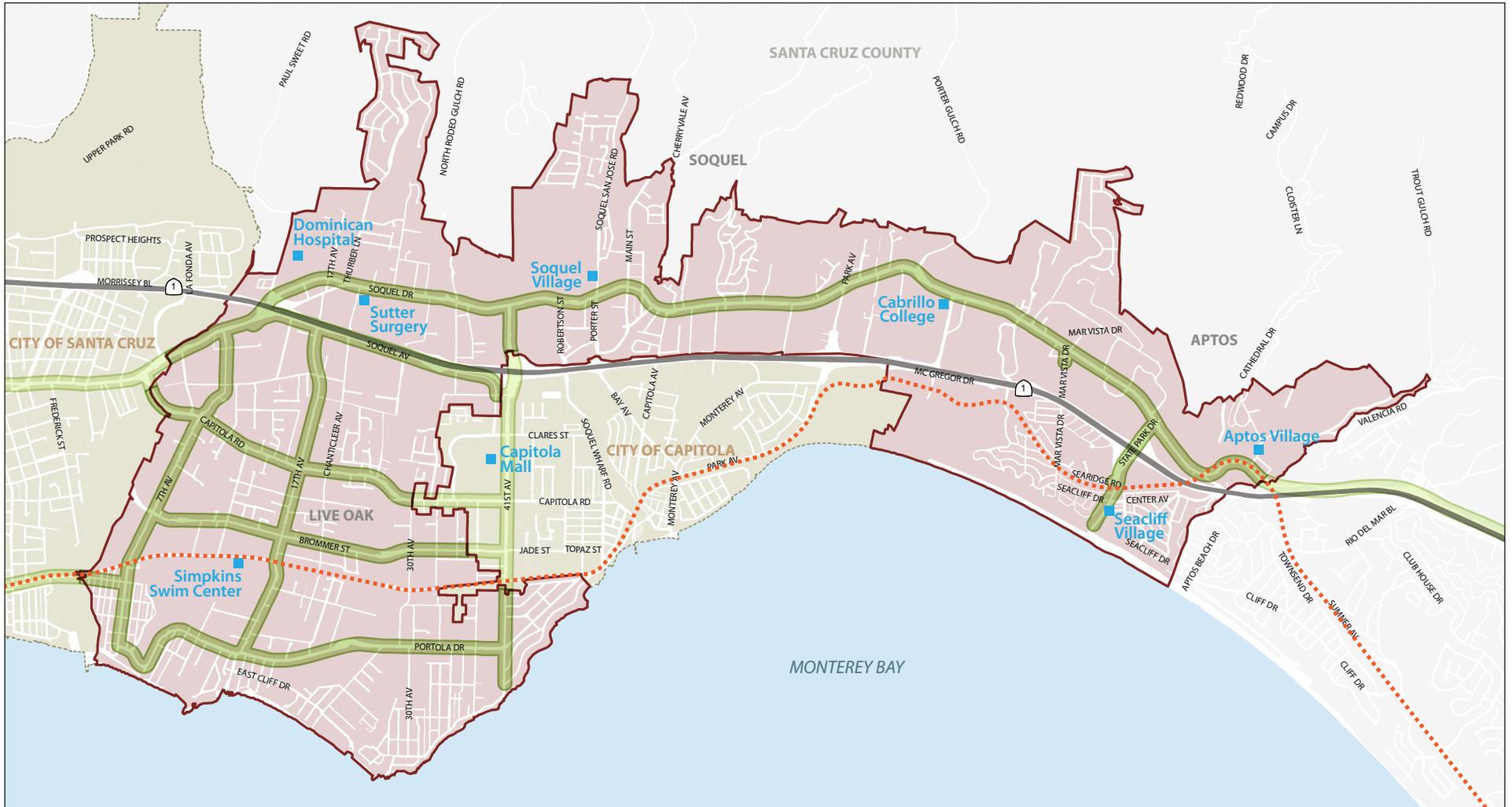
FIGURE 1 - 1 AREAS WITHIN THE URBAN AND RURAL SERVICE BOUNDARIES



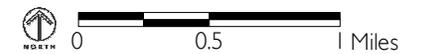
- Urban and Rural Service Boundaries
- Cities
- County Boundaries



FIGURE 1 - 2 PLAN AREA



- Plan Area
- Corridors within Plan Area
- Corridor Outside Plan Area
- Rail Line



Climate Change and Sustainability

The Sustainable Santa Cruz County plan is closely linked to the issue of climate change and greenhouse gas emissions, and is intended to be consistent with the County's Climate Action Strategy, adopted in 2013. In Santa Cruz County, approximately 60 percent of greenhouse gas emissions are generated by the transportation sector. Coordination of land use and transportation policies to decrease reliance on the single-occupancy vehicle, increase the use of transit, and support walking and biking is key to reducing emissions.

The Climate Action Strategy identified reduction of "vehicle miles traveled" through long-range planning efforts, such as this plan, as the main method to reduce greenhouse gas emissions from the transportation sector (Climate Action Strategy, Table 3-2, page 22). Recommendations in this plan would implement three of the top five strategies in the Climate Action Strategy.



Resource preservation is linked to the wise use of urban land.

- Live Oak/Soquel Redevelopment Area Implementation Plan
- County Bicycle Plan
- 2035 Metropolitan Transportation Plan and Sustainable Communities Strategy

This Plan includes suggestions for specific amendments to the General Plan and Zoning Ordinance and for policies that will encourage the type of development described in the sustainability vision. Any amendments will require the preparation of a CEQA environmental review document and noticed public hearings before they may be implemented. Once the regulatory framework is in place, individual development projects will also be subject to a public hearing and environmental review process consistent with current procedures and State law.

The Plan also recognizes plans prepared by other governmental agencies in Santa Cruz County and the Monterey Bay Area region. This includes General Plans recently updated by the cities of Santa Cruz and Capitola. Relevant regional plans include *Envisioning Monterey Bay*, the Metropolitan Regional Transportation Plan for the Monterey Bay region, prepared by the Association of Monterey Bay Area Governments (AMBAG), the *Santa Cruz County Regional Transportation Plan*, and the *Short Range Transit Plan* prepared by the Santa Cruz Metropolitan Transit District (SCMTD or Metro).

PLAN CONTENTS

The Sustainable Santa Cruz County Plan is divided into the following chapters:

- **Chapter 1: Plan Overview** presents the purpose of the Plan and explains its relationship to existing County plans and policies.
- **Chapter 2: Vision and Guiding Principles** highlights core values and aspirations that serve as a foundation for the Plan.
- **Chapter 3: Sustainable Land Use and Transportation Pattern** graphically presents the Plan's key land use, urban design, and transportation concepts.
- **Chapter 4: Focused Development and Community Character** identifies possible goals and strategies to promote a more sustainable land use pattern and healthy communities.
- **Chapter 5: Transportation** describes how the transportation system in the Plan area can better support sustainability objectives.
- **Chapter 6: Natural Resources** describes how development within urban areas can protect natural resources.
- **Chapter 7: Focus Areas** presents detailed land use, community design and circulation concepts for five geographic areas in the Plan area.
- **Chapter 8: Next Steps** describes additional actions that would be needed to implement the Plan, including amendments to the County's General Plan/Local Coastal Program and Zoning Code.

A number of appendices are attached to this Plan that describe the process to prepare the Plan and identify specific transportation improvements recommended to support the Plan's vision and goals.

- **Appendix A: Illustrative Street Cross Sections** presents sample illustrations of street types discussed in Chapter 6.
- **Appendix B: Transportation Improvements** identifies possible transportation improvements to implement the Plan's vision and goals.
- **Appendix C: AMBAG Population and Employment Trends and Projections** presents population, dwelling unit and employment Projections from 2010 to 2035 prepared by the Association of Monterey Bay Area Governments (AMBAG) and the County's housing need allocation for 2014 to 2023.
- **Appendix D: Potential Multimodal Levels of Service Methods and Next Steps**, prepared by Fehr & Peers, outlines issues and options for adopting new County policies to support a multimodal transportation system.
- **Appendix E: Guiding Principles for Future of East Cliff Village Shopping Center Site** identifies key goals for the future the East Cliff Village site based on public input from two community workshops.
- **Appendix E: Existing Conditions Report**, prepared at the beginning of the project, provides a detailed discussion of existing conditions relevant to the Plan.
- **Appendix F: Public Participation** includes a description of the plan preparation process, a list of all public meetings and workshops, and summaries from all community workshops.

Vision & 2

Guiding Principles

This chapter presents a vision and guiding principles for the Sustainable Santa Cruz County Plan. These guiding principles are a statement of core community values to guide land use, transportation decisions, and conservation in Santa Cruz County. The guiding principles served as the touchstones for the preparation of the Plan as they help to define the community's special identity and aspirations for the future.

The vision statement and guiding principles were prepared based on public input from a series of community workshops in October of 2012. At this workshop, participants described their vision for the future of the county and discussed the following questions:

1. **What does sustainability mean to you, relating to concepts such as environment, equity, and economy?**
2. **What are the ways that we can become more sustainable in Santa Cruz County?**
3. **Of the ways to achieve more sustainable communities identified in the prior conversations, which ideas are most important for Santa Cruz County?**

Following the community workshops, the County drafted guiding principles and a vision statement based on responses to these questions. The guiding principles and vision were reviewed by the Advisory Group and Planning Commission on December 12, 2012 and approved by the Board of Supervisors on February 12, 2013.



Visioning Workshop small group discussion (top) and card with ideas for promoting sustainable development in Santa Cruz County (bottom)

A Vision for Sustainable Communities in Santa Cruz County

All parts of Santa Cruz County, both urban and rural, benefit from the increased vitality of more sustainable patterns of development and conservation. Within all neighborhoods, investments in transportation improvements have increased residents' transportation options, mobility, and quality of life. The unique needs of the various communities are taken into account in County policy-making and transportation decisions, allowing appropriate solutions for each area. The rural areas maintain the character and densities that recognize their topography and important natural resources, and that distinguish them from the urban part of the County. There are improved links among rural areas and between rural and urban areas. Residents, businesses, non-profit organizations, and governmental agencies work together in an effective partnership to encourage economic growth and private investment that benefits county residents and businesses, and supports the ability of governmental agencies to provide necessary facilities and services.

Within all neighborhoods, there are retail and other services that meet the needs of residents. The robust economy generates increased County revenues, which can then be leveraged to obtain grant-funding necessary to provide the expanded multi-modal transportation system desired by the community. Commercial centers feature quality design and convenient connections to neighborhoods for pedestrians and cyclists. Local businesses contribute to a distinctive sense of place and community pride, with jobs providing a living wage to residents. The area is attractive to knowledge-based industries that benefit from the County's unique assets, such as lifestyle enterprises, ecotourism, and sustainable industries. The environmental and social stresses of a large commuter population have been reduced by increasing the number of local well-paying jobs. All residents have the opportunity to benefit from this growth and prosperity – the area is known as a diverse and inclusive community with equal access to opportunity. A healthy local economy contributes to the fiscal sustainability of schools and public agencies and enables the County to provide the high quality services desired by all residents.

Within urban areas, infill development has occurred on vacant and underutilized commercial properties along key transportation corridors. In some places, this development is mixed use with residential or office uses located above ground-floor commercial uses. The best characteristics of favorite areas, such as the Villages and lower 41st Avenue in Pleasure Point, have been replicated elsewhere. Development is well designed to support a walkable environment and a unique sense of place. Along key corridors, development is of sufficient intensity to support an active environment with transportation choices. New development provides a variety of housing types, and there are housing options that are affordable to households of all income levels. All residents who wish to are able to live within easy walking distance of activity centers that enhance community ties.

A Vision for Sustainable Communities in Santa Cruz County (continued)

Transportation choices are such that residents can leave cars at home for some of their daily trips. Bike and pedestrian infrastructure has been optimized so that there is a good network of on-road lanes and sidewalks, supplemented by some off road facilities. It is easy and safe to walk or bike from one neighborhood or commercial area to another, as new connections supplement the existing grid pattern. The railroad and Monterey Bay Sanctuary Trail Network (MBSST), popularly known as the rail-trail, contribute to transportation and recreation choices, as well as enhancing the sense of community and the vitality of the industries that use the rail. The barrier created by Highway One between the ocean and inland sides of the County has been lessened by strategic improvement of crossings and connectivity to those crossings. Better functioning Highway One reduces travel times on the freeway and also removes some pressure from local streets, increasing the reliability of travel.

Development within urban areas reduces development pressure in rural areas of the County and helps to preserve valued open space. Development in the Plan area is environmentally friendly due to its location, density, and green building practices. Within the urban area open space and natural habitat are protected, and new development is designed to help protect these resources. The area is a part of a sustainable system of food production with community gardens, urban agriculture, artisan food businesses, and organic farming practices. Development is designed to minimize per capita consumption of resources such as water and energy.

GUIDING PRINCIPLES

The following principles were used to guide the preparation of the Transit Corridors Plan for Sustainable Communities in Santa Cruz County.

- **Focused Development.** When market demand stimulates new commercial, residential, office, or retail activity, encourage those new uses to use land efficiently. New development should be compact, located primarily within existing urban areas, and should feature a mixture of uses and development intensities that support transportation choices including transit, cycling, walking, and carpools, and to the extent possible, promote the fiscal sustainability of the area.
- **Transportation Choices.** Develop safe, reliable, and efficient transportation choices to improve air quality, reduce greenhouse gas emissions, promote public health, and enhance quality of life. Recognize that specific strategies to promote transportation alternatives will vary depending on

the unique characteristics of different places.

- **Open Space and Resource Preservation.** Preserve the County's unique natural resources and habitats by carefully managing new development outside the urban and rural services line. Inside the urban and rural services line, promote the reuse of existing structures or developed land, and ensure that open spaces and parks are protected, accessible, and open to all County residents.
- **Unique Community Character.** Enhance the unique characteristics of communities by investing in healthy, safe, attractive, and walkable neighborhoods and efficient transportation choices between communities. Focus County investment within existing communities to increase community vitality, provide infrastructure efficiently, increase mobility, and promote social connections while protecting open space and existing community assets.



Santa Cruz Metro bus, Cabrillo



Congregational Church of Soquel

- **Economic Vitality.** Support locally owned businesses that bind the community together and new businesses that generate environmentally friendly, well-paying jobs and local economic prosperity. Encourage businesses that generate tax revenue such as hotels that generate transient occupancy tax, enterprises that generate sales tax, and manufacturing and other basic productive



Medical Offices, Dominican Hospital

economic developments that create demand for indirect supportive economic activity, so that important services such as police, fire, community services and a social safety net can continue to be provided to residents. Support efforts to train and prepare County residents to occupy locally available jobs. Ensure that County regulations encourage private investment and allow for economically feasible development projects consistent with sustainability goals.

- **Housing Options.** Expand housing choices for people of all ages and incomes to lower the combined cost of housing and transportation and to promote diversity in terms of age, income, and family size throughout the County. Recognize that many factors including economic feasibility affect the provision of housing choices.
- **Inclusive Decision-Making.** Encourage community and stakeholder involvement in planning and decision-making. Ensure that

planning decisions are predictable, fair, forward thinking, and cost-effective. Reform the project review process to encourage high-quality infill development and reduce unnecessary uncertainty and expense.

- **Governmental Coordination.** Align policies and funding among local, County, regional, and State governmental agencies, including schools and colleges. Remove barriers to collaboration, leverage funding, improve local control over local resources, and increase the effectiveness of all levels of government that impact growth and development in Santa Cruz County. Improve financial sustainability of city and county governments, especially given the loss of redevelopment financing for local projects.
- **Fiscal Sustainability.** Recognize that there is a significant gap between the level of governmental revenue that is generated by the existing land use pattern in Santa Cruz County and the level that is needed to sustainably fund necessary public facilities and services. Promote development patterns and specific land uses that generate revenues to provide the infrastructure and services necessary for thriving communities. Recognize that economic development projects help fiscal health by generating revenues that enable high quality public services.

Sustainable Land Use & 3 Transportation Pattern

This chapter presents illustrations of the pattern and type of new development envisioned by the Sustainable Santa Cruz County Plan. These illustrations show examples of high-quality infill development that utilizes land resources efficiently, increases housing choices, supports a balanced transportation system, and enhances the character of the existing community. In the words of one workshop participant, this chapter illustrates “what we can say yes to” to achieve a more sustainable development pattern in Santa Cruz County.

This chapter illustrates a sustainable development pattern at four different scales and settings:

- Plan Area
- Neighborhood Activity Center
- Corridor Infill
- Village Center Infill

Specific locations for where these types of development could be applied are shown in the Community Land Use and Transportation Pattern diagrams in Chapter 4.

The illustrations are a tool to help the community visualize how new development could support the goals of this Plan. The type of development shown in these illustrations would enhance the quality of life for current and future residents by introducing new urban amenities into existing communities. High-quality infill development will increase housing choices for singles, young families, and seniors. Additional retail and services close to existing neighborhoods and work places will make it easier for residents and employees to walk and bike to destinations. New development could incorporate public spaces to build community and enhance resident and worker access to parks and open space.

LAND USE AND TRANSPORTATION PATTERN

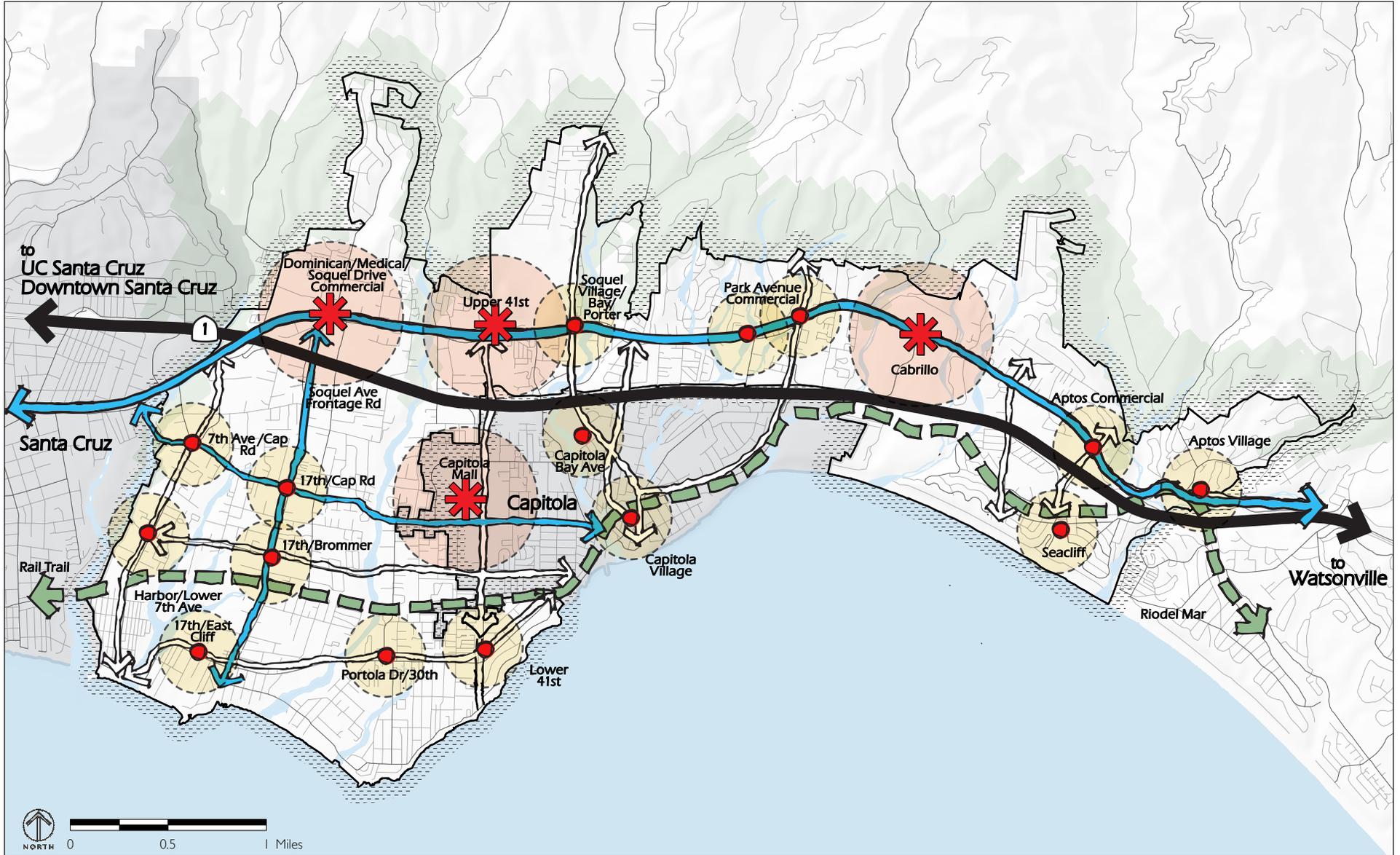
Figure 3-1 presents the general future land use and transportation pattern described by the Vision for the Plan area. This diagram graphically illustrates the guiding principles presented in Chapter 2 of this Plan.

The figure illustrates a set of regional and neighborhood activity centers distributed throughout the Plan area. Growth would be focused in and around these centers, which would support open space preservation elsewhere and help create walkable neighborhoods with convenient access to goods and services.

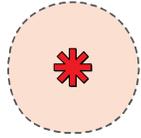
An integrated multimodal network would effectively connect activity centers to each other as well as surrounding areas. Enhanced pedestrian, bicycle, and transit facilities could help improve mobility along the three major east-west corridors. New Highway 1 crossings would create new local-serving north-south connections for all modes of transportation.

Additional details about the features shown in this diagram are provided in Chapter 4 and 5.

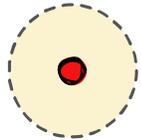
FIGURE 3 - 1 FUTURE LAND USE AND TRANSPORTATION PATTERN



Future Land Use and Transportation Pattern Symbols



Regional Employment Center



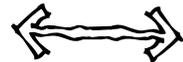
Neighborhood Activity Center



Highway 1



Primary Transit Corridor



Secondary Transit Corridor



Monterey Bay Sanctuary
Scenic Trail Network (MBSST)
and Santa Cruz Branch Rail
Line

Important features of this concept that are highlighted in Figure 3-1 include the following:

Multimodal Transit Corridors

Regional destinations shown within the Plan area are connected by three primary multimodal transit corridors: Soquel Drive, Capitola Road, and 17th Avenue. Secondary transit corridors connect to neighborhood destinations. Land use density, design, and diversity along these corridors support more frequent and convenient transit service. Bicycle storage, shared parking structures, and park-and-ride lots support transportation alternative along the corridors.

Monterey Bay Sanctuary Scenic Trail Network (MBSST) and Santa Cruz Branch Rail Line

The MBSST is shown as an important recreational amenity and east-west connector. Access to the trail is enhanced from adjacent uses. Land uses adjacent to the trail complement its recreational and transportation functions. The Santa Cruz Branch Rail Line, owned by the Santa Cruz County Regional Transportation Commission, hosts portions of this scenic trail. The rail line is also being studied for a range of passenger rail options.

Highway 1

Highway 1 is improved to become a more functional, important east-west connector through the Plan area. Increased transportation options and new local multimodal connections within the urban area will help to alleviate traffic congestion on the highway, or at least better enable residents to avoid highway congestion.

Regional Employment Centers

Regional employment centers are focused around the Dominican and Sutter/Palo Alto Medical Foundation medical district, 41st Avenue, and Cabrillo College in the Plan Area, and Capitola Mall in Capitola. New employment uses and transit infrastructure will be concentrated in these centers as well as at new nodes such as 17th and Brommer and along Soquel Avenue south of Highway 1. New housing is located in places where residents can more easily walk, ride bicycles, or take transit to employment centers.

Neighborhood Activity Centers

Neighborhood activity centers contain commercial and public uses to serve surrounding neighborhoods. Community gathering places are well connected to neighborhoods through bicycle and pedestrian facilities. Residential and mixed-use development in appropriate locations enhances the vitality of the activity centers.



Example of a community-serving activity center within walking distance of nearby housing

INTRODUCTION TO CONCEPT FIGURES

The following concepts for the Plan area represent three different types of locations, which are presented to illustrate concepts of sustainable design appropriate for each type of location. The three settings differ in the type of surroundings into which new buildings and transportation improvements must fit and the needs they should serve. The different concepts reflect the unique character of different neighborhoods within the Plan area.

NEIGHBORHOOD ACTIVITY CENTER CONCEPT

Figure 3-2 presents an illustration of a prototypical neighborhood activity center as envisioned by this Plan. This concept is based on the intersection of 41st Avenue and Portola Drive in Pleasure Point, but the ideas apply to other neighborhood activity centers that incorporate a variety of housing, commercial, employment, and public uses. Additional ideas about neighborhood activity centers are provided in Chapter 4. Important features of this concept include the following:

Community Character

New development depicted by Figure 3-2 maintains and enhances the unique Santa Cruz character. Building and site design is eclectic, creative, and respectful of the surrounding neighborhood. New development maintains the area's pedestrian scale and strengthens a sense of place.

Economic Vitality

The illustration shows additional retail and restaurant uses that increase pedestrian activity and enhance

economic vitality. Public gathering places create destinations that attract shoppers and encourage them to linger. Additional housing accommodates working households whose expenditures support local independent businesses. Office spaces accommodate businesses and employees that earn living wages.

Natural Resources

Natural resources are protected, and new development incorporates rooftop photovoltaic panels, green building practices, and urban agriculture. Existing structures are improved to accommodate modern uses. Redevelopment of vacant and underutilized lots in the urban area supports the wise and efficient use of land resources.

Transportation Choices

Increased residential and commercial intensity supports more frequent bus service. Bike lanes, enhanced crosswalks and other infrastructure improvements increase safety, comfort, and convenience for bicyclists and pedestrians. Mixed-use development creates more destinations that are accessible to area residents by bus, bicycles, and walking. Shared structured parking allows visitors to park once and walk to different destinations.

FIGURE 3 - 2 NEIGHBORHOOD ACTIVITY CENTER CONCEPT

Frequent transit service

Additional Street Trees

Stores and services close to residents

Variety of housing

Eclectic building design

Reinvest in existing structures

Urban agriculture

Public gathering places

Renewable energy

Enhanced design and safety at intersections

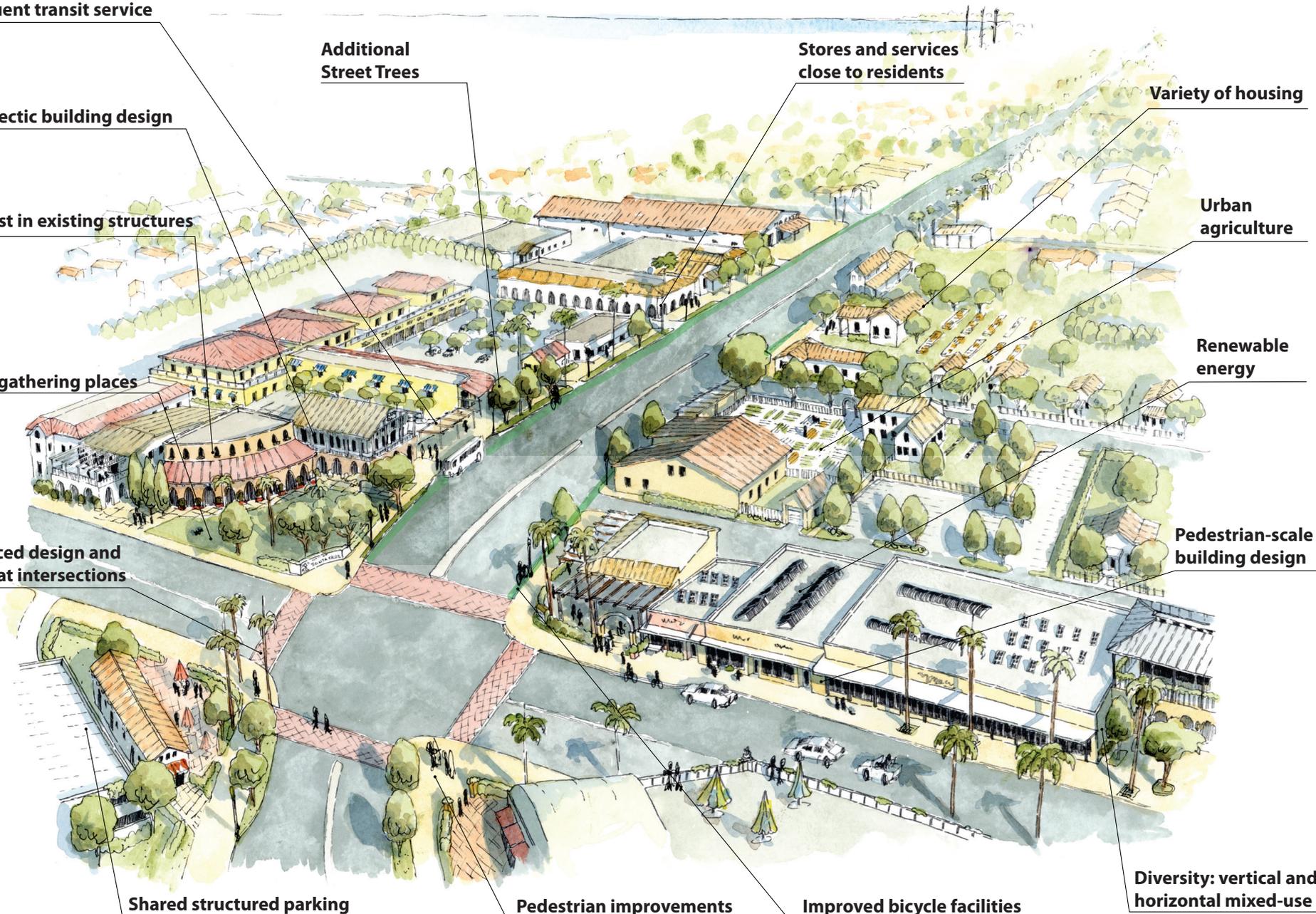
Pedestrian-scale building design

Shared structured parking

Pedestrian improvements

Improved bicycle facilities

Diversity: vertical and horizontal mixed-use



CORRIDOR INFILL CONCEPT

Figure 3-3 illustrates an example of a mixed-use infill project along a primary transit corridor near a regional employment center. Some important features of this concept include the following:

Housing

The increased supply and variety of housing expand housing choice. Housing types include single-family homes, townhomes, small apartments, and mixed-use buildings. New housing can be conveniently located close to stores, services, and transit. More dense housing is located along travel corridors and not within the interior portions of single family areas.

Land Use

The illustration includes a variety of housing types, including townhomes and apartments, which are located close to jobs and transit. High quality commercial spaces accommodate retail and service uses serving residents and nearby workers. A destination is created by the mix of businesses and services.

Public Spaces

Public plazas, courtyards, and outdoor dining provide outdoor gathering places for residents, workers, and the general public. Outdoor spaces can be designed for public safety and comfort.

Building Design

Buildings in the illustration feature varied architectural styles and design character. Architecture is pedestrian friendly and human-scale, with active ground floor uses. Primary building entrances are oriented to the street or

public courtyards. Public safety is enhanced with increased “eyes on the street.”

Parking

As shown here, off-street parking can be located and designed to support pedestrian activity. Parking can be provided behind buildings and buffered from adjacent residential uses. Structured parking could be economically feasible with increased residential density and commercial vitality.

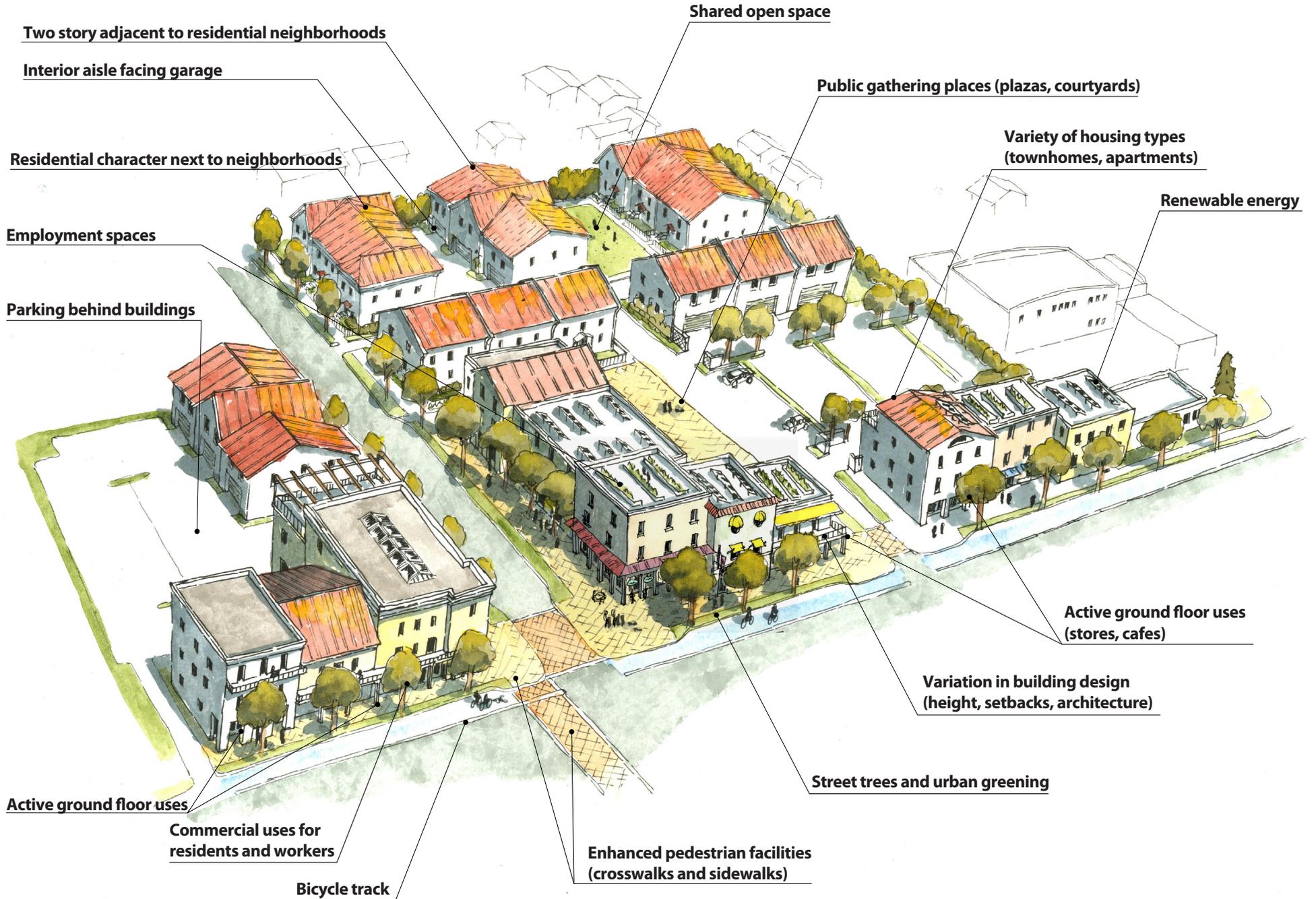
Neighborhood Context

New development should minimize impacts on adjacent residential uses. Taller and larger buildings should be located away from adjacent homes, as illustrated. Landscaped buffers are shown between parking lots and adjacent homes. Buildings that adjoin single family areas adjacent to homes are limited to two stories at the transition area and respect the surrounding residential character.

Economic Vitality

Infill development on an underutilized site along a key transportation corridor can increase the vitality of an employment center. As illustrated, pedestrian-friendly, mixed-use development complements medical uses and educational institutions and helps attract additional investment to an area.

FIGURE 3 - 3 CORRIDOR INFILL CONCEPT



VILLAGE CENTER INFILL CONCEPT

Figure 3-4B presents a visual simulation of one idea for a mixed-use, infill project at the corner of Center Street and Broadway in Seacliff Village. The concepts shown in this simulation are applicable to other village center locations. Important ideas in this simulation include the following:

Land Use

The illustrated mixed-use development includes ground floor retail and restaurants to serve residents and visitors. Upper floor residential uses add to the vitality of the village center and expand housing choices. A small boutique hotel at the rear of the site could provide visitor accommodations.

Site Design

The entire site has been envisioned as an integrated project consistent with the Seacliff Village Plan. Courtyards, public gathering places, and areas for outdoor dining enhance the vitality of the village and increase pedestrian activity.

Building Design

Active ground floor businesses are shown to reflect the scale and character of existing buildings on the opposite side of Center Street. Buildings are human scale and feature rhythm and variation in building forms, material, and colors.

Parking

A parking district could manage the supply and demand of parking for all of Seacliff Village. Required on-site parking could be reduced through payment of in-lieu fees and coordinated shared use of the State beach parking lot. On-site parking could be located to the rear and interior of the development site.

Streetscape Improvements

In the foreground of the simulation, pedestrian safety and convenience has been enhanced with widened sidewalks, textured street crossings, and street lighting. Undergrounded utilities and street trees further enhance the public realm.



Seacliff Village, south side of Center Street

**FIGURE 3 - 4A
(EXISTING)**

SEACLIFF VILLAGE, NORTHEAST CORNER OF CENTER STREET AND STATE PARK DRIVE VISUAL SIMULATION



FIGURE 3 - 4B SEACLIFF VILLAGE, NORTHEAST CORNER OF CENTER STREET AND STATE PARK DRIVE VISUAL SIMULATION (WITH A MIXED-USE, INFILL PROJECT)



Focused Development & Community Character 4

The adopted Guiding Principles for the Sustainable Santa Cruz County Plan call for more focused development in order to use land efficiently. New development should be compact, located primarily in urban areas, and feature a mixture of uses and development intensities to support housing and transportation choices. New development should enhance the distinctive characteristics of communities and honor existing town and village plans.

How can development patterns in Santa Cruz County best support this vision? What opportunities exist to shift existing land use conditions in ways that better support sustainable communities in Santa Cruz County? This chapter suggests answers to these questions and identifies ways to encourage private development and redevelopment of the type that promotes sustainability and is desired by the community.

The chapter begins with a description of the existing development pattern in the Plan area and an overview of the relationship between land use, urban design, and transportation behavior. It then presents suggested land use and community design goals and policies. Strategies for how these goals could be implemented through the adoption of new planning tools are in Chapter 8.

Existing Conditions

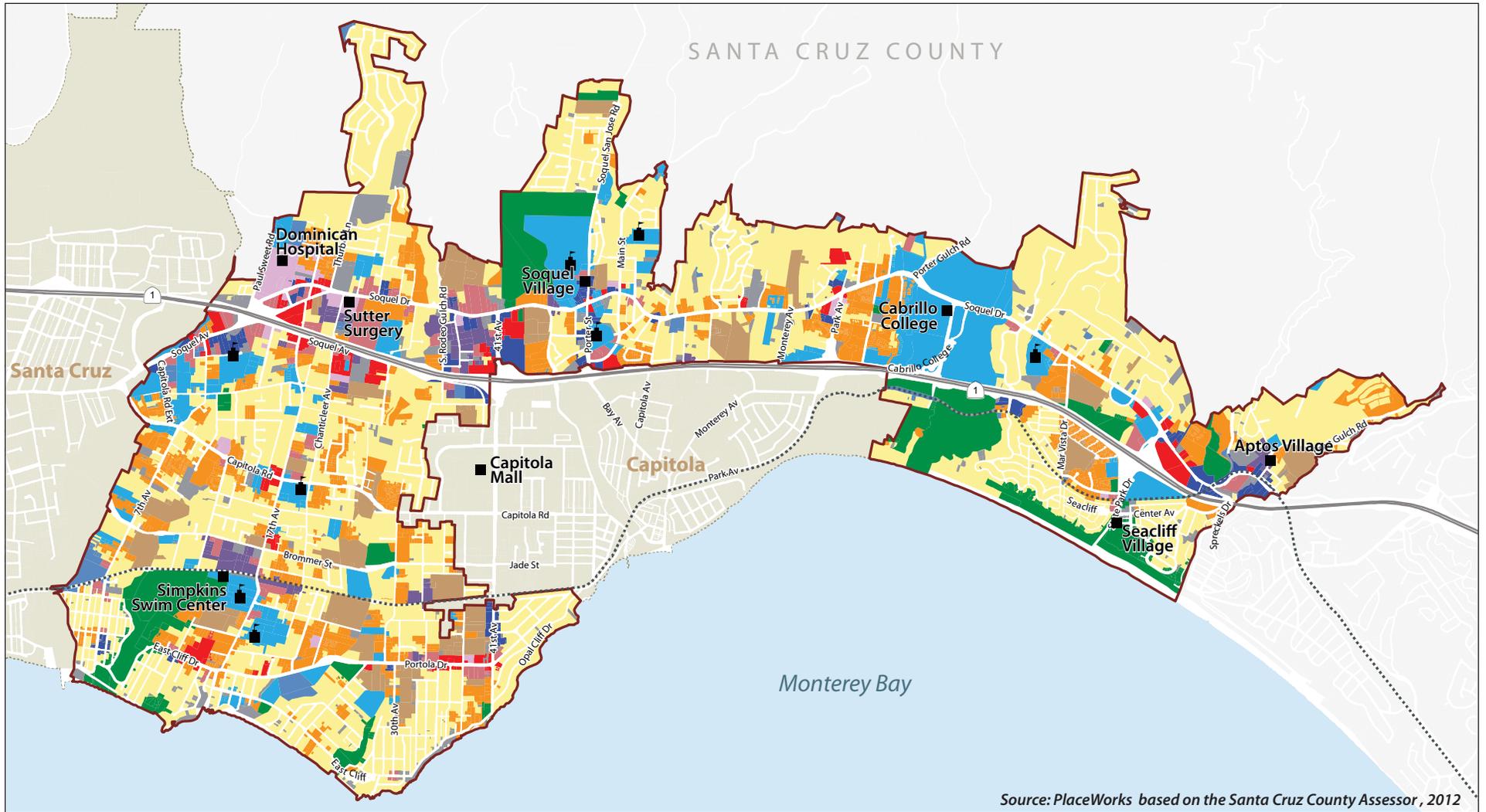
Below is a summary of existing conditions information most relevant to the ideas contained in this chapter. More detailed existing conditions information can be found in the Existing Conditions Report, prepared for the Plan (Appendix E).

LAND USE

Existing land use in the Plan area based on County Assessor data is shown in Figure 4-1. Key observations about existing land uses include the following:

- **Residential Uses.** Single-family residential is the predominant land use in the Plan area. Multi-family residential uses are located mostly along Soquel Drive, near Highway 1, in Live Oak, Soquel, and Aptos, and along major arterials in Live Oak. A notable number of mobile home parks are found throughout the Plan area, with the largest number in Live Oak.
- **Medical and Educational Uses.** A cluster of medical uses is located at the western end of Soquel Drive, anchored by Dominican Hospital and the Sutter Surgery Center. The Cabrillo College campus occupies a large area on Soquel Drive south of Park Avenue.
- **Retail Uses.** Large-scale retail uses are focused on Soquel Avenue and Soquel Drive near the Highway 1 interchange, 41st Avenue at Soquel Drive, and Soquel Drive at State Park Drive. Smaller-scale retail uses are found near major intersections along Soquel Drive and near the intersection of major arterials in Live Oak.
- **Commercial Service Uses.** The Plan area contains a variety of non-retail, heavy commercial service uses. These include auto services, auto storage, and landscape/timber businesses. Some of these uses can consume a large amount of land while providing relatively few jobs.

FIGURE 4 - 1 EXISTING LAND USE



Source: PlaceWorks based on the Santa Cruz County Assessor, 2012

- | | | | |
|---------------------------|---------------------|-------------------------------------|---|
| Plan Area | Mobile Home Park | Medical | Open Space/Park/Recreational/Agricultural |
| Rail Line | Retail and Services | Industrial | Vacant |
| Single-Family Residential | Office | Utilities and Public Infrastructure | Public Schools |
| Multi-Family Residential | Other Commercial | Public/Quasi Public | |



- **Industrial Uses.** Industrial uses are concentrated in an area surrounded by 41st Avenue, Highway 1 and Soquel Drive. There are also a few isolated sites of industrial uses in Live Oak.
- **Local Schools.** A number of public schools are located in the Plan area, including Soquel High School, Mar Vista Elementary School, and Live Oak Elementary School among others. These schools function as important community centers but also generate a significant amount of local traffic.

DEMOGRAPHIC CHARACTERISTICS

Table 4-1 presents a summary of key demographic characteristics of residents within the Plan area. These characteristics are compared to Santa Cruz County overall and the State of California. Demographic characteristics that are most relevant to the Plan include:

- **Age.** Residents in the Plan area are, on average, older than residents in the rest of the county and the state. The percentage of senior citizens in the area will increase at a rate that exceeds that in the county and state.
- **Education.** Plan area residents have relatively high levels of educational attainment, with significant variation between communities. Aptos and Pleasure Point have the highest percentage of residents 25 and older with a college degree, and Live Oak and Twin Lakes have the lowest percentage.
- **Household Income.** Median household income in the Plan area is lower than in the county overall. There is significant variation in household income among communities in the area, with Aptos having the highest income and Twin Lakes the lowest.

- **Ethnicity.** The Plan area overall is somewhat less ethnically diverse than the county and much less ethnically diverse than the state. This does vary significantly across the Plan area communities, with Live Oak and Twin Lakes both having relatively large Latino populations. Moreover, the number of Latinos as a percentage of the Plan area population has been growing relatively rapidly from 15 percent in 2000 to 21 percent in 2012.
- **Language.** The most common language spoken at home in the Plan area is English (80 percent) followed by Spanish (15 percent). Both Live Oak and Twin Lakes have large communities of Spanish speakers.

JOBS AND EMPLOYERS IN THE PLAN AREA

The current economic base within the Plan area is heavily concentrated in health care and education, with smaller concentrations of professional and business service jobs and retail jobs. Manufacturing and leisure and hospitality comprise a lower proportion of all jobs in the Plan area compared to the county. The Plan area's share of agriculture is very small unlike the county, which has a large presence in this sector. The largest employers in the Plan area include Dominican Hospital, Cabrillo College, Home Depot, and Safeway.

Principal employment clusters within Mid-County are located in downtown Santa Cruz, at the University of California Santa Cruz, and in Capitola. Within the Plan area, jobs are clustered around Dominican Hospital, Cabrillo College, and along Soquel Drive between 41st Avenue and Porter Street. Additional employment is found stretched out along Soquel Drive into Aptos, and dispersed in Pleasure Point and Twin Lakes.

TABLE 4-1 KEY DEMOGRAPHIC CHARACTERISTICS OF RESIDENTS

	Plan Area		Santa Cruz County	California
Population (2012)				
Total Population	46,654	--	262,804	37,718,293
Age (2012)				
Median Age	40.8	--	36.7	34.8
17 Years and Younger	9,556	20.5%	22.5%	25.7%
18 to 64 Years	31,074	66.6%	66.3%	63.1%
65 Years and Older	6,024	12.9%	11.2%	11.2%
Race (2012)				
White	32,658	70.0%	58.6%	39.0%
Black/African American	462	1.0%	0.9%	5.7%
Asian	1,720	3.7%	4.2%	13.2%
Other Race	1,785	3.8%	2.9%	2.8%
Hispanic	10,028	21.5%	32.9%	38.5%
Language Spoken at Home (2012)				
English Only	37,691	80.8%	71.9%	57.1%
Spanish	6,836	14.7%	23.0%	28.5%
Other Language	2,127	4.5%	5.1%	14.4%
Education (2010)				
Population 25+ with College Degree	14,978	46.6%	45.3%	37.7%
Income (2010)				
Median Household Income	\$60,562	--	\$65,253	\$60,883

Source: BAE Urban Economics, 2012, based on data drawn from Nielson, the US Census, and the 2006-2010 American Community Survey (ACS).

GROWTH TRENDS

The Existing Conditions Report prepared for this Plan included a set of Economic and Population projections for an area of the County that is roughly the same as the Plan area. These projections were based on a set of assumptions and past trends that included the influence of the economic downturn of 2008. The plan projections made at the time were more modest than recent projections made by other demographers considering the same time period.

The Association of Monterey Bay Area Governments (AMBAG) is the regional planning agency responsible for reviewing the State of California's growth projections, along with other demographic and employment related information. AMBAG projects that 5,388 new housing units will be needed to meet the needs of current and new residents between 2010 and 2035 (Appendix C).

The location and type of housing units that could be added over the next few decades is a key component of sustainable community planning. Combined with the demographic information that shows households are aging and shrinking, these growth projections demonstrate a need for smaller units in convenient locations to be added to the mix of single-family homes and townhomes in the Plan area and throughout the County.

In addition to the overall growth projection for new households, AMBAG determines the County's fair share housing obligation, known as the Regional Housing Need Allocation (RHNA). The RHNA is discussed in further detail in Appendix C, but is essentially the minimum level of new housing units the County must plan to accommodate over the next Housing Element period, which is the 10-year period

from January 1, 2014 through December 31, 2023. For the unincorporated County, the RHNA is 1,314 housing units.

The growth projections presented by AMBAG, as well as those developed for the Existing Conditions Report, provide a frame of reference for considering the amount, type, and best location for housing and employment throughout the County.

COMMUNITY DESIGN

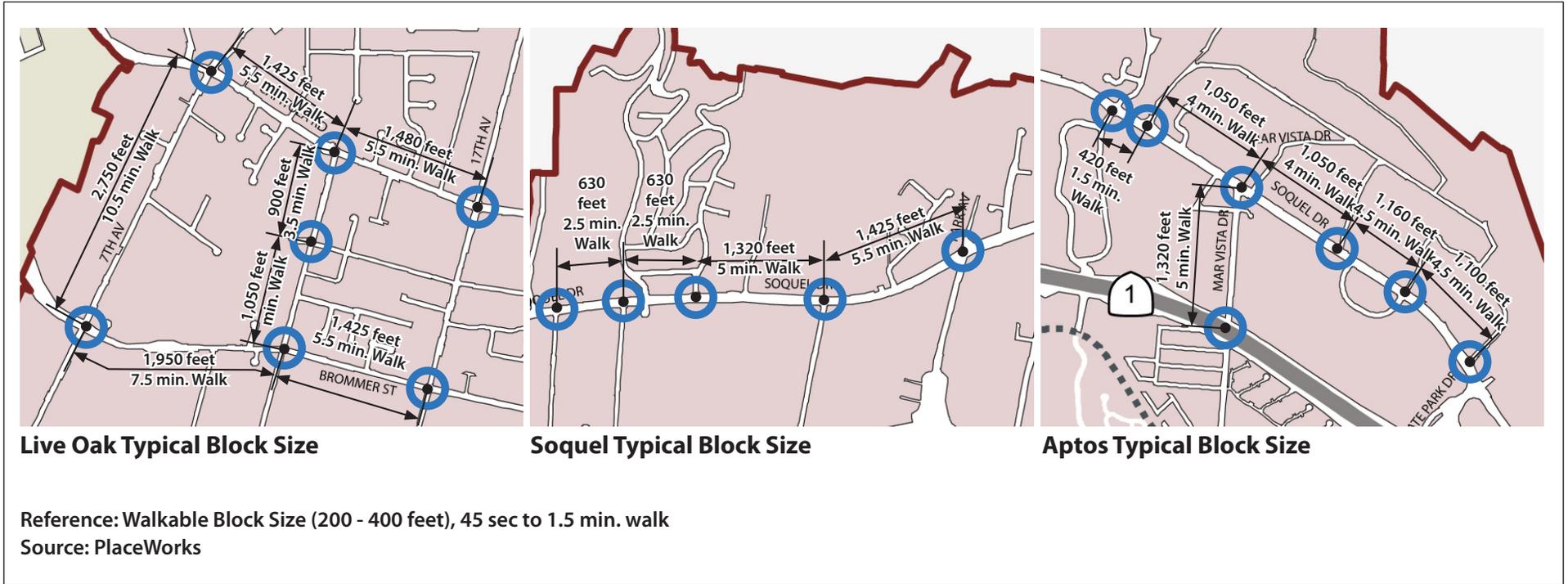
Corridors, Districts, and Neighborhoods

The urban area of the county is organized around a network of corridors, districts, and neighborhoods. Soquel Drive is the dominant corridor and changes in character along its seven-mile length. Individual segments exhibit distinct design character. In Soquel and Aptos, a series of employment and commercial centers are surrounded by residential neighborhoods. In Live Oak, commercial centers and residential neighborhoods are shaped by an intersecting pattern of arterial roadways. The design character of all places within the Plan area is shaped by the natural setting of hills, ocean, and creeks.

Street and Block Pattern

Street and block patterns play a large role in defining the design character of a place. Figure 4-2 shows typical street and block patterns in Live Oak, Soquel, and Aptos. In these neighborhoods block lengths are greater than the 200 to 400 feet needed to support more walkable neighborhoods. In Live Oak, long block lengths are compounded by numerous cul-de-sacs and dead-end streets, which further limit walkability and pedestrian connectivity. In Soquel and Aptos,

FIGURE 4 - 2 STREET AND BLOCK PATTERNS





Live Oak Supermarket storefront facing Capitola Road



This market in Live Oak serves area residents

residential areas are connected to one another primarily by Soquel Drive, which is generally not a pedestrian-friendly environment due to narrow or missing sidewalks and high vehicle speeds.

Site and Building Design

The design character of a site is defined by building placement, parking location and design, landscaping, building orientation, and vehicle, bicycle, and pedestrian circulation. Figure 4-3 compares the site and building design in two distinct places: Soquel Village and Upper 41st Avenue. In Soquel Village, buildings abut the front sidewalk with main entries oriented to the street and parking located behind buildings. Along Upper 41st Avenue, buildings are placed towards the rear of the site to accommodate vehicle circulation and large parking lots.

Elements of building design include massing, façade treatments, materials, and architectural style. In Soquel Village, buildings feature active ground-floor uses with windows that help to activate the street. Building height and width reflect human-scaled proportions. On Upper 41st Avenue, buildings are expansive, self-contained structures that accommodate large numbers of shoppers. Exterior treatments, materials, and architectural style reflect the buildings' function as a regional shopping destination.

Soquel Village and Upper 41st Avenue are examples of extremely contrasting places, but they do help to illustrate the range of design conditions present in the Plan area.

FIGURE 4 - 3 SITE AND BUILDING DESIGN

SOQUEL VILLAGE

- Building at front sidewalk
- Parking behind building

PHOTO BELOW



- Variation in building height
- Active ground floor uses
- Pedestrian scale



HOME DEPOT SHOPPING CENTER

- Primary buildings set back from street
- Parking between buildings and street

PHOTO BELOW



- Uniform building height
- Horizontal orientation
- Automobile scale
- Long distances between street and building entrances



Travel Behavior and the Built Environment

The relationship between development patterns and travel behavior is one of the most heavily researched subjects in urban planning. Not surprisingly, research has found a strong connection between the spatial arrangement of cities and how frequently people take transit, bicycle, or walk to destinations, and how far they travel to reach their destinations.

The principal factors that influence travel behavior are often referred to as the “Three D’s”: Density, Diversity, and Design. Density refers to the concentration of population (residents per acre) and the concentration of employment (jobs per acre). Diversity relates to the mixture of land uses and the balance of jobs and housing in a given area. Design refers to physical characteristics of development, including street networks and block patterns, pedestrian amenities, and building form and placement. Many researchers have found that ease of access to destinations, including employment centers, is another important variable influencing travel behavior. The “Three D’s” term relates to a “Three S’s” term that is particularly relevant to Santa Cruz County: the housing needs of “singles, students, and seniors.” People in this demographic are more willing or more reliant on transit, cycling, and walking.

Relatively low rates of transit use in the Plan area are related to existing patterns of low land use density, low diversity, limited employment density outside the medical corridor and Cabrillo College, low quality pedestrian environment, and destinations not on transit corridors. To increase

transportation alternatives and reduce greenhouse gas emissions, the Plan recommends modifying these existing land use patterns in ways that support a more sustainable community and enhance residents’ quality of life.

POPULATION AND EMPLOYMENT CONCENTRATION

Figure 4-4 identifies areas of population concentration within the mid-County area. Based on Census data, downtown Santa Cruz has the highest population concentration. Other areas of relatively high population concentration include the University of California at Santa Cruz, areas along Capitola Road and Portola Drive in Live Oak, the Jewel Box neighborhood in Capitola, and the area near Mar Vista Drive and Highway 1 in Aptos.

As shown in Figure 4-5, Downtown Santa Cruz has the greatest employment concentration. Other areas of employment concentration include UC Santa Cruz, the medical services area around Dominican Hospital and the Sutter Surgery Center on Soquel Drive, Capitola Mall, and Cabrillo College.

DIVERSITY OF LAND USE

Figure 4-6 provides a graphic representation of the diversity of land use within the Plan area. Areas with the greatest diversity of land uses within the Plan area tend to be located in historic town centers and community- and neighborhood-serving commercial areas. Soquel Village, Aptos Village, Seacliff Village, and lower 41st Avenue near Portola Drive all have relatively high land use diversity. There appears to be a correlation between land use diversity and historic, traditional grid street patterns with short blocks.

FIGURE 4 - 4 POPULATION CONCENTRATIONS

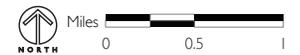
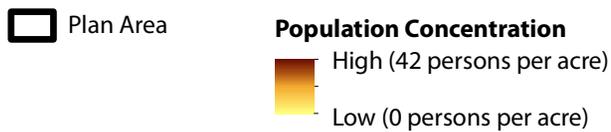
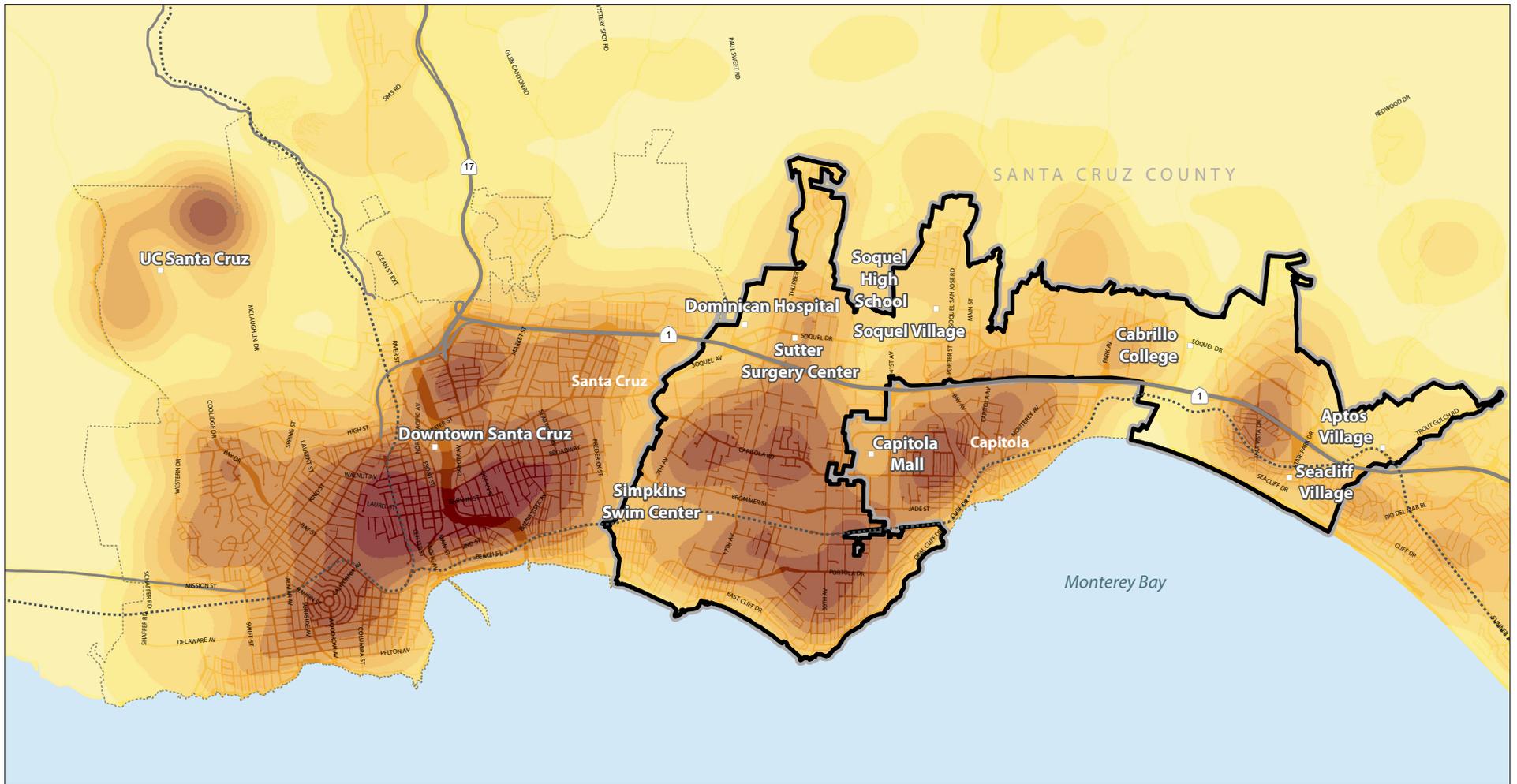


FIGURE 4 - 5 EMPLOYMENT CONCENTRATIONS

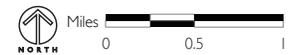
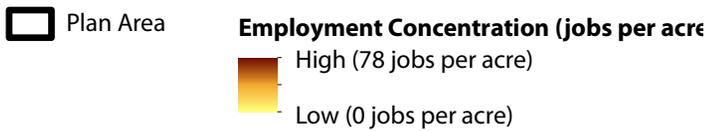
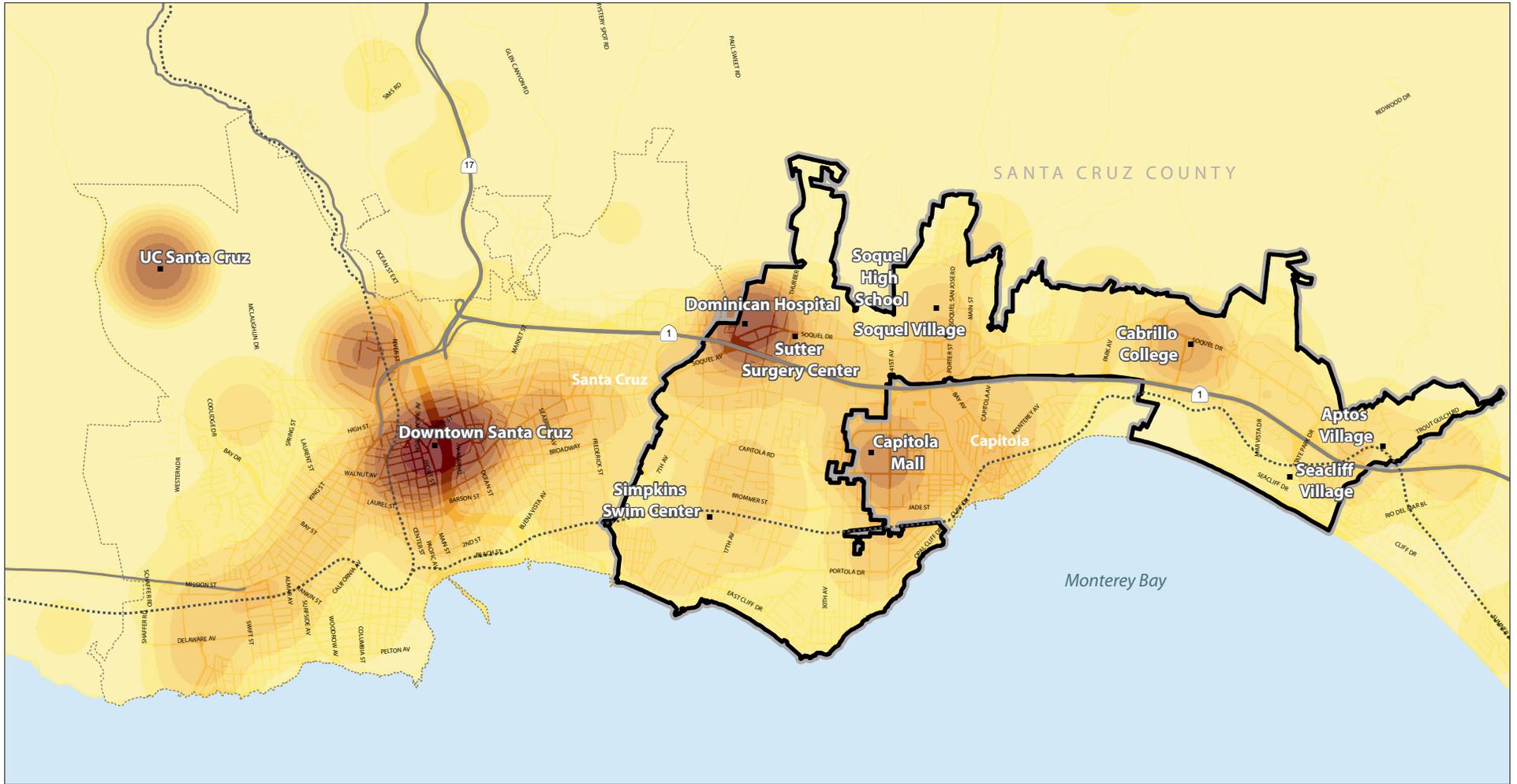
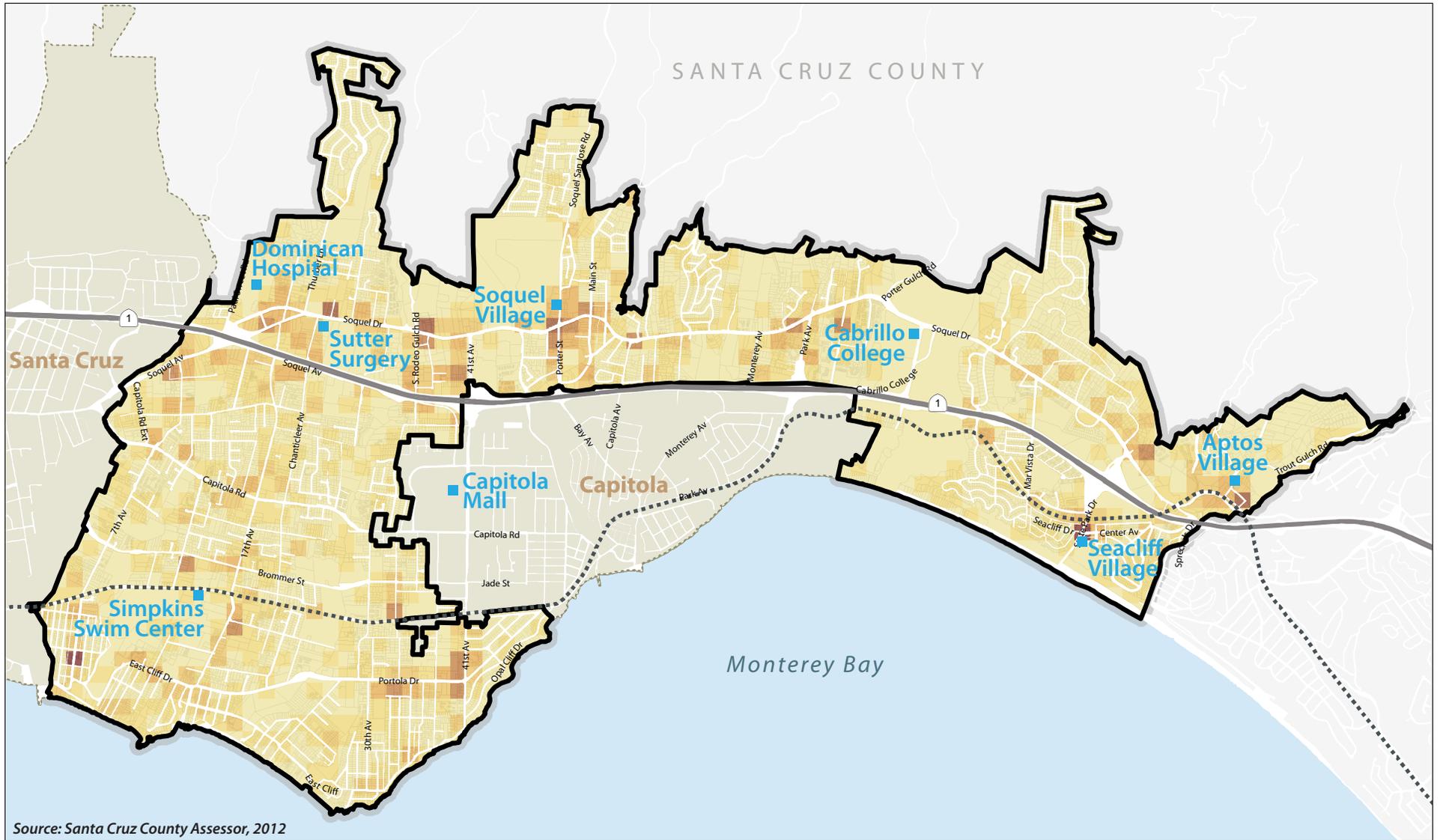
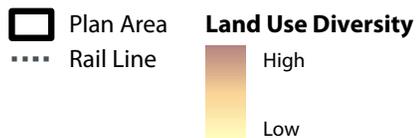


FIGURE 4 - 6 LAND USE DIVERSITY



Source: Santa Cruz County Assessor, 2012



Jobs/Housing Balance

A good balance of jobs and housing is an important component of a sustainable community. With this balance, residents have greater opportunity to find employment close to where they live and are less dependent on commuting long distances to find work. Communities with a good job/housing balance typically have a number of jobs that is close to the number of employed residents in the community.

Recent U.S. Census data shows 17,218 jobs compared to 22,370 working residents within the Plan area. The County overall is also unbalanced, with 121,706 working residents but only 109,927 jobs in the County. Many of these residents commute to jobs over the hill in Santa Cruz County.

Promoting a healthy jobs/housing balance is an important goal for the Plan, but the focus should be on promoting a healthy balance overall in the county, not just in the Plan area. Plan area residents can easily access jobs in employment centers in the City of Santa Cruz and Watsonville, and vice versa. As one integrated region, a healthy jobs/housing balance in Santa Cruz County will increase transportation alternatives, reduce greenhouse gas emissions, and promote economic vitality for all communities in the county.

DESIGN

The design character of the built environment varies throughout the Plan area. As described above, there are design elements in historic villages that support transportation choices. Active ground floor uses are oriented to the street, with parking located behind buildings; shorter blocks support walkability. However, narrow sidewalks, limited streetscape improvements, and incomplete bicycle facilities can make walking, biking, or taking transit feel inconvenient or unsafe. These same conditions exist in older residential neighborhoods.



Variation in building design in Aptos Village

Other commercial areas are designed primarily to accommodate the automobile. Buildings are placed toward the rear of a site to accommodate large parking lots. Long blocks and limited street connections make walking to destinations unappealing. Amenities for pedestrians, bicycles, and transit are typically limited. Many residential neighborhoods share similar characteristics.

Goals and Strategies

Land Use and urban design strategies in this chapter are organized around four main goals:

- Vibrant Centers
- Housing Choice
- Livable Community Design
- Increased Connections

For each goal, strategies are suggested to support a more sustainable development pattern in Santa Cruz County. Chapter 8 presents specific recommendations for how these strategies could be implemented through amendments to the County’s General Plan and Zoning Code.

VIBRANT CENTERS

Vibrant centers are an essential component of a sustainable development pattern in Santa Cruz County. These centers of activity contain a diversity of land uses, which create opportunities for people to walk or bike to destinations. Concentrations of housing and jobs support frequent transit service. Active public gathering places build community and enhance quality of life. Resident-serving stores and services



A parking lot located between buildings and street in Aptos

strengthen adjacent neighborhoods and contribute to economic vitality. Compact urban form accommodates a variety of more affordable housing choices.

As discussed below, this Plan describes three general strategies to create vibrant centers:

- Revitalize existing shopping centers.
- Create mixed-use activity nodes.
- Strengthen existing town centers.

Revitalize Existing Shopping Centers

An important finding from the County’s Draft Economic Vitality Strategy is that there is a strong need for renovation and modernization of existing commercial buildings. Many of these existing commercial buildings are several decades old and do not reflect current customer and tenant demands for modern and attractive shopping destinations. Some centers are also “too big” given their proximity to competing shopping areas in Downtown Santa Cruz and Capitola.

Community Voices

“Match infrastructure improvements to increased needs”

“Increase density at strategic nodes”

“Make beautiful and compelling urban design a priority”

“Compact Mixed Use Communities”

“Create mixed use developments around neighborhood nodes”

Figure 4-7 shows the location of major shopping centers in the Plan area, including East Cliff Village in Live Oak, El Rancho Shopping Center in Pleasure Point, Rancho Del Mar in Aptos, and the Home Depot shopping center on Upper 41st Avenue. Some of these shopping centers, such as East Cliff Village, are ready for immediate improvement. Changes to more recently constructed centers, such as the Home Depot center, would likely occur over the longer term.

Existing shopping centers could be transformed into lively places that support the County's sustainability goals. Key to this transformation is an increase in land use diversity and pedestrian-friendly urban design. More specific ways to revitalize existing shopping centers include the following:

- Renovating existing commercial space to create higher quality space that is more modern, inviting, clean, attractive, and active.
- Creating additional commercial space with larger and more adaptable space to better suit the types of businesses requested by the community.



El Rancho Shopping Center on Portola Drive

- Adding landscaping to create a more inviting and pleasant environment.
- Adding public gathering places, such as plazas, courtyards, and outdoor dining areas.
- Adding new office space so that jobs can be located closer to residents, stores, and services.
- Adding residential uses, such as townhomes or apartments, so that residents can live closer to stores and services; additional housing can support businesses and add to the economic vitality of the shopping center.

The transformation of aging shopping centers has been successful in many other communities. An early example is the Hillcrest District Uptown Project in San Diego. Twenty years ago this project transformed an aging shopping center into a lively, mixed-use community center. The completed project contains a grocery store anchor with housing above ground level commercial uses. New townhomes, public spaces, and community uses contribute to the vitality and success of the project. This type of project could serve as a model for long-term transformation of places such as upper 41st Avenue and El Rancho shopping center on Portola Drive.

Closer to Santa Cruz, the recent Alma Street mixed use project in Palo Alto is an example of the transformation of a smaller commercial property into a neighborhood-serving mixed-use center. Prior to redevelopment the site contained a strip commercial-style shopping center with a grocery store. The site was redeveloped with a new grocery store with offices above, and condominiums at the rear of the property. This model of commercial property redevelopment could be appropriate for East Cliff Village and other small shopping centers in the county.

FIGURE 4 - 7 MAJOR SHOPPING CENTERS



- Urban Service Line/Study Area
- Major Shopping Centers
- Rail Line



East Cliff Village Shopping Center Community Workshops

In April and June of 2013 the County hosted two community workshops to discuss the future of the East Cliff Village shopping center site. At these workshops residents described the need to update and activate the site and improve public safety. Many participants supported creating new public gathering places such as outdoor seating areas and an area that could continue to accommodate the Farmer's Market and other community events.

Desired land uses for the site included a small grocery store, café, restaurant, and neighborhood-serving retail and services. Participants also expressed general support for new professional or medical office. Opinions were mixed on the question of adding residential uses on the site. Some felt that housing would increase vitality and safety in the area, while others were concerned about neighborhood impacts from parking and traffic. All agreed that any type of new development should respect the scale and character of the neighborhood.

Suggested guiding principles for redevelopment of the East Cliff Village Shopping Center from these two workshops are attached to this Plan in Appendix E.



Uptown Shopping Center Redevelopment in San Diego.



Townhomes and residential above ground floor commercial in same center

Create Mixed-Use Activity Nodes

In addition to transforming shopping centers, vibrant centers also can be created through mixed-use infill development on sites in strategic locations. Figure 4-8 shows the types of locations where new mixed-use infill might be appropriate. These locations include areas close to major employment centers such as the Dominican/Sutter medical district and Cabrillo College, segments of transit corridors with an existing commercial character, and at the intersection of major arterials in Live Oak.

Figure 3-3 in Chapter 3 provides an illustration of what an infill, mixed-use project along Soquel Drive could look like. In the illustration retail, housing, and public spaces create a new activity center that complements the nearby medical uses. The scale and intensity of the development reflects its location on a transit corridor and proximity to a major employment center. Less intensive mixed-use development would be more appropriate in locations outside of employment centers such as at the intersection of major arterials in Live Oak and Aptos.

Creating new centers through infill and mixed-use development supports the County's sustainability goals in the following ways:

- New townhomes and multi-family housing increase the supply of affordable housing.
- Retail and services located close to jobs provide more opportunities for nearby workers to walk to stores and services.
- New public amenities strengthen the real estate market and make further investment more likely.



The East Cliff Village shopping center (above) could be redeveloped with pedestrian-friendly design and new public gathering places (below).

FIGURE 4 - 8 MIXED USE INFILL ATTRACTORS AND POSSIBILITIES



Types of Areas for Mixed Use Infill

-  Live Oak Major Intersections
-  Existing Employment Centers
-  Transit Corridor with Existing Non-Residential Character



- Opportunities for shared parking reduce the amount of land needed for parking and increase the economic feasibility of infill development.
- New public gathering places serve residents and workers.
- New commercial development provides modern retail space to better meet market demand.

Strengthen Existing Village Centers

Vibrant centers can also be achieved by strengthening existing village centers. The historic villages of Soquel, Aptos, and Seacliff contribute to a unique sense of place and community identity. They are home to a variety of small local businesses that serve the daily needs of residents, workers, and visitors. The traditional pedestrian-friendly and mixed-use development pattern provides opportunities for nearby residents to walk or bike to a variety of destinations.

Figure 4-9 shows the boundaries of town plans for Soquel Village, Aptos Village, and Seacliff Village. These town plans describe the desired type of development as well as transportation and public improvements. Any new development within towns must reflect the distinctive character of each community through careful site planning, building design, and architectural style. New development must also respect adjacent residential uses and minimize traffic, parking, and noise impacts within these neighborhoods.

There are vacant and underutilized lots that can accommodate infill development within existing town centers. New residences in commercial buildings would increase pedestrian activity and economic vitality in core



Outdoor dining as part of a mixed-use development



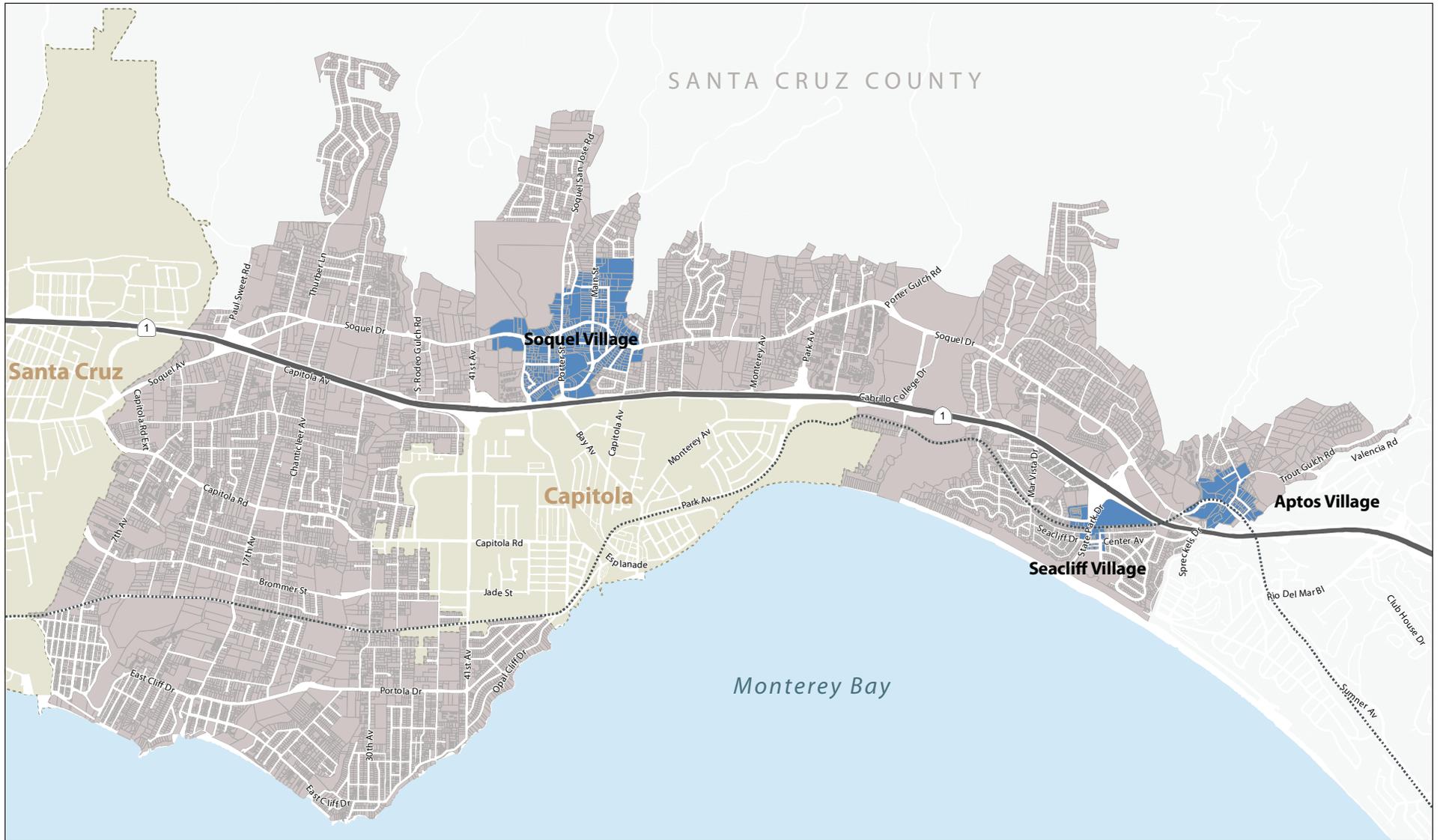
Two-story mixed-use project with office above retail

Community Voices

“Families need places to go that they can walk to”

“More community gathering places.”

FIGURE 4 - 9 TOWN PLAN BOUNDARIES



- Plan Area
- Rail Line
- Town Plan Area



areas. New ground floor retail, restaurants, and outdoor dining would provide valued amenities for residents and visitors. New visitor accommodations in designated areas would also activate those areas and supply additional customers for shops and restaurants. Figure 3-3 in Chapter 3 illustrates one example of infill development.

Opportunities also exist for infill residential development around the edges of town centers. In these areas a variety of housing types, including small-lot single-family homes, townhomes, and small apartments would increase housing choices and support local businesses within the town centers.



Aptos Village Center

HOUSING CHOICE

The adopted Vision for the Sustainable Santa Cruz County Plan (Chapter 2) includes increased housing choices to meet the broad range of housing needs and preferences within the county. Most housing in the Plan area today is in the form of single-family detached homes. These homes are typically located away from stores, services, and areas with good transit service, and are the most expensive housing. As the average age of residents in the County continues to increase, this type of housing will create challenges for seniors who wish to age in place. The existing housing stock is also poorly suited to meet the needs of singles, students, and young families.

Community Voices

“Affordable, flexible housing stock”

“Develop housing near or within services, jobs”

“Socio-economic diversity through planning and implementation”

“Variety of housing price levels at locations served by alternative transportation”

Housing affordability is a critical issue in Santa Cruz County. Based on data from the Bureau of Labor Statistics and the National Low Income Housing Coalition, the Santa Cruz-Watsonville area is the third least affordable area in the country for renters. Of the 226 areas tracked by National Association of Home Builders (NAHB), the Santa Cruz-Watsonville area ranks 220th in terms of affordability of for-sale housing. Among metropolitan areas with less than 500,000 residents, the Santa-Cruz Watsonville area is the second least affordable metro area in the nation (median household cost relative to median household income).

Increasing housing choice will be even more important in the future as demographics continue to shift. To increase housing choice consistent with the principles of sustainable development, this Plan suggests the following two strategies:

- Locate housing close to jobs, stores, and services
- Encourage a variety of housing types



Small lot single-family homes facing a central courtyard.



Rental townhomes in Soquel

Locate Housing Close to Jobs, Stores, and Services

New housing should be located in places that reduce resident dependence on the automobile. Ideal locations for new housing in the Plan area include areas that are close to major employment centers or that have access to transit that

serve these centers. New housing should also be located to allow residents to walk or bike to neighborhood-serving stores and services. These destinations could be existing (such as in existing village centers) or could be provided as part of new mixed use and commercial infill along transit corridors and in neighborhood centers.

Ideally, all residents should be able to walk or bike to a variety of neighborhood-serving stores within 20 to 30 minutes. This concept is referred to as “walk circle” and is an important component of a sustainable community. Generally, participants at Plan workshops responded well to the concept of a “20 minute neighborhood” which contains neighborhood-serving uses within walking distance.

Locating new housing in these types of places is consistent with existing County policy. Housing Element Program 3.5 states:

“Support additional incentives that will expand the opportunities for increased residential uses within mixed use developments in the County, such as flats above retail uses, including expanding the Planned Unit Development (PUD) Ordinance to facilitate such uses. Potential incentives include defining nodes/corridors where mixed use projects would be strongly encouraged or required and exploring reduced parking and other standards for mixed use projects.”

Figures 4-12 and 4-14 at the end of this chapter show some possible locations for new multi-family housing along Soquel Drive in Soquel and Aptos. These locations include the Atilia’s site, among others. Implementation of the Sustainable Santa Cruz County Plan will involve further analysis of the suitability of these sites for additional housing.

Encourage a Variety of Housing Types

Housing types are not limited to detached single-family homes or apartment buildings. A broad array of housing types are possible within the Plan area. A variety of housing types will increase choices for residents and better meet the housing needs of a diverse community.

Following are illustrations of various types of residential developments. However, the full range of options is not available at this time to Santa Cruz County because the current General Plan and County Code do not allow some types, and can discourage others. Planned Unit Developments and variances would be required to develop some of these styles, where existing site standards and density are limitations that prevent these housing choices.

Housing affordability is closely linked to density. The County can promote affordable housing choice by allowing a greater variety of housing types that require less land area per unit. Denser housing must be carefully located and designed to complement its surroundings and enhance the quality of life for current and future residents.

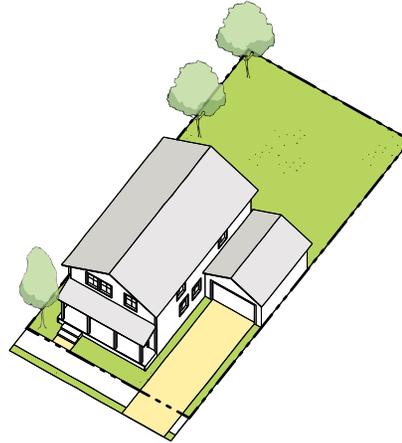
Figure 4-10 illustrates some example housing types grouped into three general categories:

- **Single-Family Types** include small lot single-family homes, accessory dwelling units/second units, side yard homes, and bungalow courts. This housing type is well suited for young families and can be located within or adjacent to existing single-family neighborhoods.
- **Multi-Family Types** include duplex, triplex, and quadplex homes, townhomes, small apartment buildings, and studios. Multi-family housing provides more affordable housing choices for seniors, singles, and students.

FIGURE 4 - 10 HOUSING TYPES - SINGLE FAMILY (1 OF 4)

SMALL LOT SINGLE-FAMILY HOMES

A small lot single-family home is a detached residential structure on a small lot that provides a complete, independent living facility for one household. This type of development is typically located in low- to medium-density residential neighborhoods or in transition areas between commercial areas and low- to medium-density residential neighborhoods.



SECOND UNITS/ACCESSORY DWELLING UNITS (ADUS)

An accessory dwelling unit or ADU is a secondary dwelling unit located as a part of a structure, or above or behind a detached or semi-detached garage structure. ADUs contribute to a more diverse housing stock and can provide affordable housing opportunities. This type of development is typically located in low- to medium-density residential neighborhoods.

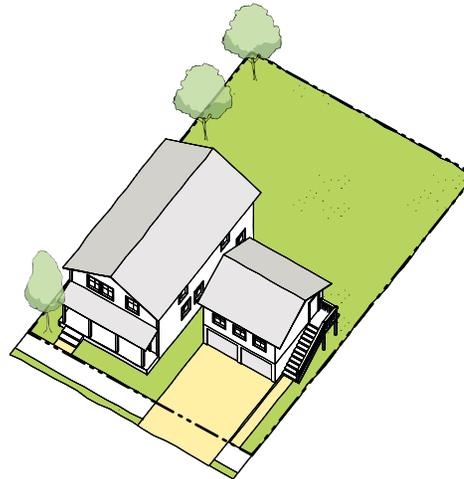


FIGURE 4 - 10 HOUSING TYPES - SINGLE FAMILY (2 OF 4)

SIDE YARD HOMES

A side yard home is a single-family home that occupies one side of a lot, leaving a spacious side yard. Typically, the side yard home is oriented on a narrow lot so that the primary façade takes advantage of a southern or southwestern exposure, and vehicle access is taken from an alley. This type of development is typically located in low- to medium-density residential neighborhoods.



BUNGALOW COURTS

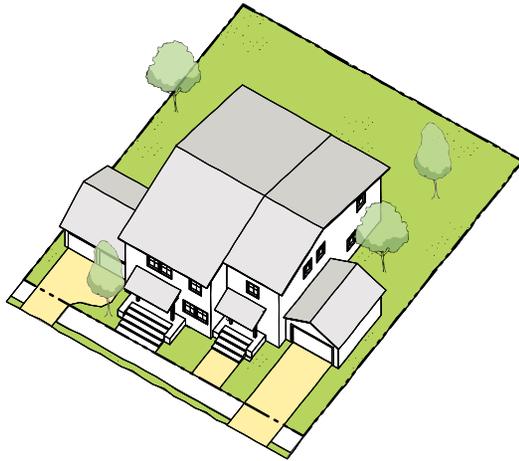
A bungalow court consists of a grouping of detached single-family homes arranged around a courtyard that is typically perpendicular to the street. This housing type allows a high-quality, single-family living environment with shared outdoor space. This type of development is typically integrated into low- to medium-density residential neighborhoods.



FIGURE 4 - 10 HOUSING TYPES - MULTI-FAMILY (3 OF 4)

DUPLEX, TRIPLEX, AND QUADPLEX

A duplex, triplex, or quadplex is a single residential structure that contains two to four dwelling units, with each unit having its own entrance. The dwelling units may be positioned side-by-side, back-to-back, or stacked above each other. This type of development is typically located in low- to high-density residential neighborhoods or in transition areas between commercial areas and residential neighborhoods.



TOWNHOMES OR ROWHOUSES

A townhome is a single-family home attached to one or more other single-family homes in a linear arrangement, either as multiple townhome units per parcel or one townhome unit per parcel. Because of its linear arrangement, a townhome typically features a yard and a garage in the rear. This type of development is located in medium-density residential neighborhoods or in transition zones between commercial areas and low-density residential neighborhoods. Rowhouses tend to be narrower and more dense than townhomes, and are a traditional style in older neighborhoods.



SMALL APARTMENT BUILDINGS

A small apartment building is a 2- to 3-story structure that contains multiple dwelling units that share one or more common entries. A small apartment building is developed at a scale that is compatible with adjacent single-family homes. As such, small apartment buildings are typically located in medium- to high-density residential neighborhoods or in transition zones between commercial areas and residential neighborhoods.

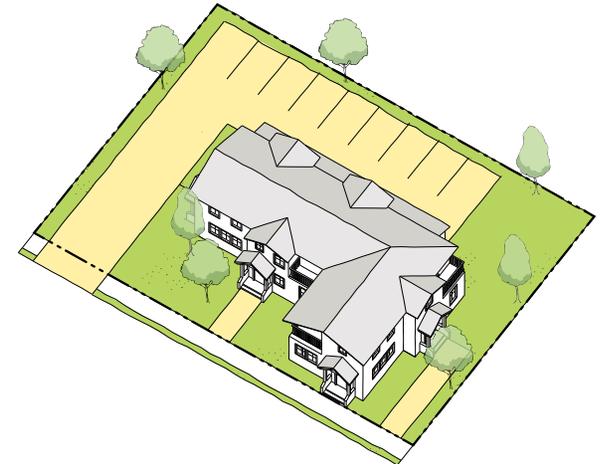


FIGURE 4 - 10 HOUSING TYPES - MIXED-USE AND LIVE/WORK (4 OF 4)

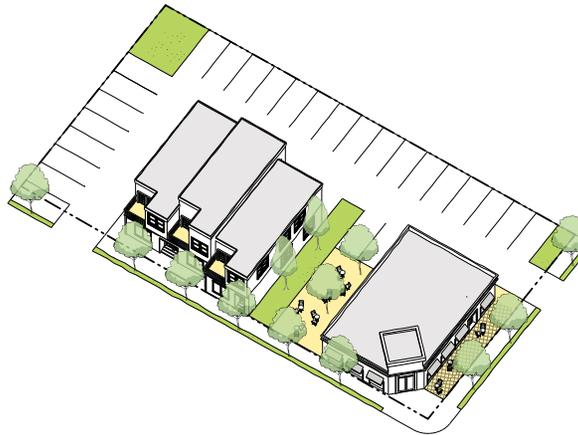
VERTICAL MIXED USE

A vertical mixed-use building is a small- to medium-scale building that provides a mix of uses. It typically consists of retail, service, and/or office uses on the ground floor and residential uses on the upper floors. In areas with a fair amount of pedestrian traffic, vertical mixed-use buildings provide pedestrian-oriented retail or services on the ground floor. This type of development is typically located in downtown commercial neighborhoods, along major arterials and transit corridors, or on corner lots in residential neighborhoods.



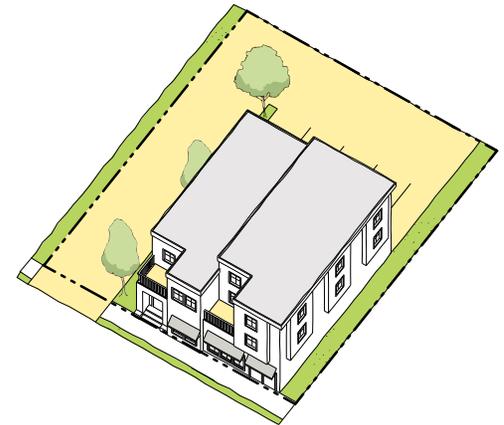
HORIZONTAL MIXED USE

Horizontal mixed use is a type of mixed-use development where residential uses are located behind or next to non-residential uses on the same development site. The uses could be placed in the same building or in separate buildings on the site. This type of development is typically located in downtown commercial neighborhoods, along major arterials and transit corridors, or in transition zones between commercial areas and residential neighborhoods.



LIVE/WORK

A live/work unit is a building that is used jointly for commercial and residential purposes. A live/work unit is typically 2- to 3-stories high with a non-residential use on the ground floor. This type of development is typically located in downtown areas, commercial and service-commercial areas, and higher-density residential neighborhoods where the residential uses are compatible with adjacent non-residential uses.



Housing Element Update

Santa Cruz County is beginning a process to update its General Plan Housing Element as required by State law. This Housing Element must identify adequate sites to accommodate the County's fair share of housing over the next ten years. As determined by the Association of Monterey Bay Area Governments (AMBAG), the County's fair share housing requirement during this period is 1,314 units from 2014 to 2023.

Sites to accommodate a portion of these units must allow residential densities sufficient to accommodate housing that is more affordable to lower-income households. The State typically requires sites to have a density of at least 20 units per acre to meet this requirement.

The Sustainable Santa Cruz County Plan envisions higher density housing located close to employment centers, stores, and services. Adopting the housing strategies described in this chapter would help the County to comply with State Housing Element law and would expand the supply of affordable housing needed by residents.

- **Mixed-Use and Live/Work Types** include housing integrated with commercial in one building (vertical mixed use) and in separate buildings on one property (horizontal mixed-use). Live/work units incorporate commercial and residential uses within a single space. Housing in mixed-use projects increases land use diversity and the supply of housing within close proximity to stores and services.

An additional type of housing could be a unit or a lot that allows for small markets or small co-working opportunities within residential neighborhoods. The commercial use could occupy either a portion of a housing unit or a lot within a neighborhood that is zoned with a Neighborhood Commercial (NC) Overlay and approved for commercial use.

LIVABLE COMMUNITY DESIGN

Well-designed buildings and public spaces are an essential component of a sustainable community. Good design enhances a unique sense of place, supports economic vitality, and facilitates community interaction. Good design also influences residents' overall quality of life and sense of well-being.

Community design also affects transportation choices and behavior. An attractive and inviting public realm encourages bicycle and pedestrian activity. Communities designed around the needs of automobile discourage walking, biking, and use of transit.

This section describes aspects of livable community design as it relates to development sites, buildings, and parking. Specific recommendation and guidelines are provided for each of these general topics.

Site Design

- **Building Orientation.** Buildings should be highly visible and readily accessible from the sidewalk, encouraging people to walk from place to place. Orient buildings towards the street, so that they frame the pedestrian environment.
- **Building Placement.** Site commercial buildings near the back of the sidewalk to provide a strong definition of the public realm. Consider setting portions of a building back from the street to create usable outdoor space. Use fences, walls, planters, or landscaped areas to define the edge of the outdoor space.
- **Setback Variation.** Buildings should be set back varying distances from the street frontage.
- **Plazas and Open Space.** Integrate semi-public outdoor spaces, such as plazas or courtyards, into private development where feasible to help support pedestrian activity and connect to the public realm. Ensure that outdoor areas are visible from public streets and accessible from buildings, streets, and pedestrian and bicycle networks.
- **Vehicle Access.** Limit access points to the minimum necessary to serve the property. Minimize the width of all driveways. If a driveway must accommodate large vehicles, such as delivery trucks, use the minimum width that can accommodate the effective turning radius of these vehicles.



Building placed close to the sidewalk and oriented to the street



Outdoor dining creates activity and visual interest

Crime Prevention

Crime Prevention through Environmental Design (CPTED) is the practice of designing sites, buildings, and public spaces with the goal of reducing crime, alleviating the fear of crime and improving quality of life. The following is a list of the guiding principles of CPTED:

- **Natural Surveillance.** Encourage legitimate activity and provide visual access to spaces, in order to increase the number of people using, watching, and caring about the place.
- **Territory Reinforcement.** Ensure that the transitions between private and public space are visible, so that people have an appropriate perception of how spaces are meant to be used.
- **Access Control.** Clearly communicate where people are allowed and not allowed to prevent illegitimate use of a space.
- **Maintenance.** Ensure that development is designed in a way that reduces maintenance needs after construction. Poorly maintained spaces send a signal that the community is willing to tolerate negative activities in these spaces.
- **Appropriate Use.** Utilize design rails and decorative ledges to discourage skateboard use of seating walls. Avoid blank walls that can provide a blank surface for graffiti.

- **Outdoor Seating.** Incorporate seating into high-traffic outdoor areas to maximize opportunities for people to interact.
- **Landscaping.** Incorporate landscaping into projects to provide green elements and shade. Landscaping can also soften the interface between the front of a building and the sidewalk as well as allow for stormwater infiltration.
- **Building Entrances.** Orient the main entrances of a building toward a public street, and include architectural features that give them prominence. Locate transit stops, pedestrian seating, bicycle parking, and similar amenities near building entrances.
- **Pedestrian and Bicycle Access and Connectivity.** All sites must provide clear, safe points of access for pedestrians and bicyclists. Provide attractive, well-marked pedestrian links through and around the site that create a clear path of travel between parking, buildings and sidewalks.

Building Design

- **Building Rhythm.** Establish a rhythm for building façades that is small-scale, with individual building bay widths of 25 to 50 feet. Design each building with varying wall planes, heights, and/or contrasting materials to break up visual mass and avoid large, featureless structures.

- **Mass, Proportion, and Façade Detail.** Subdivide horizontal mass into portions or segments compatible with the scale of adjacent buildings. Employ vertical architectural elements such as columns, piers, or pilasters to subdivide buildings into smaller increments at the ground floor and upper stories.
- **First Floor Ceiling Height.** Provide adequate ceiling heights (12 to 15 feet) for first floor retail uses to create attractive and comfortable spaces for tenants.
- **Ground Floor Activities** Locate public and publicly oriented uses on the ground floor of buildings to encourage pedestrian activity. In buildings containing retail, commercial, community-serving, or other active uses, position windows for visibility by both pedestrians and motorists at street level. Maintain a minimum of 50 to 60 percent of the ground floor linear dimension as evenly distributed display windows.
- **Entries.** Accentuate all entries with features such as moldings, lighting, overhangs, or awnings. Locate residential entries on the front façade of buildings and provide direct access to the sidewalk or street.

Parking

- **Parking Lot Placement.** Place parking lots behind buildings wherever possible, so that pedestrians can access buildings more easily and buildings have a visual presence on the street.
- **Buffers and Screening.** If a parking lot is adjacent to a residential area, provide fences, walls, and landscaping to create a buffer around the back and side of the lot. Where parking lots are adjacent to a street, use low walls and attractive, varied landscaping to provide screening.

- **Parking Structures.** Break up the building's façade with vertical elements, such as projecting columns and offset wall planes, as well as variations in color, texture, and materials. Reinforce the pedestrian realm by wrapping the parking garage with retail or office uses.

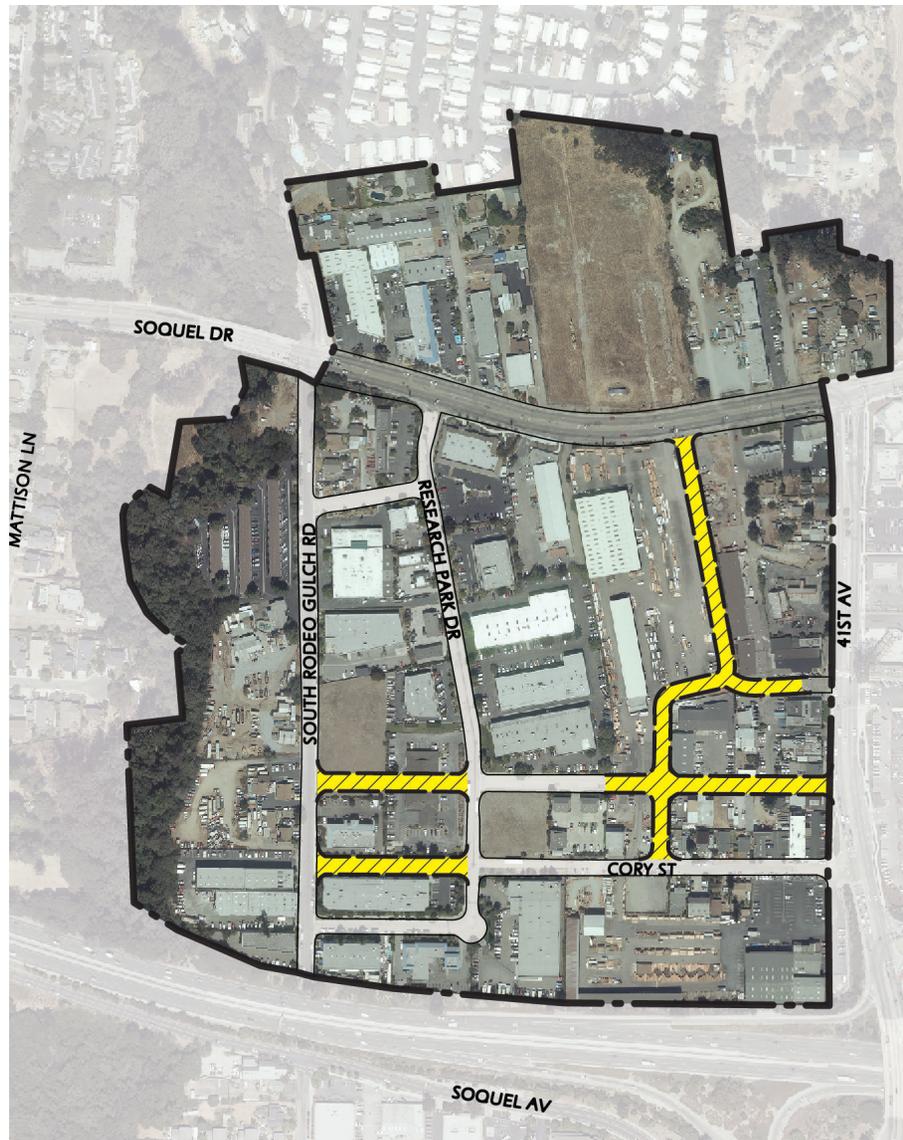


Shop front windows create visual interest and enhance vitality



Building articulation creates pedestrian-scale rhythm

Figure 4-11 New Streets



INCREASED CONNECTIONS

At community workshops for the Sustainable Santa Cruz County Plan, residents frequently identified traffic congestion as a major concern. Residents are looking for solutions to reduce congestion, increase mobility, and expand transportation choices both in terms of type of transportation (mode) and route.

Reducing traffic congestion will primarily result from targeted improvements to the transportation system as well as long-term shifts in the county's land use pattern. Another way to reduce traffic congestion is to increase the number of connections for vehicles, bicyclists, and pedestrians. New connections can be created as bicycle and pedestrian pathways through and between properties. In addition to improving circulation, these new connections can also activate public spaces and improve public safety by increasing the number of people who occupy public spaces.

In the long term, new connections can be created for vehicles as well. While costly, a few new streets may be considered in areas where new development is likely to occur, which may help to fund the improvements. New streets can be publicly or privately owned and can be located in both residential and non-residential areas.

At Workshop Series #2, residents reviewed ideas for new streets in the four land use focus areas and the Apts circulation focus area. Workshop participants expressed strong support for new streets to increase vehicle connections and reduce traffic congestion. Figure 4-11 shows a conceptual alignment for new streets in the Upper 41st focus area. Chapter 7 shows additional ideas for new streets in the focus areas.

Creating new streets provides a variety of benefits. In addition to reducing vehicle congestion, they could also increase public safety by improving emergency vehicle access to properties. New streets may stimulate private investment and increase development opportunities by improving property access. Breaking up large block patterns also utilizes land more efficiently and creates a more pedestrian-friendly environment. A walkable block pattern is one of the community design features shown to increase the frequency by which people walk or ride bicycles to destinations. As discussed earlier in this chapter, block lengths of 200 to 400 feet are ideal for walkable neighborhoods.

There are a number of ways that the County can encourage this concept. A first step is to adopt design guidelines that encourage through passage and right-of-way dedication. Where new connections are particularly important, new streets can be adopted as part of a detailed area plan, specific plan, or Planned Unit Development (PUD), and new development would be required to respect these plan lines. In some cases, new streets may be privately owned and maintained; in other cases, property owners could dedicate land to the County as a public street. Experience from other communities has shown that property owners are often supportive of creating new streets, as it substantially increases the value of property by improving public access.

The County should consider creating new zoning tools, including incentive zoning and the creation of master plans and specific plans, to help support creation of new connections. This may be particularly important for the Sutter/Palo Alto Medical Foundation campus and Rittenhouse property on the northeast corner of Soquel Drive and Thurber Lane, as well as the upper 41st Avenue area.



A pedestrian walkway increases connections through a property

Community Diagrams

Figures 4-12 through 4-15 graphically illustrate many of the ideas described above combined with transportation ideas described in Chapter 5 of this Plan. These figures divide the Plan area into four sections:

- Soquel Drive from the County border to 41st Avenue
- Soquel Drive from 41st Avenue to Cabrillo College
- Aptos from Cabrillo College to the Plan boundary
- Live Oak south of Highway 1

These figures synthesize ideas discussed in this Plan to show where new neighborhood activity centers could be located, together with possible new vehicular, bicycle, and pedestrian connections between these centers and other destinations. The figures show possible new locations for multi-family housing and how these locations relate to existing and future employment centers. The figures show how land use density, diversity, and design can be guided in a way that increases transportation choices and supports a more sustainable development pattern.

FIGURE 4 - 12 WEST SOQUEL DRIVE COMMUNITY LAND USE PATTERN

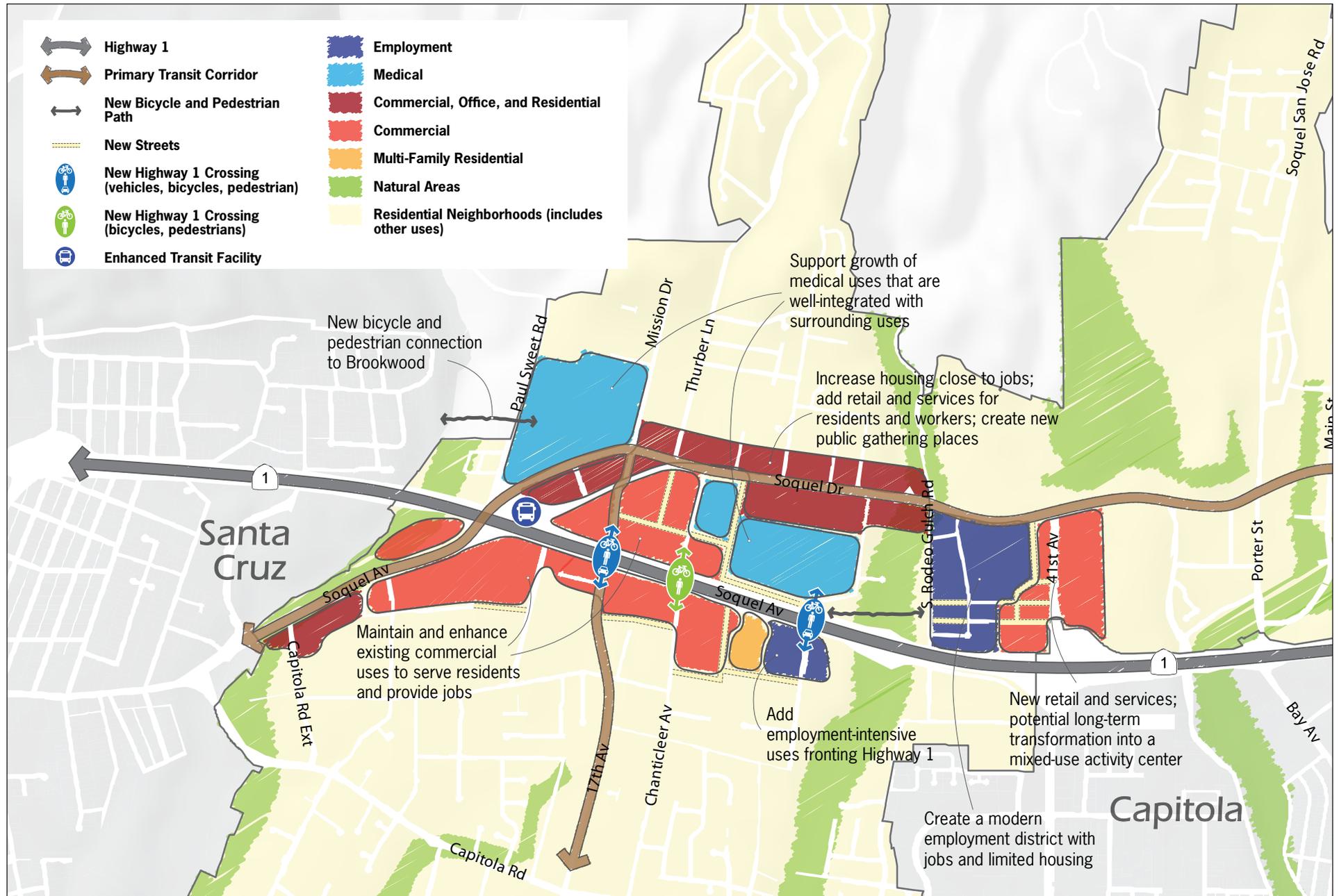


FIGURE 4 - 13 SOQUEL COMMUNITY LAND USE PATTERN

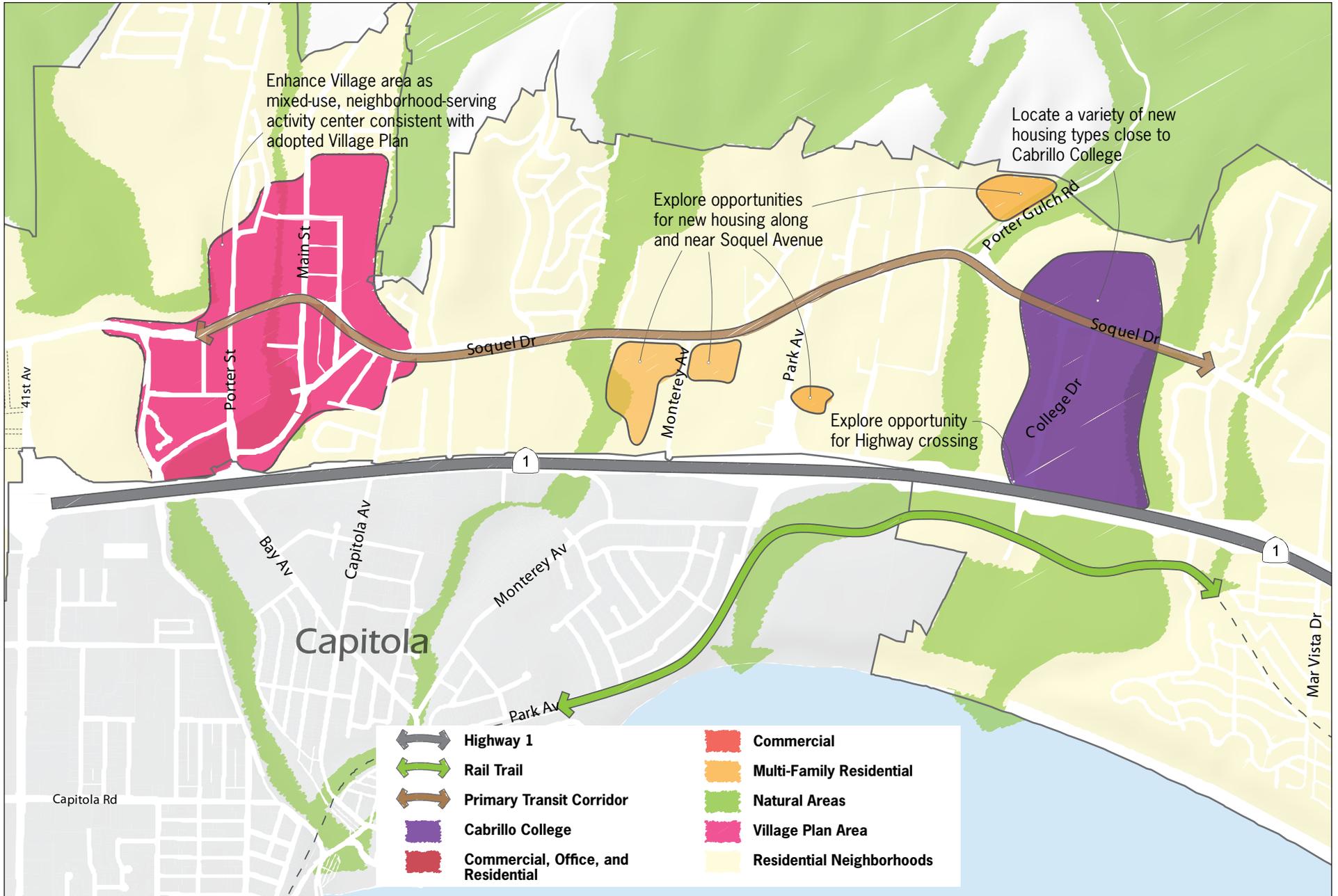


FIGURE 4 - 14 APTOS COMMUNITY LAND USE PATTERN

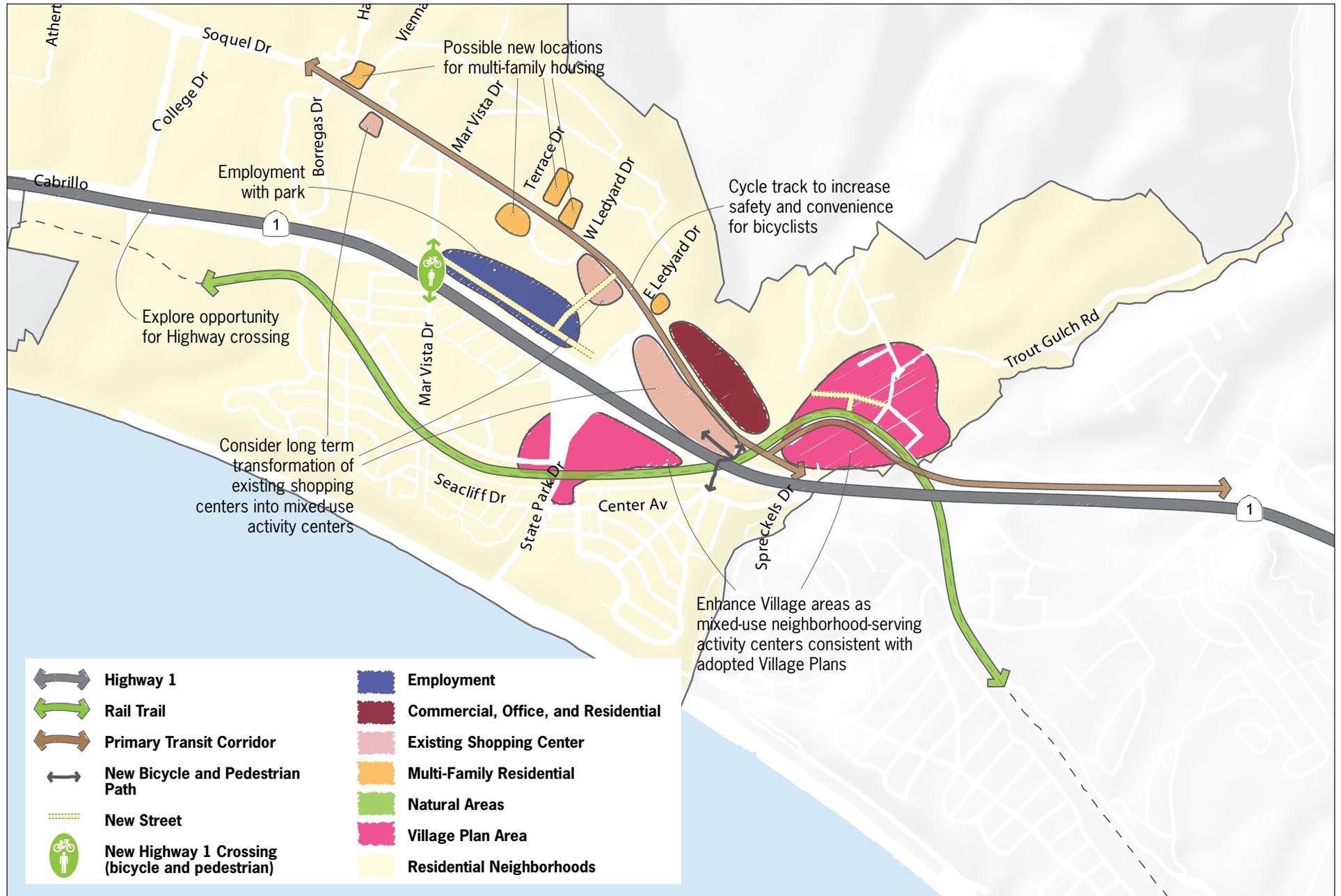
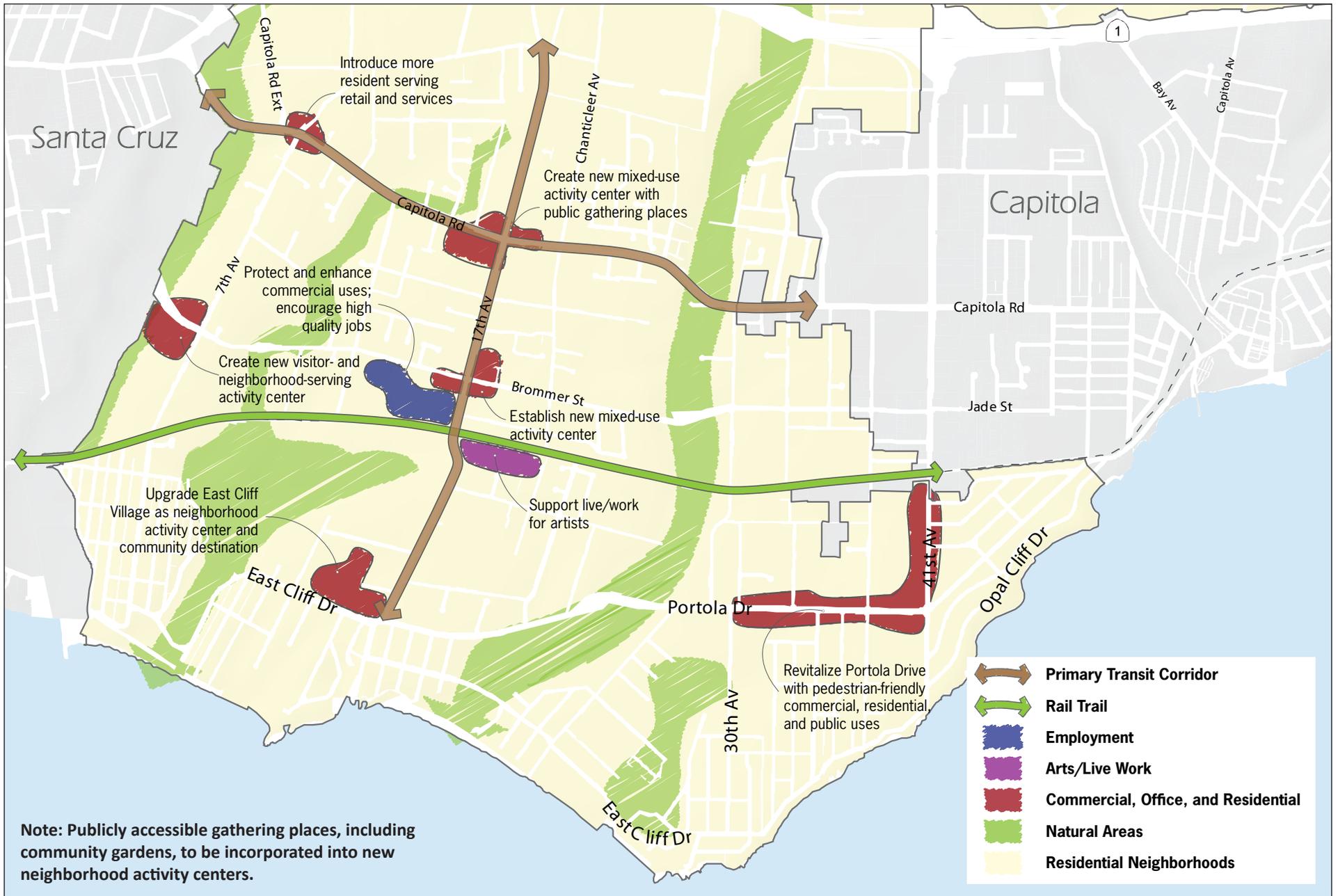


FIGURE 4 - 15 LIVE OAK COMMUNITY LAND USE PATTERN



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 20th Avenue, carry fewer than 20,000 vehicles per day. Others, such as several segments along Soquel Drive, 41st 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).

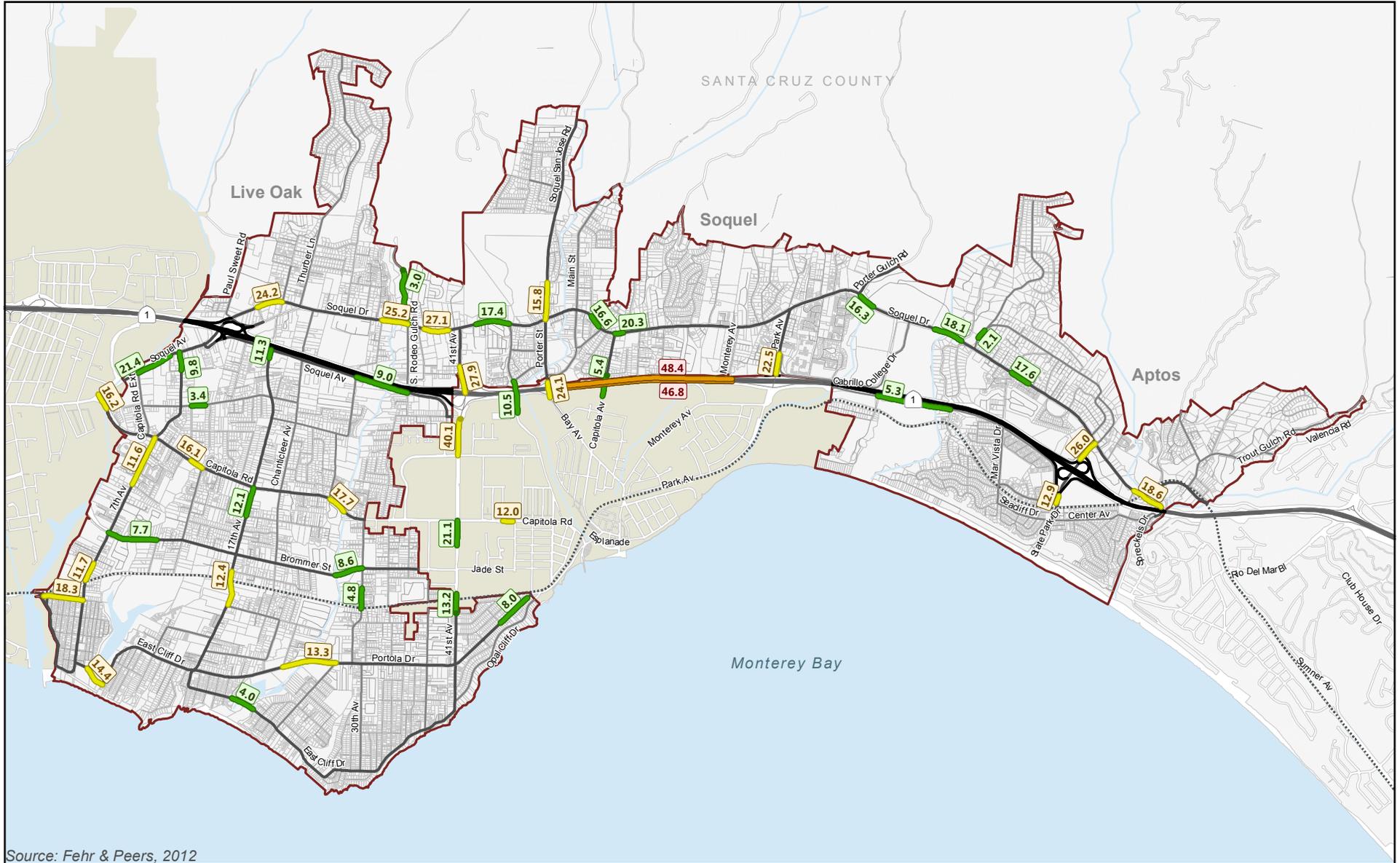
On a typical weekday, commute trips represent approximately 20 to 25 percent of all trips.¹ These trips have the longest average trip length compared to the 75 to 80 percent of daily non-commute trips. Non-commute trips are comprised of school, shopping, civic, and recreational trips. Santa Cruz County 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.

¹ 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 17th 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.²

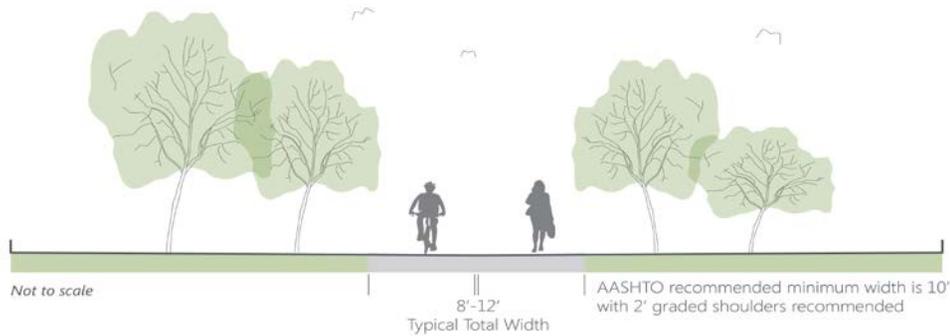
The Plan area is served by the Santa Cruz Metropolitan Transit District (Metro) bus system, which provides bus service in Santa Cruz County. Metro operates approximately 30 year-round bus routes. Some additional routes operate seasonally according to UCSC school terms or the tourist high season. Metro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

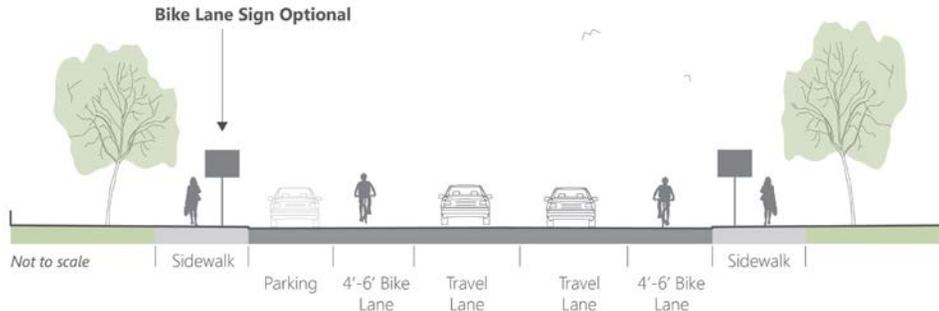


Monterey Bay Sanctuary Scenic Trail Study Area

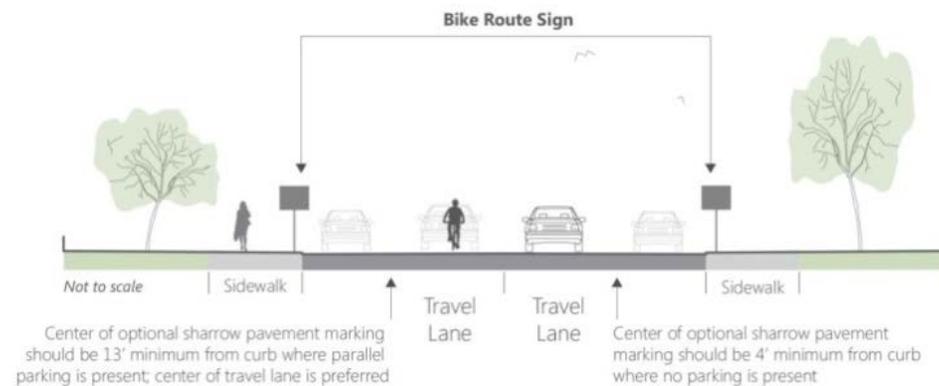
² ACS, 2006-2010; BAE, 2012



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*.

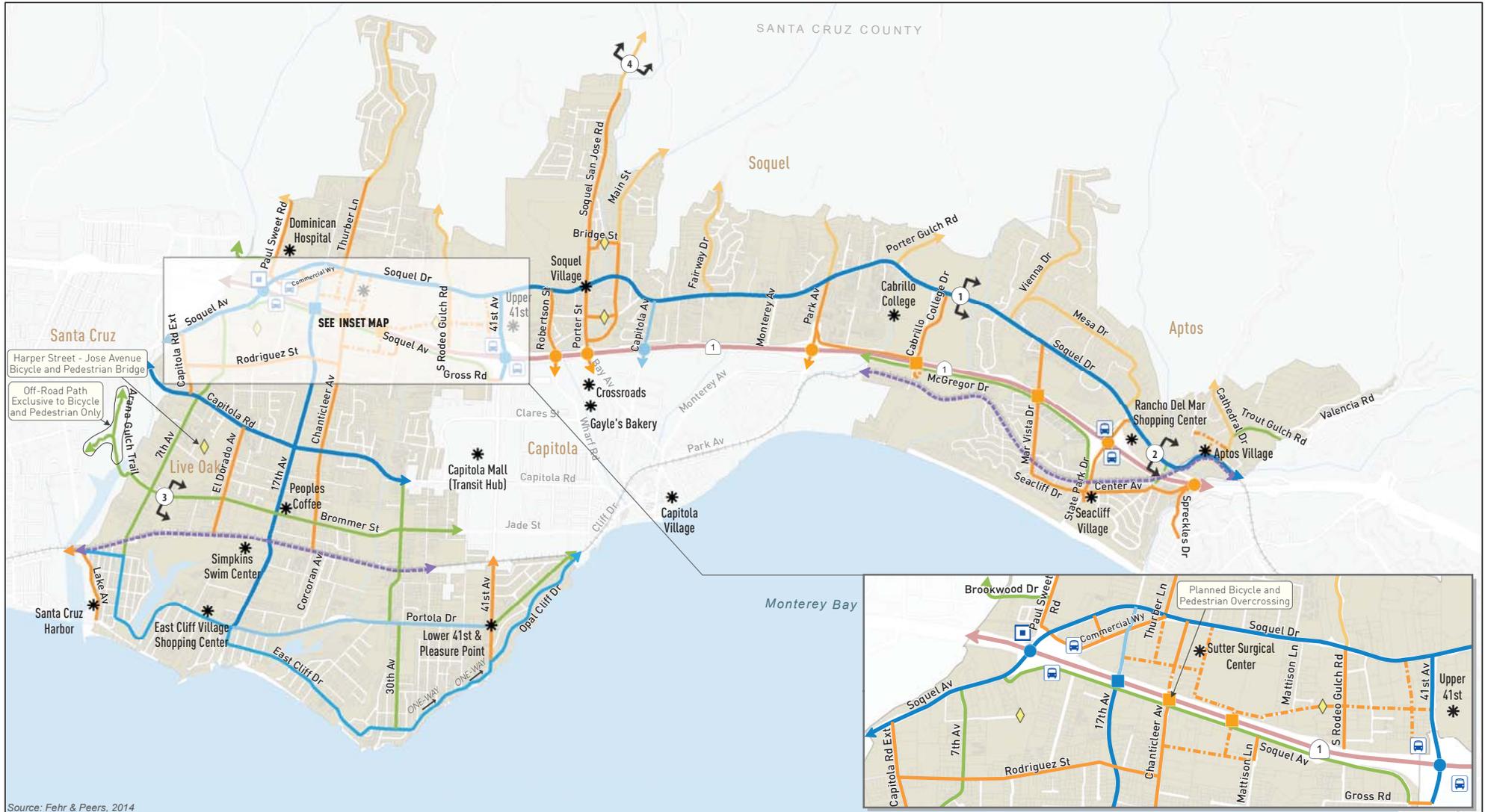
Activity Centers

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
Multimodal Corridor		
<p>Buses, Bicyclists, Pedestrians, Automobiles</p> 	<p>Trucks</p> 	<ul style="list-style-type: none"> • The purpose of this street type is to provide a safe, continuous route for vehicles, transit users, pedestrians, and cyclists. • Buses, bicycles, pedestrians, and automobiles are prioritized on Multimodal Corridors. Trucks are provided for, but not prioritized. • 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. • 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. • 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. • Sample Cross Section Locations: <ol style="list-style-type: none"> (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). (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).
Transit Connector		
<p>Buses and Pedestrians</p> 	<p>Automobiles, Trucks, and Bicyclists</p> 	<ul style="list-style-type: none"> • The purpose of this street type is to connect transit users and pedestrians to Multimodal Corridors. • Buses and pedestrians are prioritized on these streets. Automobiles, trucks, and bicyclists are provided for, but not prioritized. • Transit Connector streets are streets with existing Metro bus service. • 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. <p>2+</p>

TABLE 5-1 STREET TYPES AND MODE PREFERENCE

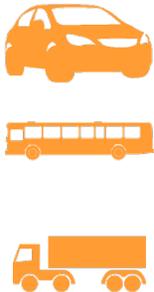
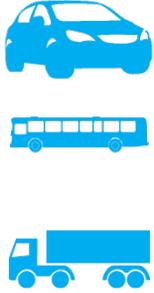
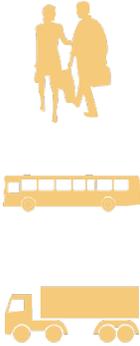
Prioritized Modes	Non-Prioritized Modes	Description and Preferred Attributes
Bicycle Connector		
<p>Bicyclists</p> 	<p>Automobiles, Trucks, Buses, Pedestrians</p> 	<ul style="list-style-type: none"> • The purpose of this street type is to connect bicyclists to Transit Connector streets. • Bicycles are prioritized on these streets through dedicated bicycle facilities, such as bicycle lanes or cycle tracks. • Buses (where routes are currently in operation or will be in the future), automobiles, trucks, and pedestrians are provided for, but not prioritized. • 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. • 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 • Sample Cross Section location at (3) Brommer Street between 7th 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.
Active Connector		
<p>Pedestrians and Bicyclists</p> 	<p>Automobiles, Trucks, Buses</p> 	<ul style="list-style-type: none"> • The purpose of Active Connector Streets is to connect pedestrians and bicyclists to different activity centers and land uses in the Plan area. • 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. • Active Connectors streets tend to be north-south oriented in order to connect pedestrians and bicyclists to the east-west oriented transit street types. • 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.

TABLE 5-1 STREET TYPES AND MODE PREFERENCE

Prioritized Modes	Non-Prioritized Modes	Description and Preferred Attributes
Coastal Street		
<p>Pedestrians and Bicyclists</p> 	<p>Automobiles, Trucks, Buses</p> 	<ul style="list-style-type: none"> • 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. • Pedestrians and bicyclists are prioritized on Coastal Streets. Buses and automobiles are provided for, but not prioritized. • Some portions of Coastal Streets are one-way, thus the ability of trucks and larger buses to navigate Coastal Streets may be limited.
Rural Connector		
<p>Automobiles and Bicyclists</p> 	<p>Trucks, Buses, and Pedestrians</p> 	<ul style="list-style-type: none"> • 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. • A few rural connectors have regional transportation importance. In those cases, consider traffic mix and commuter use in road design. • Both bikes and automobiles are prioritized on Rural Connectors. Pedestrians and trucks are provided for, but not prioritized. • 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. • 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. • 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).

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.

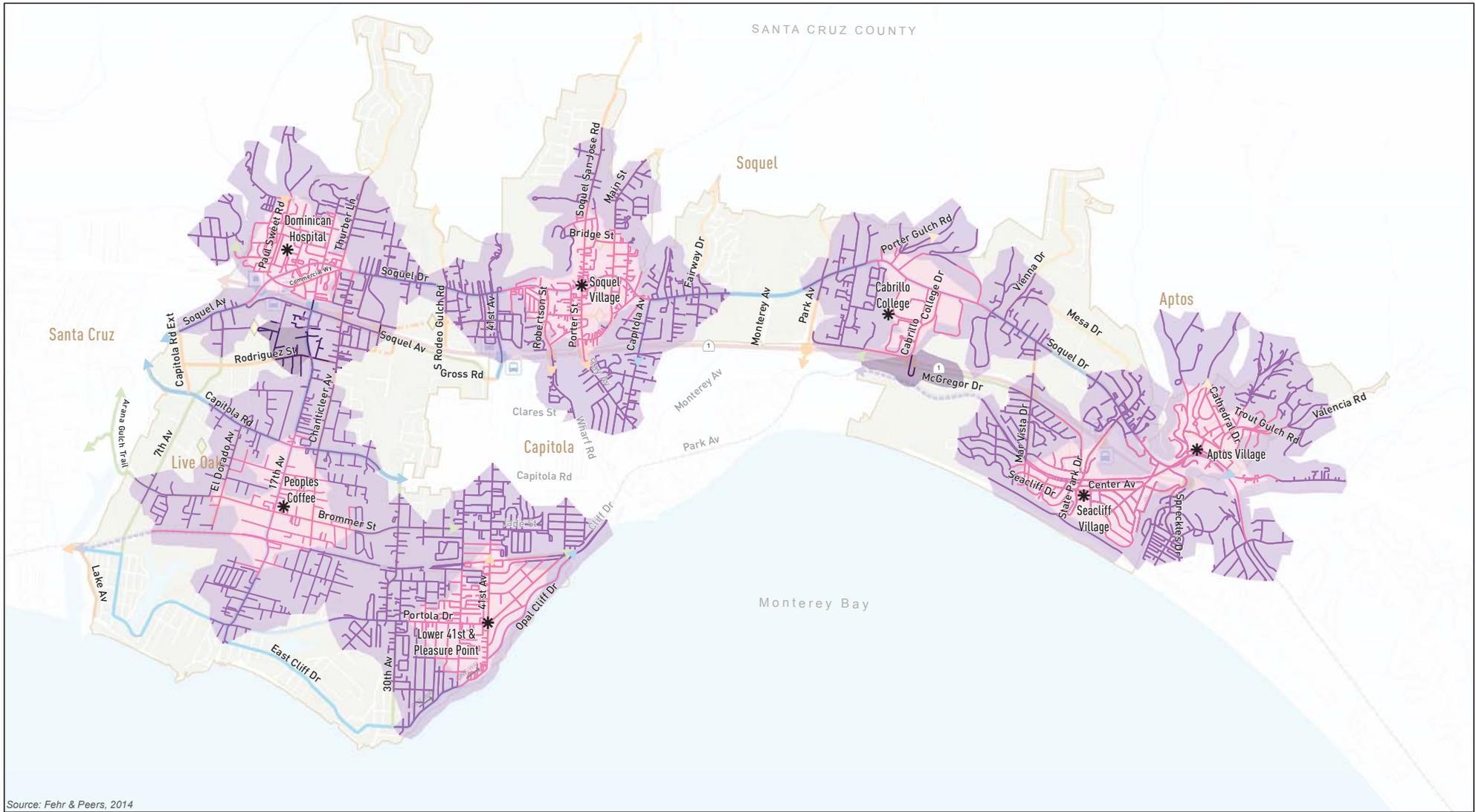
In addition to employment, commercial and educational activity centers, a number of other points of interest exist in the Plan area including medical uses and parks. The majority of these points of interest are clustered along 17th Avenue and Soquel Drive. Both of these streets are suggested to be classified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

An analysis was conducted surrounding 17th 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 17th 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 17th 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 six north-south connections across the 8-mile length of Highway 1 within the unincorporated area, at Soquel Drive, 41st Avenue, 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.³

³ 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 Avenue between Soquel Drive and 41st 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 17th and 41st 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.

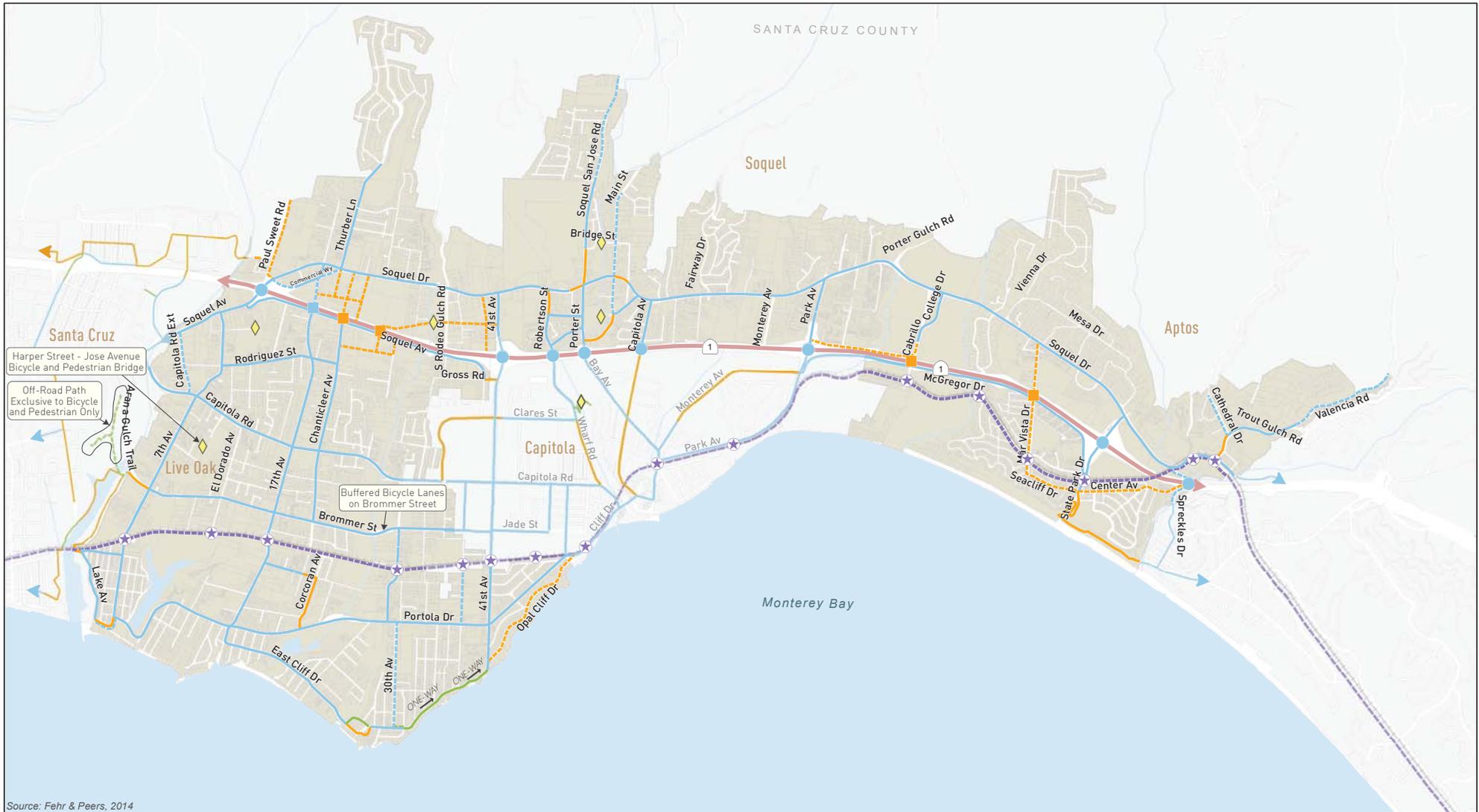
Bicycle facilities in the Plan area should provide strong east-west connectivity, with dedicated bicycle lanes present on most of the arterial streets. The proposed MBSST would enhance east-west connectivity for bicyclists for trips within the Plan area and also for trips to nearby cities along the trail. Figure 5-4 shows points of connection to the trail from existing and planned bicycle facilities in the Plan area.



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
- ⦿ Plan Area
- ⦿ Freeway
- ⦿ Railroad

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

Chanticleer Avenue, 17th Avenue, 30th Avenue, and 41st 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



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

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, 41st Avenue, and 7th 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. Opportunities for shared parking should be explored where feasible, as discussed in Chapter 7.

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.

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 41st 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 consumption¹ 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

¹ *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

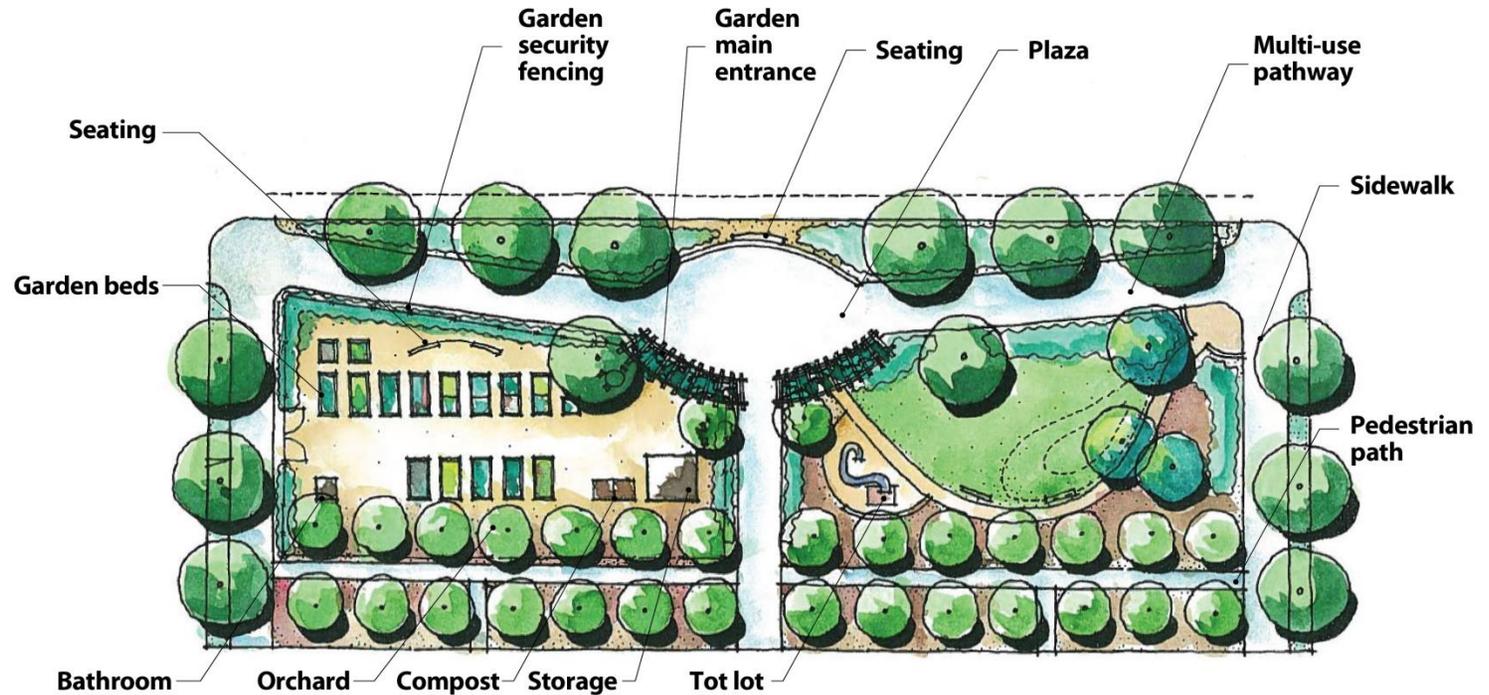
Santa Cruz County already has strong policies and regulations relating to energy conservation and renewable energy:

- **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,

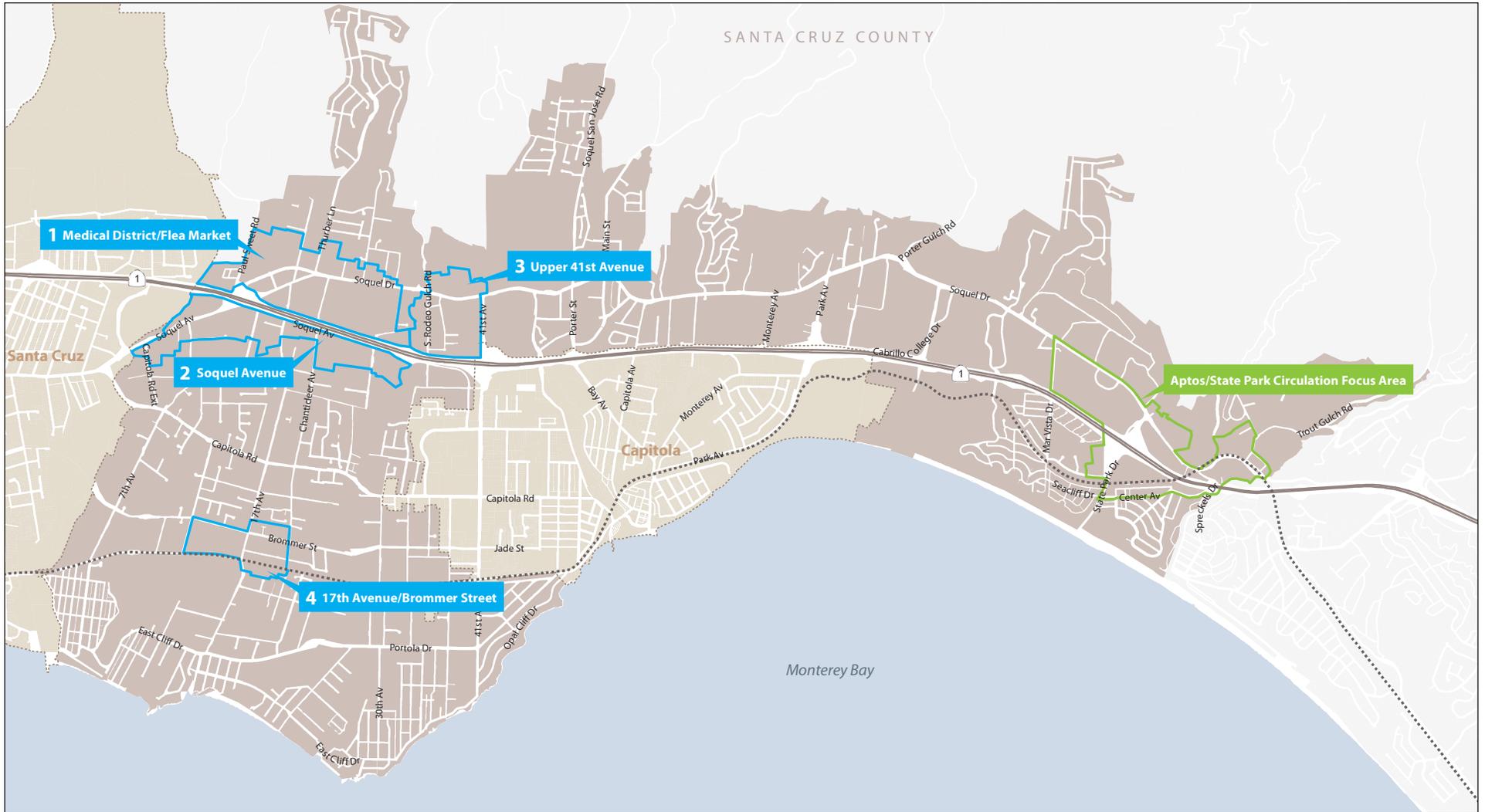
placement, and orientation. Concepts also support a parcel-specific assessment of General Plan land use designations. The smaller geographic scale also allows for consideration of transportation improvements, such as introduction of new streets, enhanced transit facilities, and new bicycle and pedestrian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

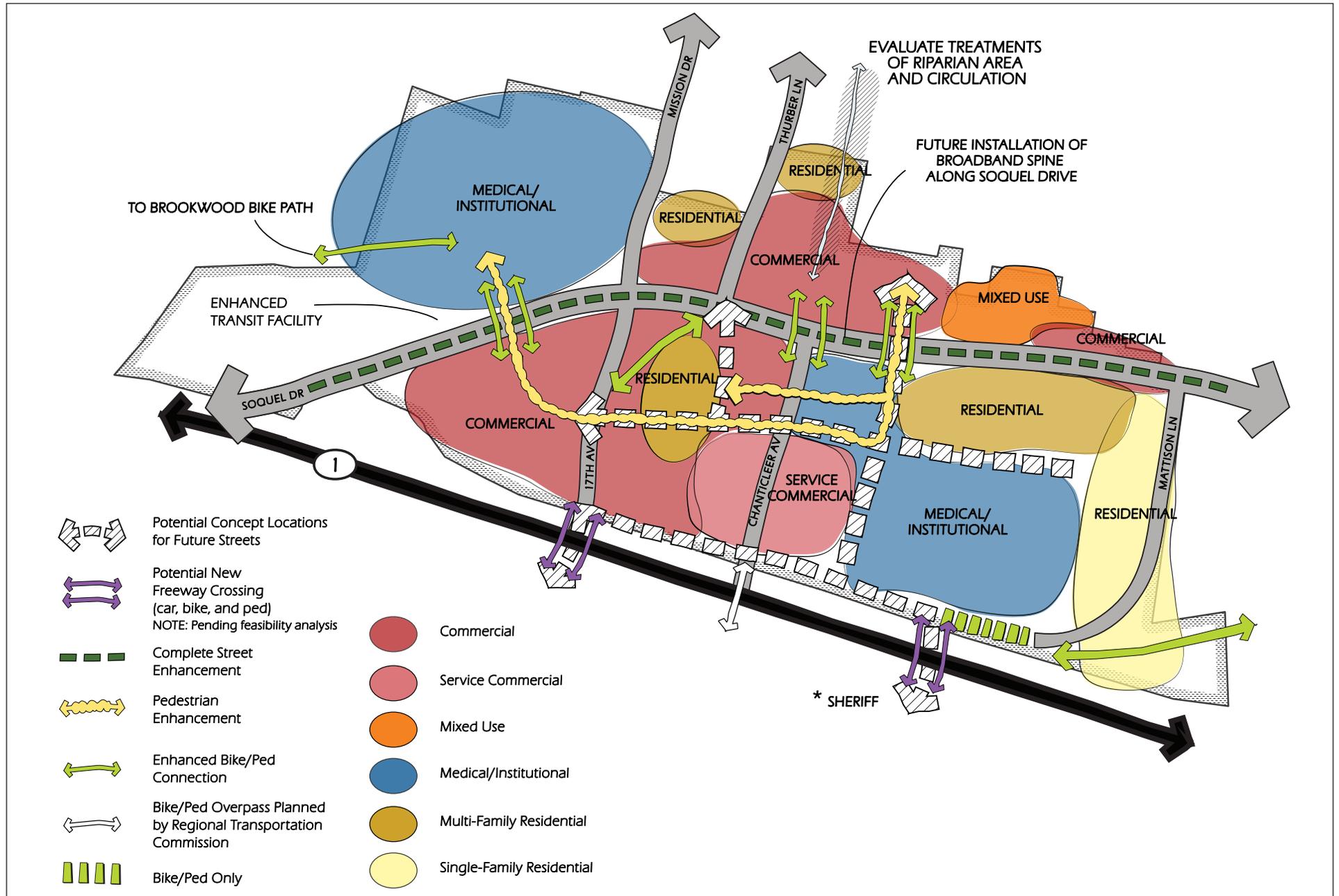
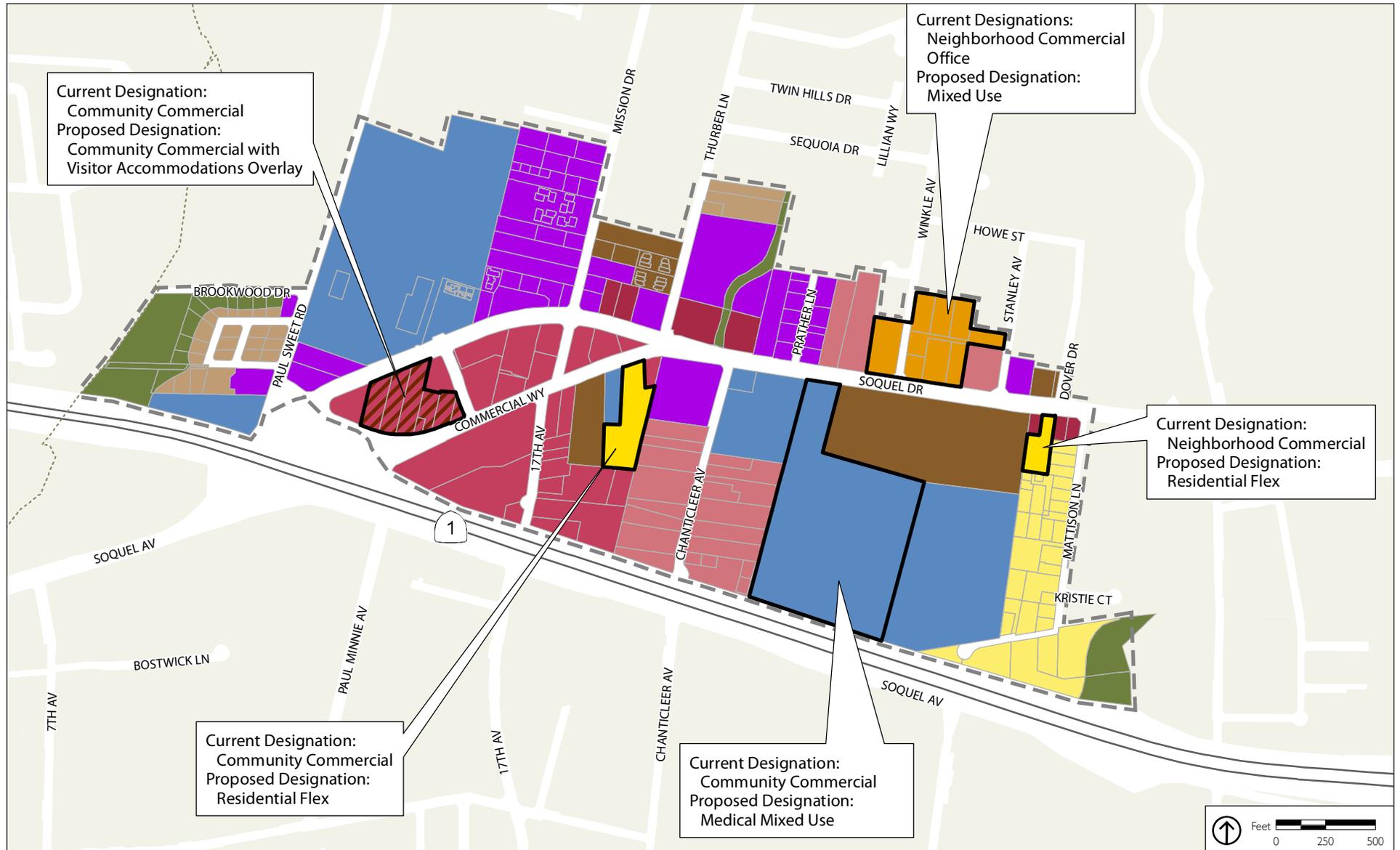


FIGURE 7 - 3 MEDICAL DISTRICT/FLEA MARKET GENERAL PLAN LAND USE DESIGNATIONS



Current Designation:
Community Commercial
Proposed Designation:
Community Commercial with
Visitor Accommodations Overlay

Current Designations:
Neighborhood Commercial
Office
Proposed Designation:
Mixed Use

Current Designation:
Neighborhood Commercial
Proposed Designation:
Residential Flex

Current Designation:
Community Commercial
Proposed Designation:
Residential Flex

Current Designation:
Community Commercial
Proposed Designation:
Medical Mixed Use

- | | | | |
|---|---|--|---|
| <ul style="list-style-type: none"> Focus Area Boundary City Limits Areas with Designation Changes Overlays Visitor Accommodations (-VA) | <ul style="list-style-type: none"> Residential Designations Urban Low Residential (R-UL) Urban Medium Residential (R-UM) Urban High Residential (R-UH) Residential Flex (R-F) | <ul style="list-style-type: none"> Mixed-Use Designations Mixed Use (MU) Commercial and Industrial Designations Community Commercial (C-C) Neighborhood Commercial (C-N) | <ul style="list-style-type: none"> Service Commercial and Light Industrial (C-S) Office (C-O) Other Designations Public/Institutional Facilities (P) Urban Open Space (U-O) |
|---|---|--|---|

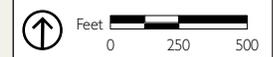
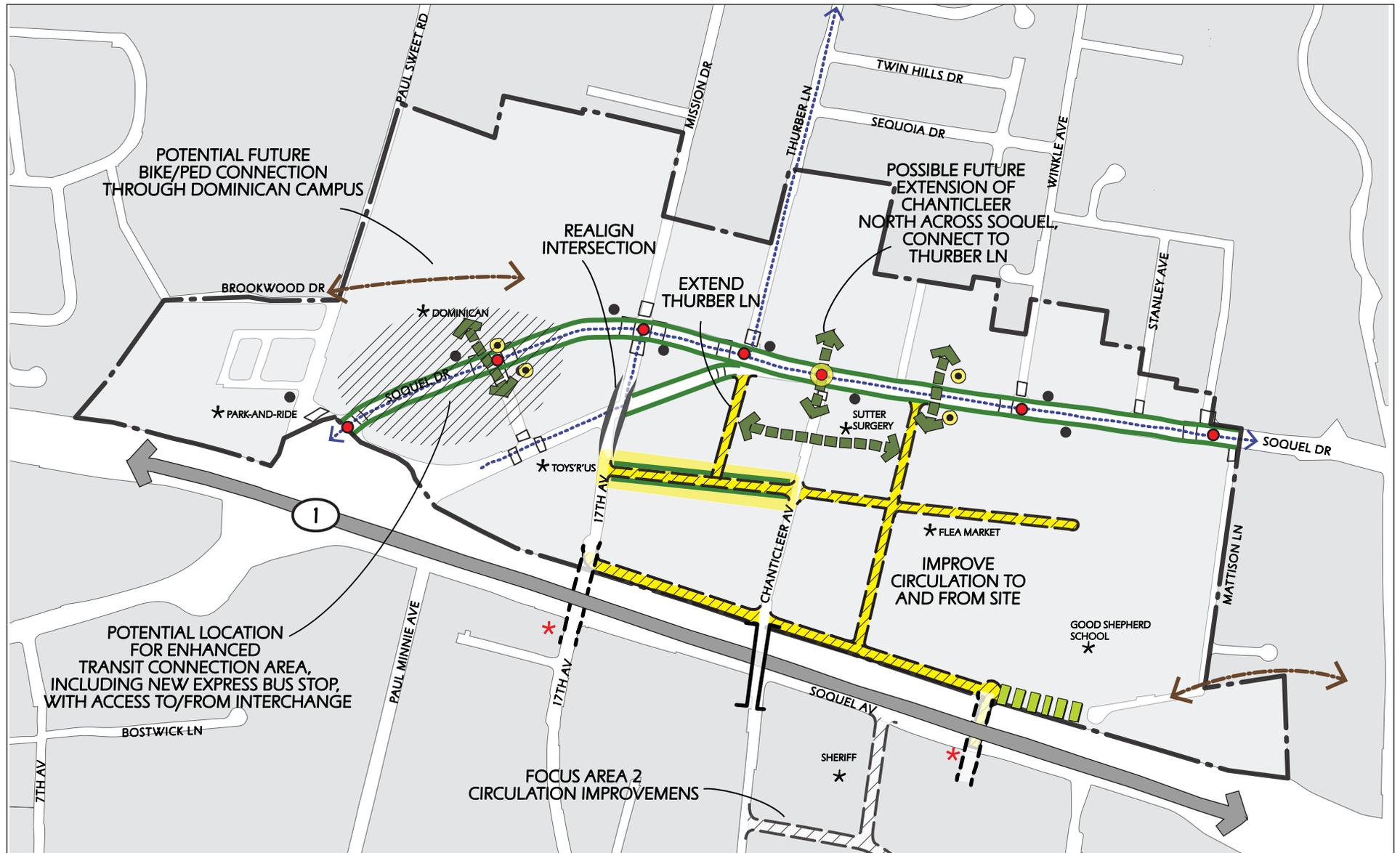


FIGURE 7 - 4 MEDICAL DISTRICT CIRCULATION IMPROVEMENT



- Existing Bus Stop
- Existing Crosswalk
- Existing Signal
- ↔ Existing Bike Lane
- ▬ Complete Streets Enhancement
- ▬ Enhanced Streetscape
- ▬ Proposed Bike/Ped Only Street
- ▬ Possible New Street Concept
- ↔ Potential Multi-Use Trail
- ▬ Planned Bike/Ped Bridge
- ↔ Enhanced Pedestrian Connection
- Possible New Connection*
- New Local Bus Stop
- Possible Future Signal
- * 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 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

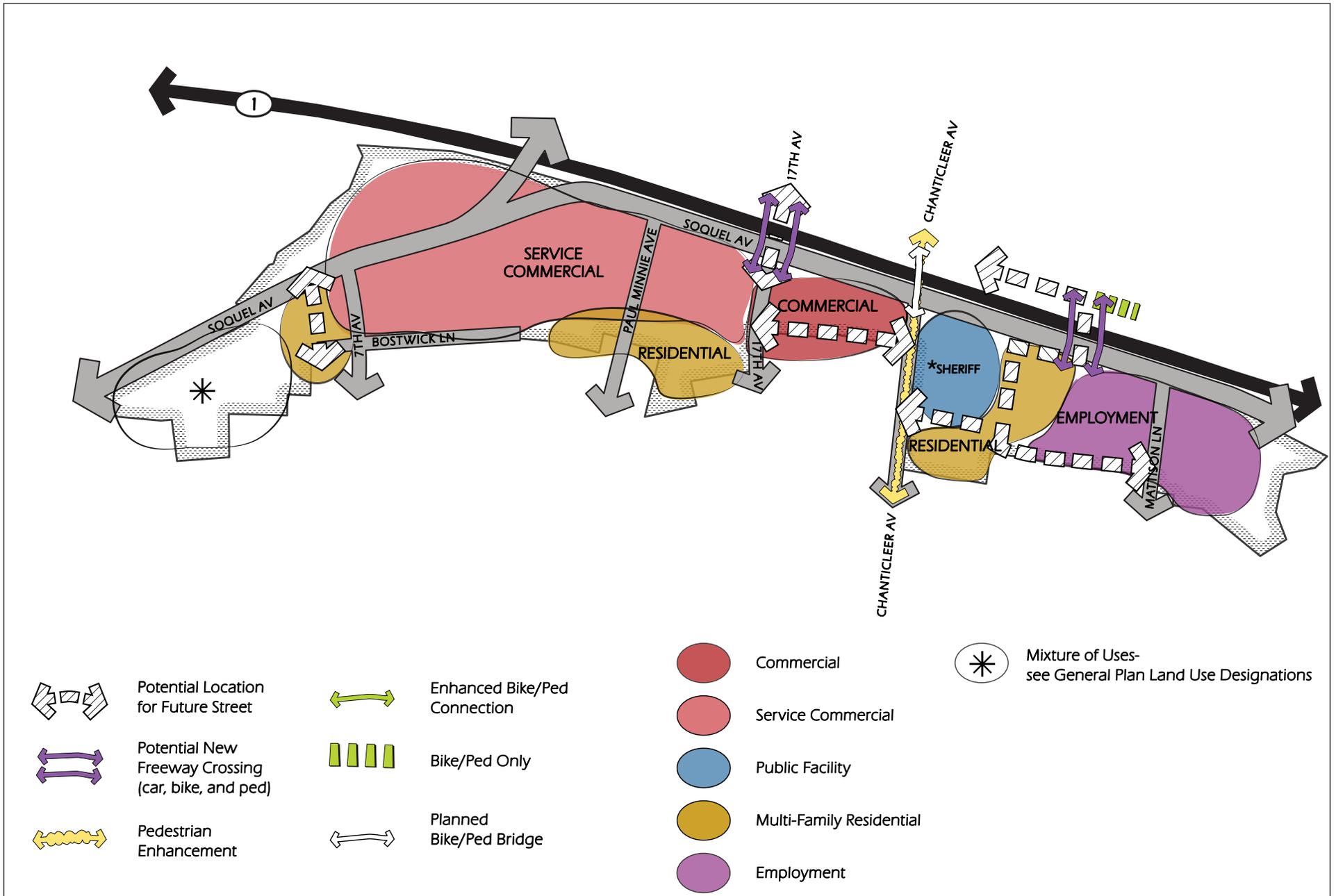
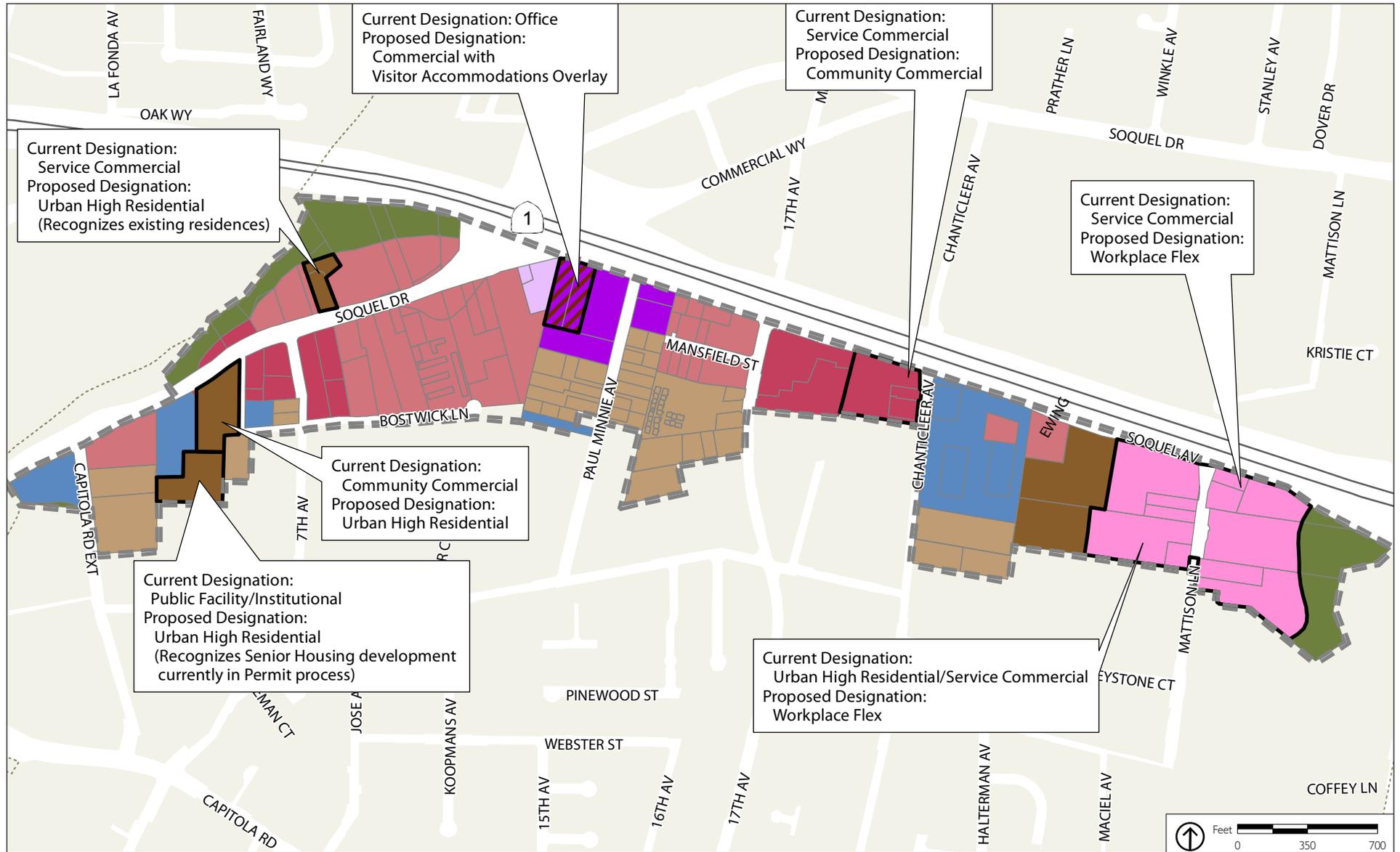
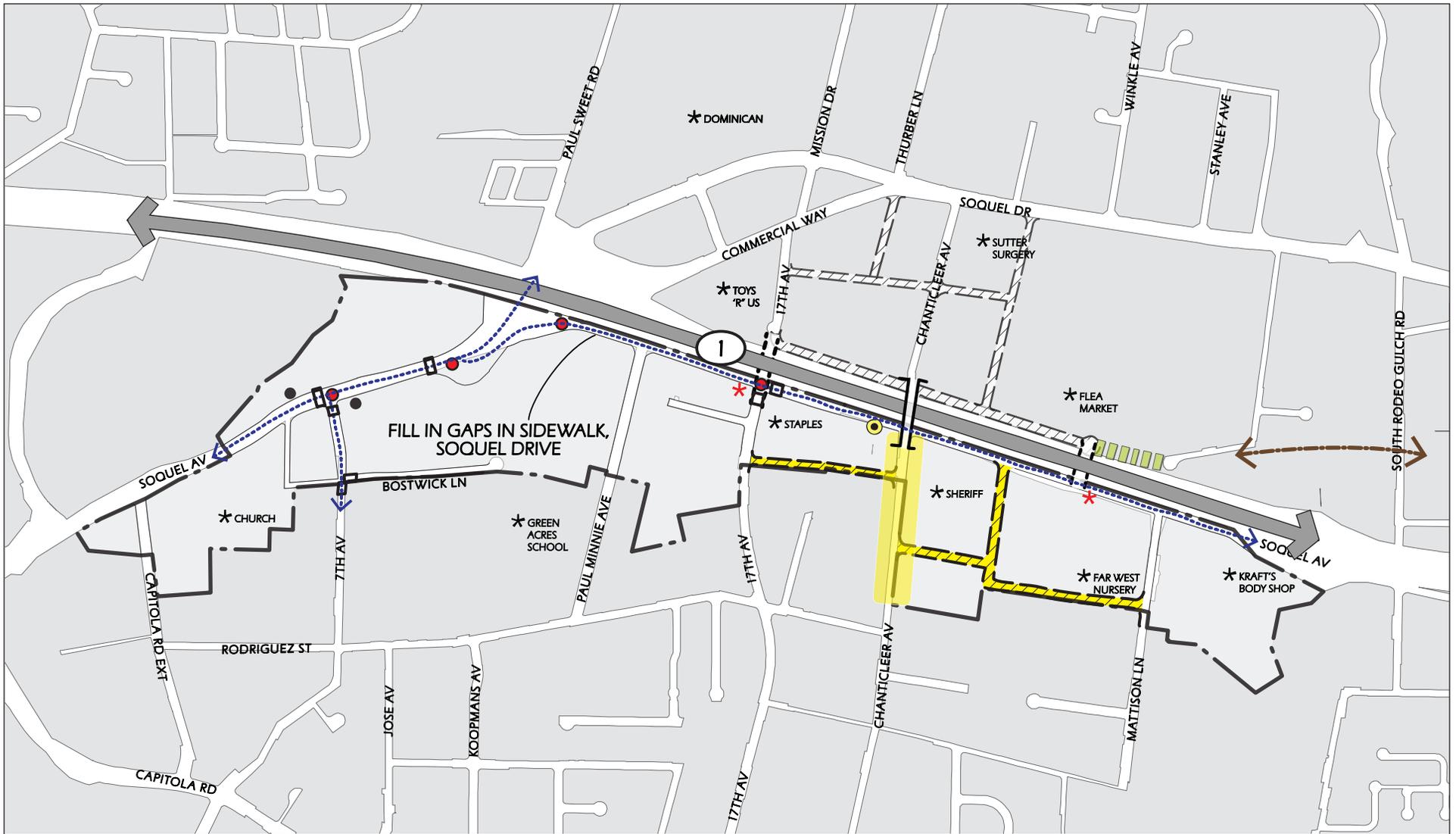


FIGURE 7 - 6 SOQUEL AVENUE GENERAL PLAN LAND USE DESIGNATIONS



<ul style="list-style-type: none"> City Limits Focus Area Boundary Areas with Designation Changes Overlays Visitor Accommodations (-VA) 	<p>Residential Designations</p> <ul style="list-style-type: none"> Urban Medium Residential (R-UM) Urban High Residential (R-UH) 	<p>Commercial and Industrial Designations</p> <ul style="list-style-type: none"> Community Commercial (C-C) Service Commercial and Light Industrial (C-S) Office (C-O) 	<ul style="list-style-type: none"> Workplace Flex (C-WF) Visitor Accommodations (C-V) Other Designations Public/Institutional Facilities (P) Urban Open Space (U-O)
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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 41ST AVENUE

Figure 7-8 presents a concept plan for the Upper 41st Avenue Focus Area (Focus Area 3). This concept envisions upper 41st 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 41st 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 41st Avenue (top) serves visitors and employee of new office park development (bottom)

FIGURE 7 - 8 UPPER 41ST AVENUE CONCEPT DIAGRAM

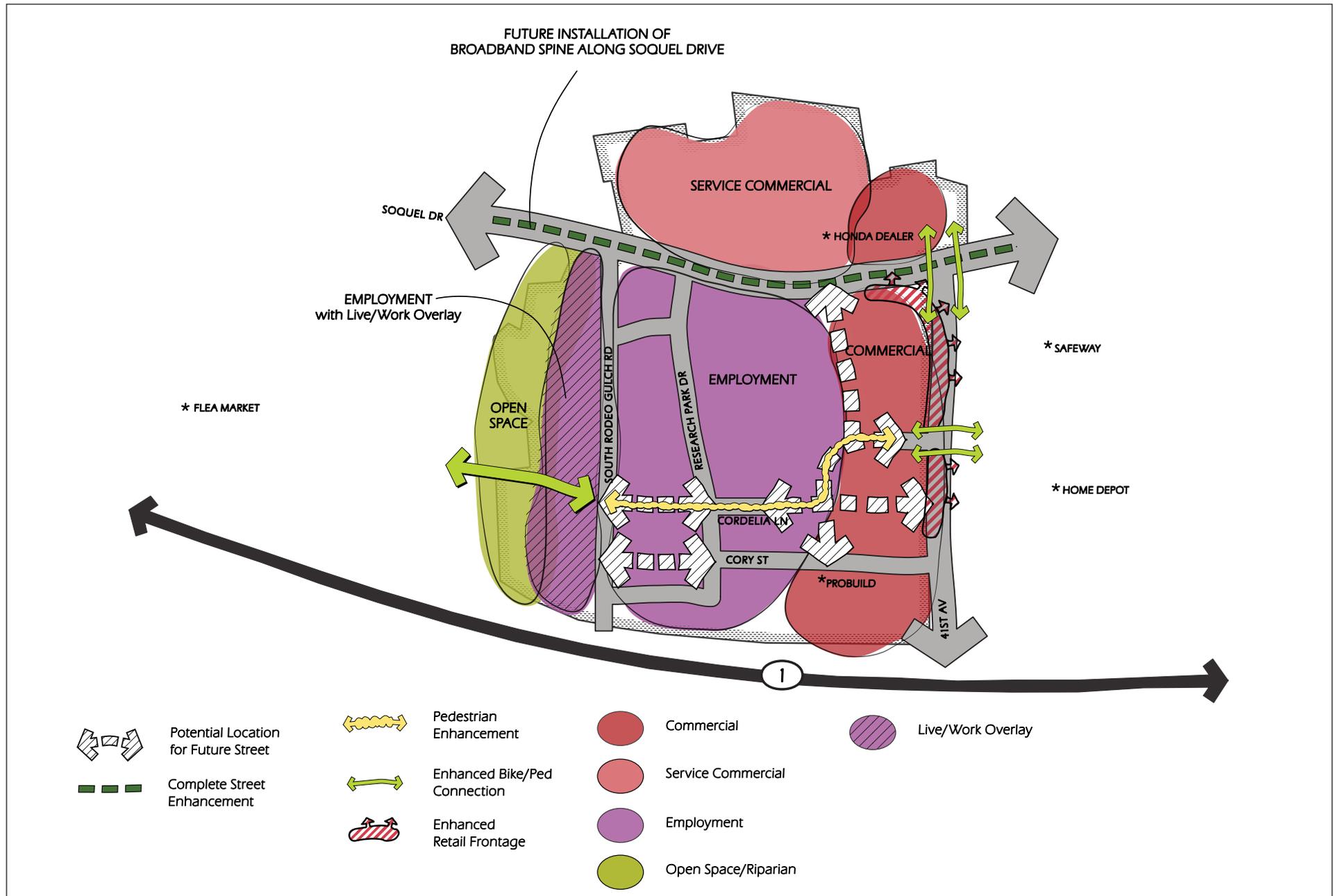
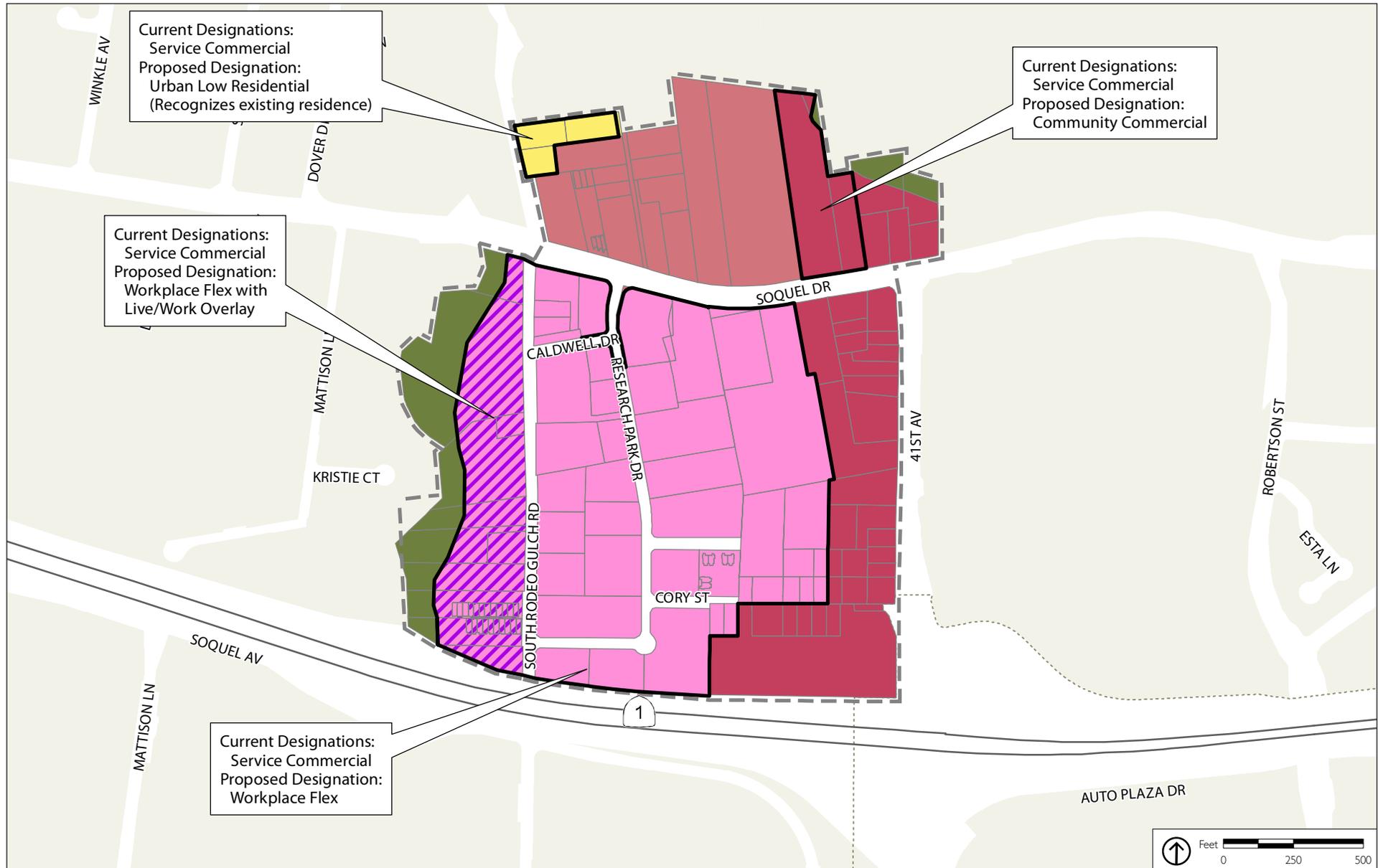


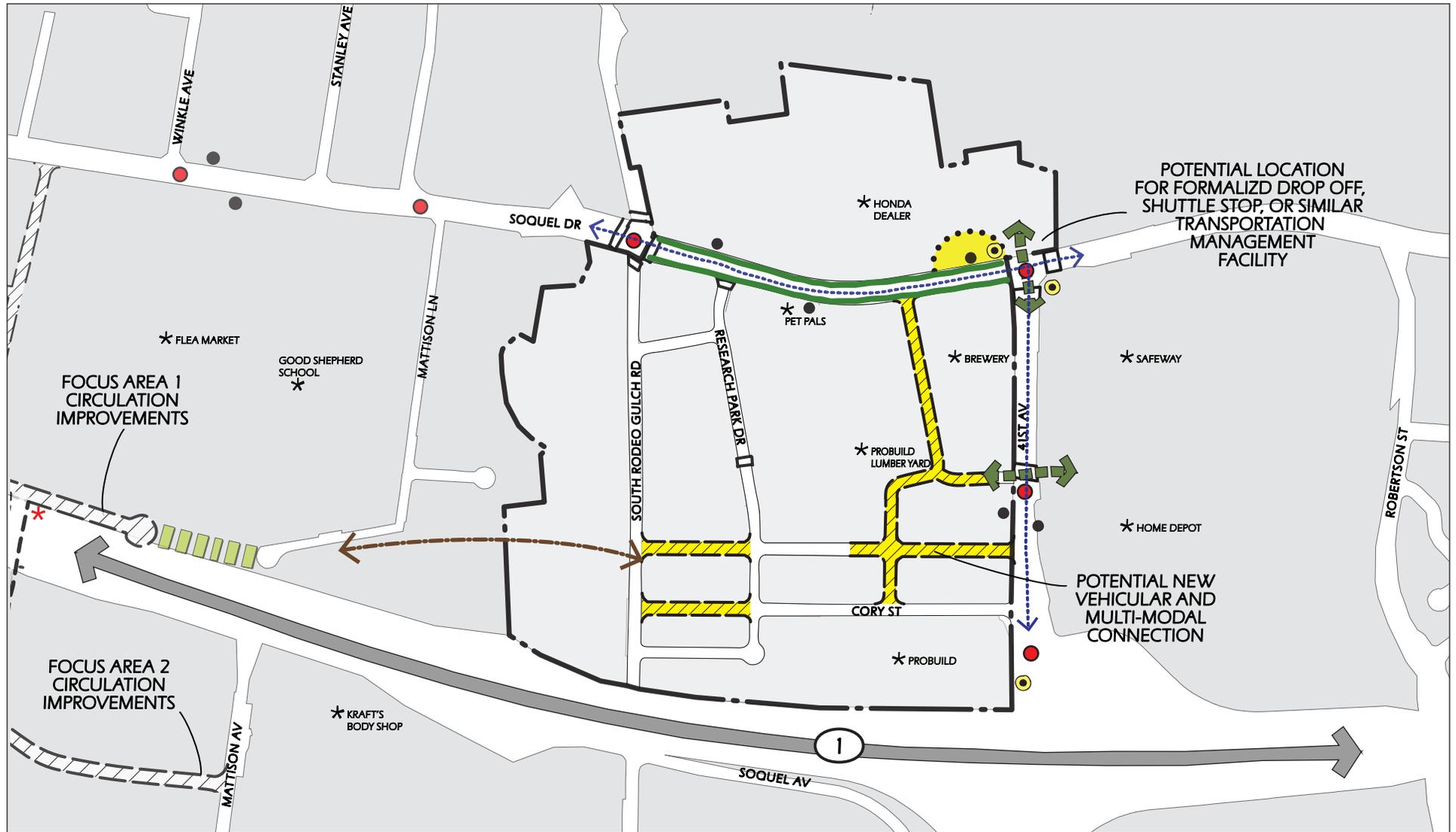
FIGURE 7 - 9 UPPER 41ST AVENUE GENERAL PLAN LAND USE DESIGNATIONS



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



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 *
- New Local Bus Stop
- * 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: 17TH AND BROMMER

Figure 7-11 presents a concept plan for the 17th and Brommer Focus Area (Focus Area 4). This concept aims to create a complete neighborhood focused around a mixed-use activity center on 17th Avenue. New multi-family and single-family housing west of 17th 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 17th 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

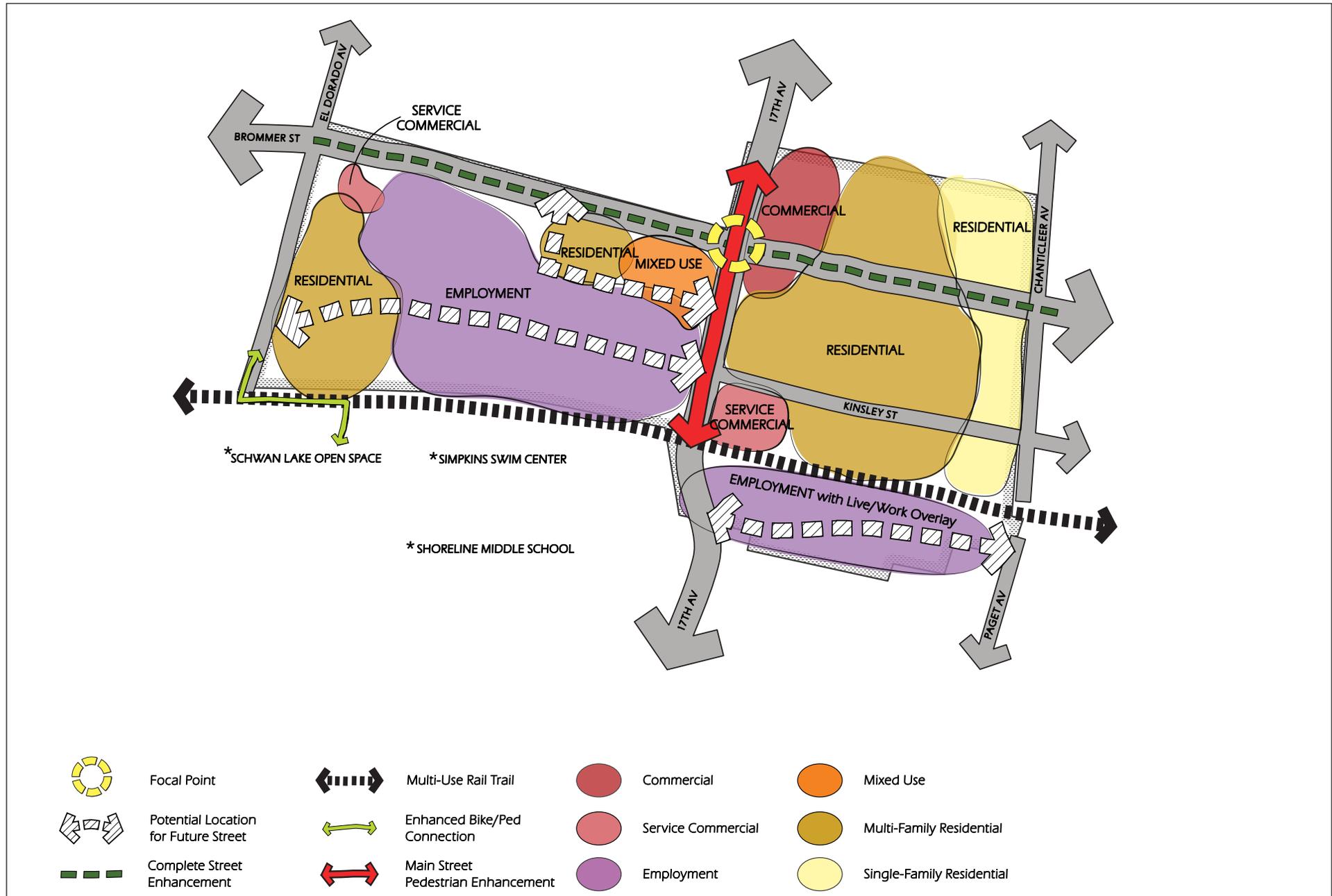


FIGURE 7 - 12 17TH AVENUE/BROMMER STREET GENERAL PLAN LAND USE DESIGNATIONS

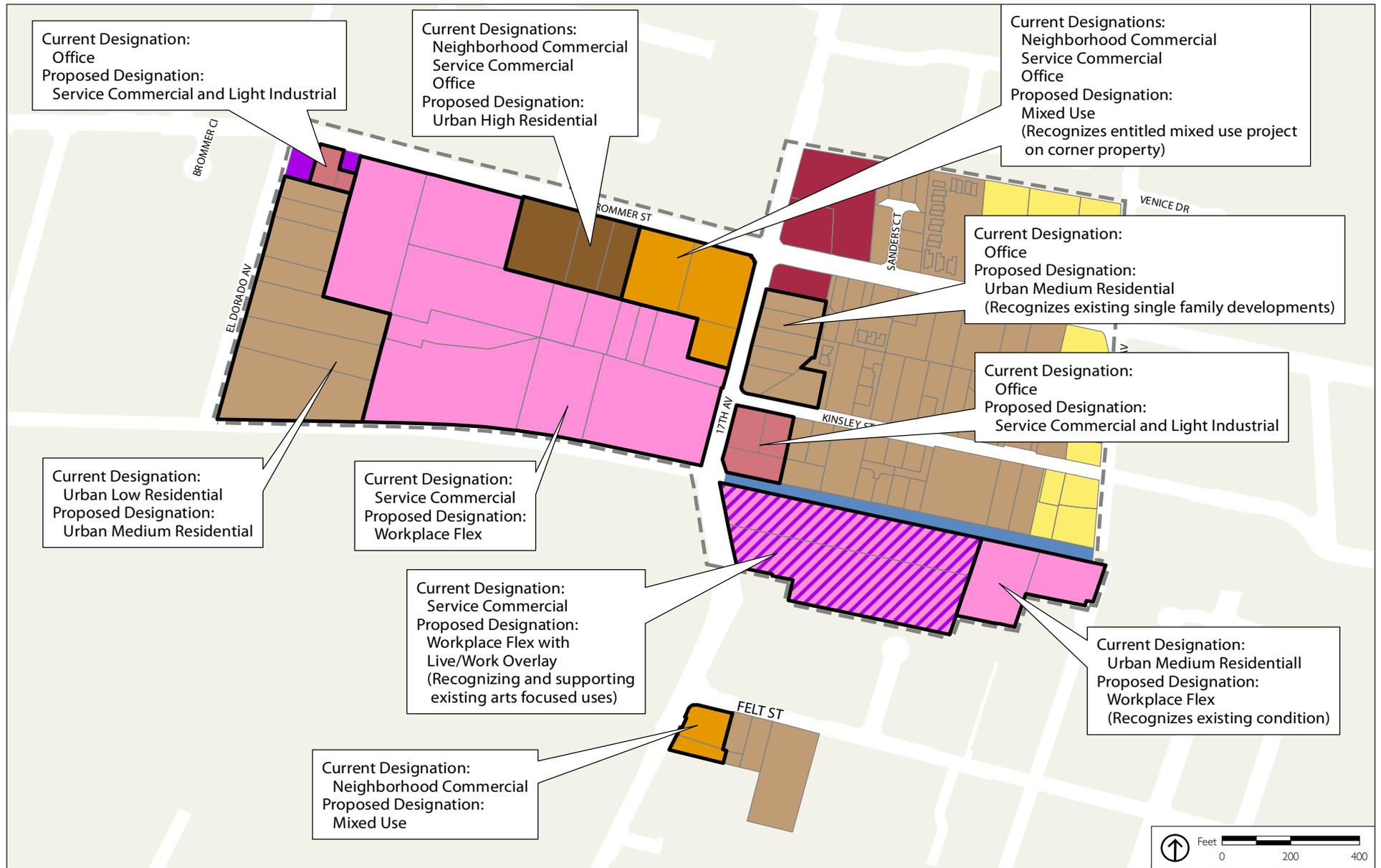
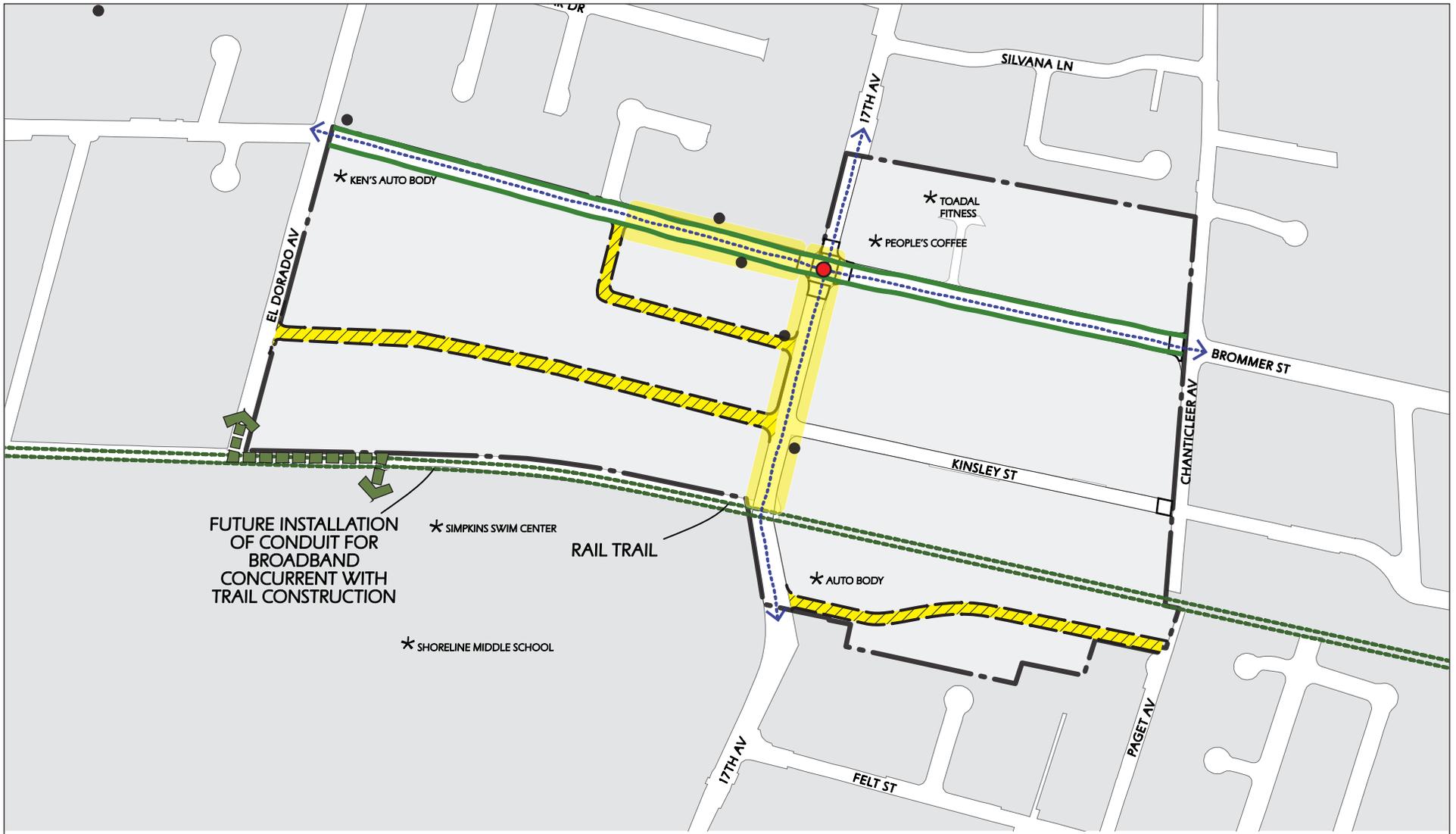


FIGURE 7 - 13 17TH AVENUE/BROMMER STREET CIRCULATION IMPROVEMENT

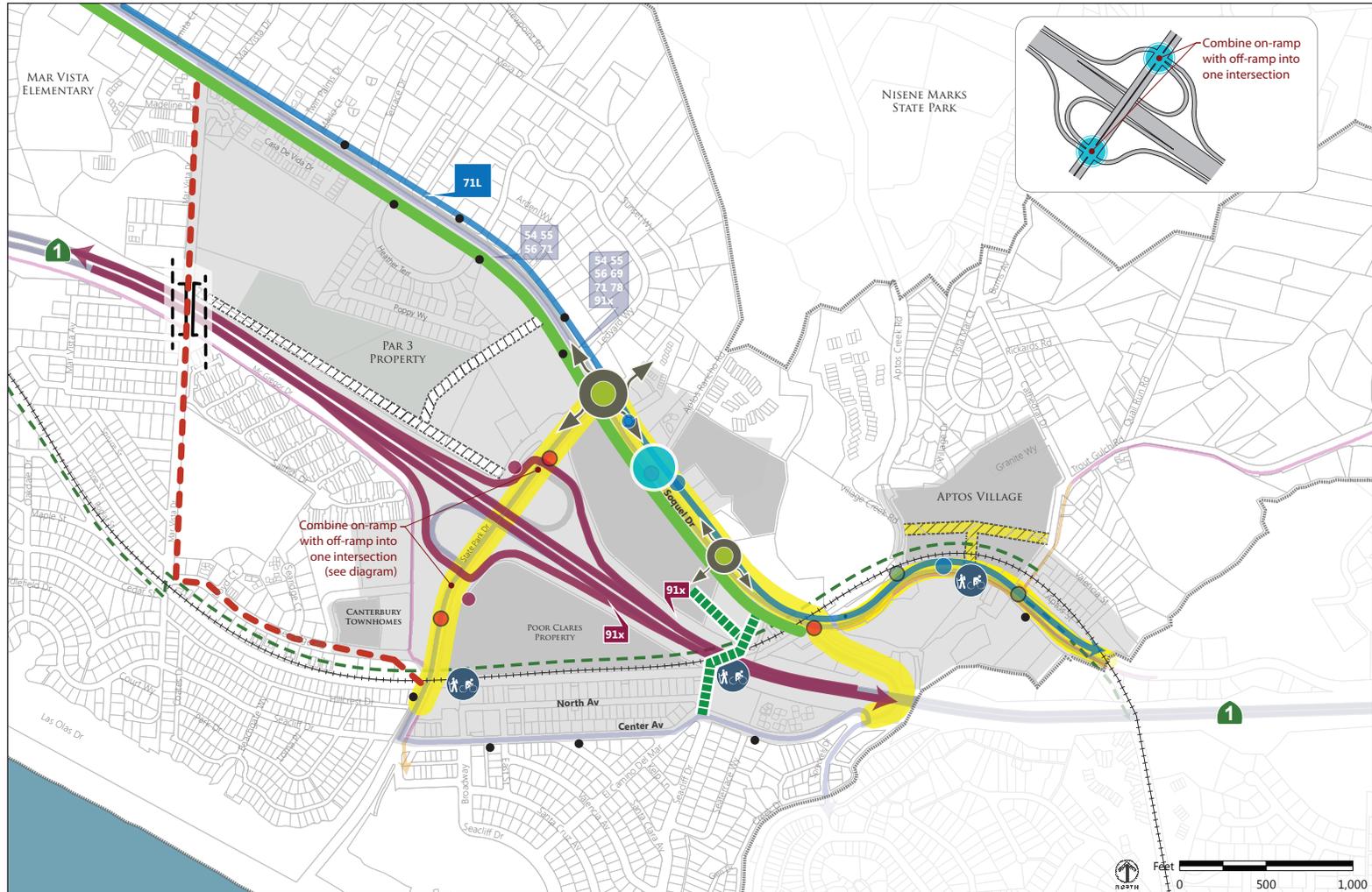


- Existing Bus Stop
- ◻ Existing Crosswalk
- Existing Signal
- ←---→ Existing Bike Lane
- ▨ Possible New Street
- ↔ Enhanced Pedestrian Connection
- Future Rail Trail
- ▬ Complete Streets Enhancement
- Enhanced Streetscape

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 (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 17th 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.

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 17th 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 17th 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 overlay could offer development incentives such as additional height for desired hotel uses. 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 17th 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.

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 41st 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 “retrofits” 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 41st Avenue, to provide “park and walk or bike” users with a connection from Soquel Drive/41st 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/41st 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 7th Avenue/Highway 1 interchange and 41st Avenue/Highway 1 interchange, such as at 17th 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 17th Avenue and 41st Avenue so that it connects due east to 41st Avenue rather than turning south onto Gross Road before it adjoins 41st 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 the suggested Residential Flex designation/zoning) would accommodate modern residential ceiling heights and variation in roof forms, and allow for more creative building design.

A four-story/60 foot non-residential height limit (where permitted through the Medical Mixed-Use Designation, Workflex District, hotel incentive zoning, 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.

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.

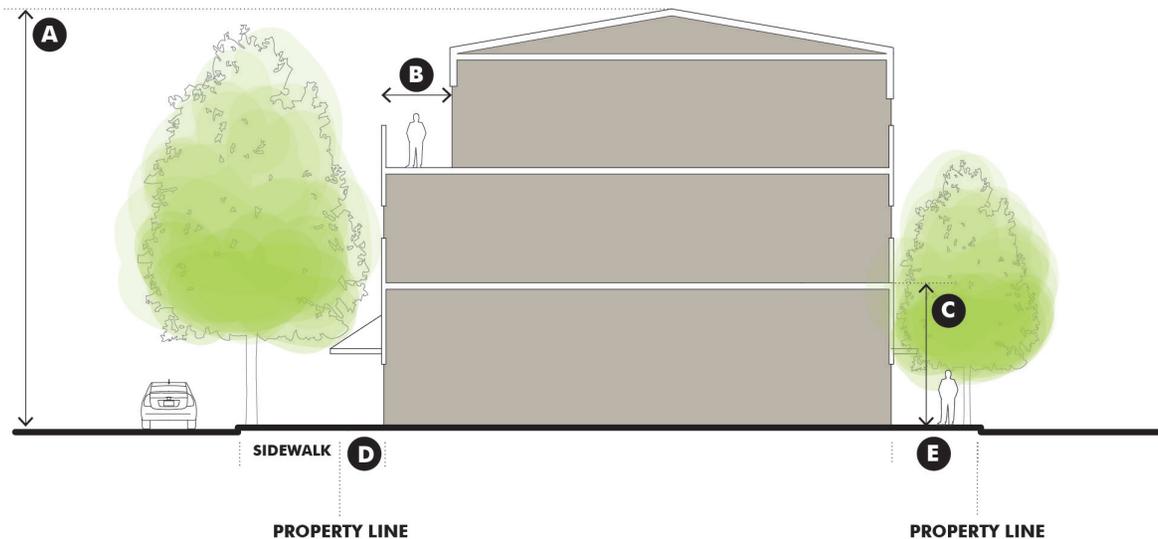
Note that the suggested maximum heights, if approved by the Board of Supervisors for specific sites or areas, would be 50 feet for residential, and 60 feet for non-residential development such as for hotels and/or medical district uses—within the new zoning districts that are contemplated for certain 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	A	40 ft. (3 stories) plus 5 additional ft. with design review
Upper Floor Stepbacks	B	10 ft. min. above the second floor
Ground floor Ceiling Height, Minimum	C	15 ft. minimum
Floor Area Ratio		1.75
Residential Density		20 du/acre; selected sites have no maximum
Setbacks		
Front and Street Side	D	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	E	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
Single-Family and Two-Family	
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
Multi-Family*	
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 (MTIP/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.

Appendix A: Illustrative Cross Sections

The sample cross sections illustrate design features that would support the priority modes for the street network. These features are not intended to be used as absolute guides for street layouts at specific locations in the Plan area. When used in future planning efforts, the cross sections should be adapted to fit the context of the street being studied. As a next step, the design features described below can be developed into a multimodal connectedness checklist of basic and enhanced design features associated with land use and transportation projects.

DESCRIPTION OF ACTIVE MODE DESIGN FEATURES

The sample cross sections in Chapter 5 include enhanced design features for active modes and transit vehicles. This section describes the most common design features suggested by the Plan.

Buffered bicycle lanes. These can include physical barriers, such as raised curbs or landscaped strips, or they may be painted markings on the road surface. In some communities the barriers are actually art pieces. The extra space enhances safety, provides width for avoiding obstacles and opening car doors, and lowers the

stress of cycling on the road. There is often a choice to be made between having a buffer and devoting that extra width to the bike lane itself. This decision is typically made with consideration for the fact that wide bike lanes can be mistaken by drivers for travel lanes.

Physical barriers provide increased comfort for cyclists and are typically more effective along streets with few driveways. Painted buffered bicycle lanes are also effective buffers and require minimal additional maintenance beyond typical bicycle lane striping.

Cycle track. This is an exclusive, enhanced width bicycle lane that features a buffer (physical or marked) between the vehicle travel lane and bicycles, as well as prominent marking, such as colored pavement. These bicycle treatments can be designed for two-way bicycle traffic. The protected environment of a cycle track accommodates cyclists of all levels, including those who would be uncomfortable riding with traffic on a high volume/high speed street.

Wide bicycle lanes. The sample cross sections show bicycle lanes of between six and seven feet. Many existing bike lanes are less than five feet. Extra width provides separation between the bicyclist and motor vehicles and creates a more comfortable riding experience for bicyclists.

Wide sidewalks with landscaping. Some cross sections feature eight to twelve foot sidewalk widths. This allows room for recreational use of the sidewalk (such as on coastal streets) as well as room for street furniture and businesses to spread seating onto the sidewalk and still allow passage. There is more width for landscaping as well. In very high pedestrian volume areas, sidewalk widths of greater than 12 feet may be appropriate.

Pedestrian refuge islands. These are median areas that are well marked and raised relative to the street surface, that shorten the crossing distance across wide intersections. They may be buffered and enhanced with landscaping where there is space.

Travel Lane Width. Benefits of narrower travel lanes on lower-speed urban streets could include a shorter pedestrian crossing distance, lower construction cost and potentially to accommodate more lanes in a constrained right-of-way. On arterial streets with a target speed of less than 35 miles per hour, travel lanes are typically between 10 and 12 feet wide. On collector streets travel lanes are typically between 10 and 11 feet. The travel lane width is based on the target speed, design vehicle (largest frequently used vehicle), right-of-way constraints, and width of adjacent bicycle and parking lanes.

SOQUEL DRIVE, A MULTIMODAL CORRIDOR

Soquel Drive, as a Multimodal Corridor, prioritizes motor vehicles along with pedestrian, bicycle, and transit buses, with transportation system management (TSM) and smart street measures to accommodate all modes of transportation. Pedestrian connectivity and safety are important along a Multimodal Corridor like Soquel Drive. Raised medians with refuge areas for pedestrians make it safer for pedestrians crossing this wider street, which has more than two lanes of vehicular traffic in each direction. Bus shelters with amenities such as benches and overhangs to protect waiting passengers from the sun or inclement weather are also recommended for high-ridership stop locations. Curb extensions (also called bulb-outs) extend the sidewalks into the parking lane to narrow the pedestrian crossing distance and provide additional pedestrian space. Curb extensions enhance

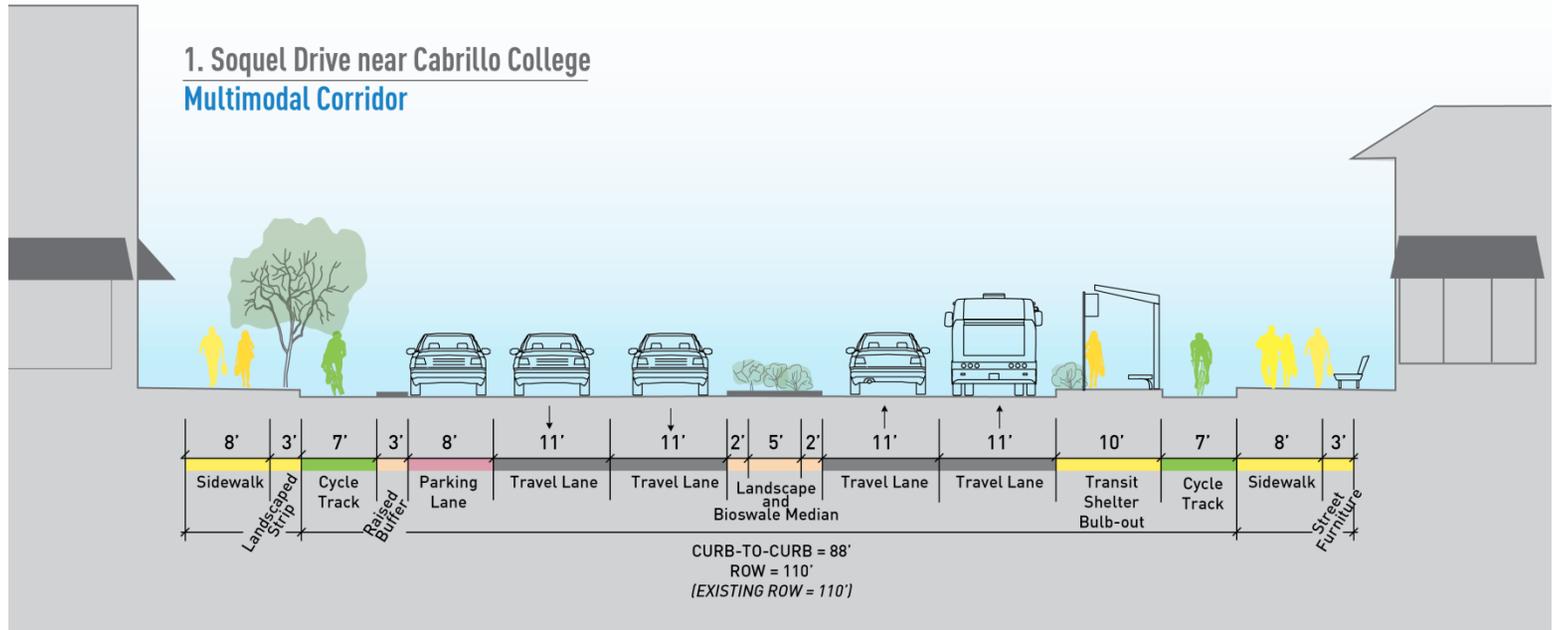
pedestrian safety by increasing visibility of the street, shortening crossing distances, slowing turning vehicles, and separating bus traffic from bicycle traffic. A cycle track provides a protected facility for cyclists.

On the Multimodal Corridor, TSM measures such as adaptive signal timing and intelligent transportation systems (ITS) could 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.

1) Soquel Drive near Cabrillo College

This sample cross section illustrates a location with sufficient right-of-way available to provide an adequate experience for each mode of transport.

For motorists and the bus, there are four travel lanes of adequate width, though narrower than the existing width, parking on one side, and space for a bus shelter. The bus would stop within the travel lane, which is positive for transit operations and contributes to decreased trip time. However, this would increase delay for vehicles during busy periods. Cyclists are accommodated by a seven foot, painted and protected lane, while pedestrians have wide sidewalks, buffers from vehicle traffic, and access to a median that can be used for landscaping and drainage mid-block, and as a mid-crossing refuge at intersections. Pedestrians would, however, have to cross the cycle lane to reach the bus shelter. There is a landscape buffer on one side and landscape/bioswale median to provide greenery, a pleasant environment, and biologic treatment of surface drainage.



2) Soquel Drive between Aptos Rancho Road and Aptos Wharf Road

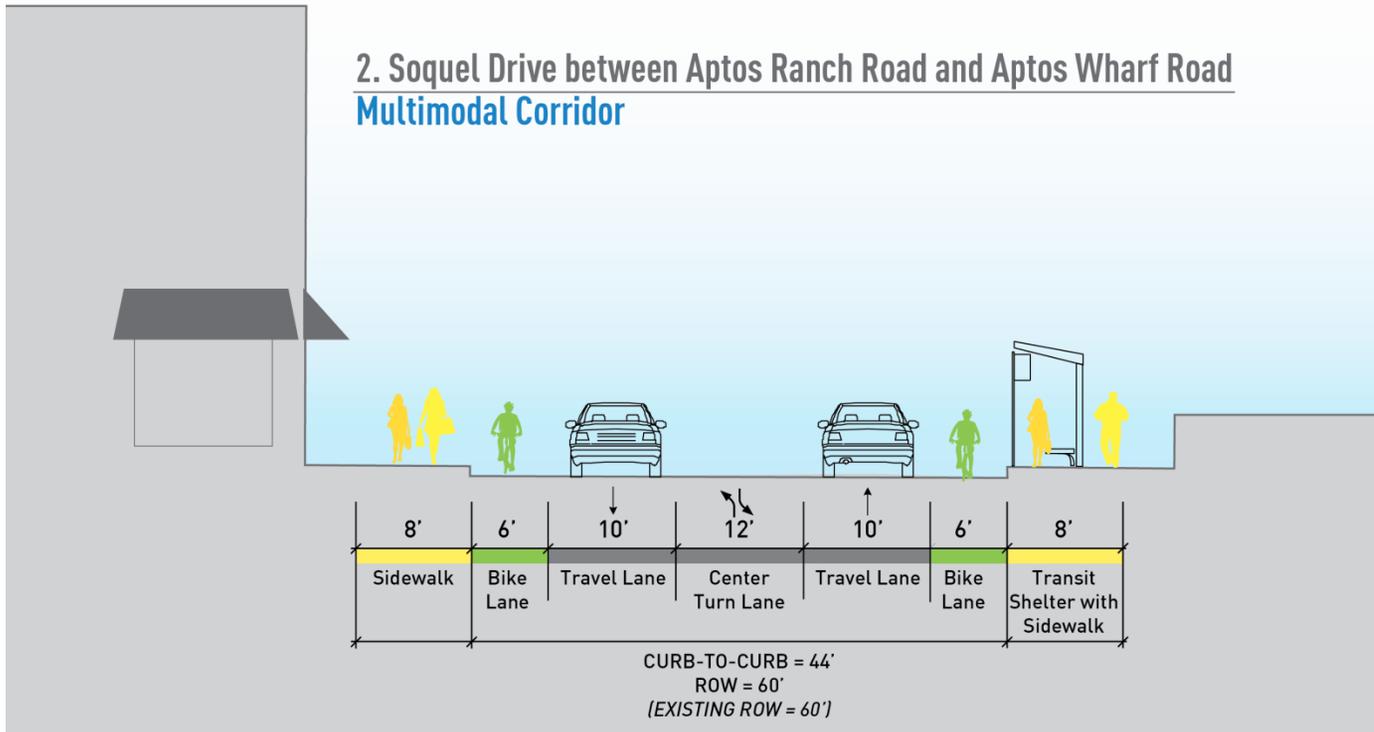
East of State Park Drive, Soquel Drive narrows to one lane in each direction, with a two-way left turn lane serving adjacent land uses. The travel lanes are narrowed, which matches the posted 25 mile per hour vehicle speed.

The Rancho Del Mar Shopping Center attracts many residents from the neighborhood who walk or bike to run errands at the various retailers. Widened sidewalks would improve the space for pedestrians accessing the shopping center from Soquel Drive. Enhanced bus shelters would make the experience of waiting for buses more comfortable for passengers and potentially

encourage people to ride transit to and from this area rather than drive.

This is area that would benefit from the acquisition of additional right of way in a few areas. In the area of the rail trestle and historic 2-lane bridge, additional right of way is particularly needed to better accommodate pedestrians and cyclists. Bike/Ped bridges alongside the historic bridge could be considered for either the south and/or north sides of the vehicular bridge. In the area fronting the Rancho Del Mar shopping center, additional right of way could accommodate construction of a pull-through bus lane which would prevent obstruction of the travel lanes. Trees and greenery could also be added, and additional width could be considered for travel lanes and bicycle lanes. If future development or renovation projects occur at the Rancho Del Mar site or sites across

2. Soquel Drive between Aptos Ranch Road and Aptos Wharf Road Multimodal Corridor



the street along the north side of Soquel Drive, that include buildings that activate the street frontages, then wider sidewalks that allow outdoor uses such as outdoor café seating should also be considered.

Currently, the bicycle lane disappears entirely where the road crosses Aptos Creek on the narrow, historic Aptos Bridge. This is a well-known “pinch point” for bicyclists. When the Monterey Bay Sanctuary Scenic Trail network (MBSST) improvements are constructed, pedestrians and cyclists will be able to cross Highway 1 from the Seacliff Area, connecting to Aptos Wharf Road which is located right at this pinch point. This is the area where the possibility of bike/ped bridge(s) could be considered on

the south and/or north sides of the historic bridge. Currently, this section of the MBSST is designated as one of the lowest priority sections for construction (Monterey Bay Sanctuary Scenic Trail Network Master Plan, 2013). If the rail trestle is ever re-built, designing more width between the abutments could be considered to better accommodate connections for cyclists and pedestrians. Given uncertainties in the timing of implementing this challenging section of the MBSST, the County could consider short-term alternatives to improve the situation for bicyclists and accessibility. These alternatives might include colored bicycle lanes, additional signage and striping.

3) Brommer Street, a Bicycle Connector

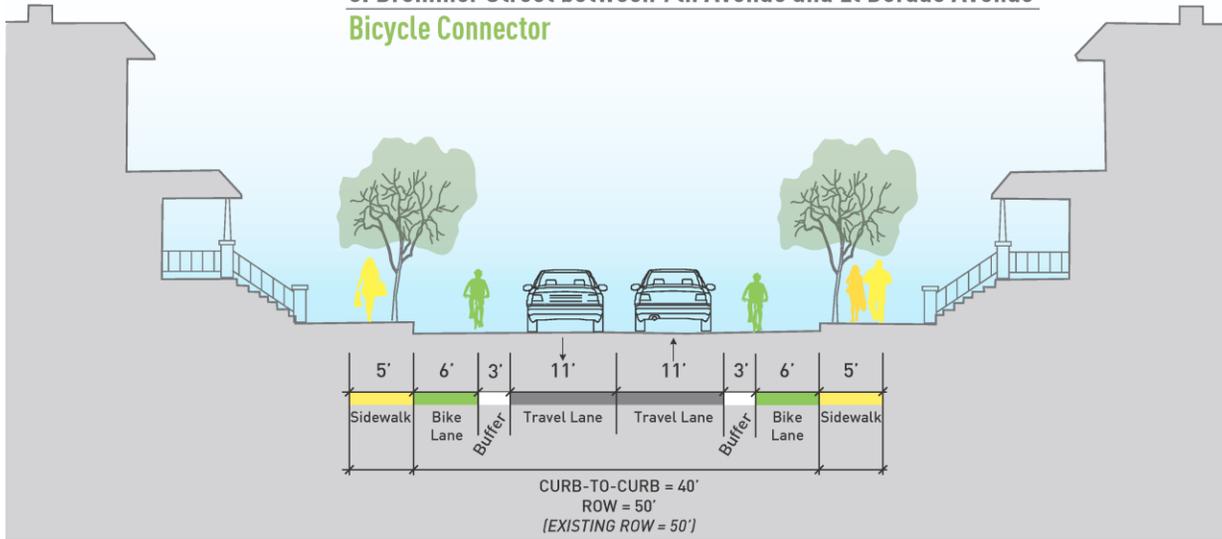
Brommer Street is designated on the network map as a Bicycle Connector, indicating that bicycle travel is the priority mode. The bicycle lanes are buffered from vehicle traffic and should be continuous from 7th Avenue to the City of Capitola. In some locations along Brommer Street there is a five-foot, separated sidewalk that was constructed relatively recently. This illustrates the types of trade-offs that will be necessary in various locations to provide a street that prioritizes bicycle travel with continuous protected bicycle lanes.

4) Soquel – San Jose Road, Rural Connector

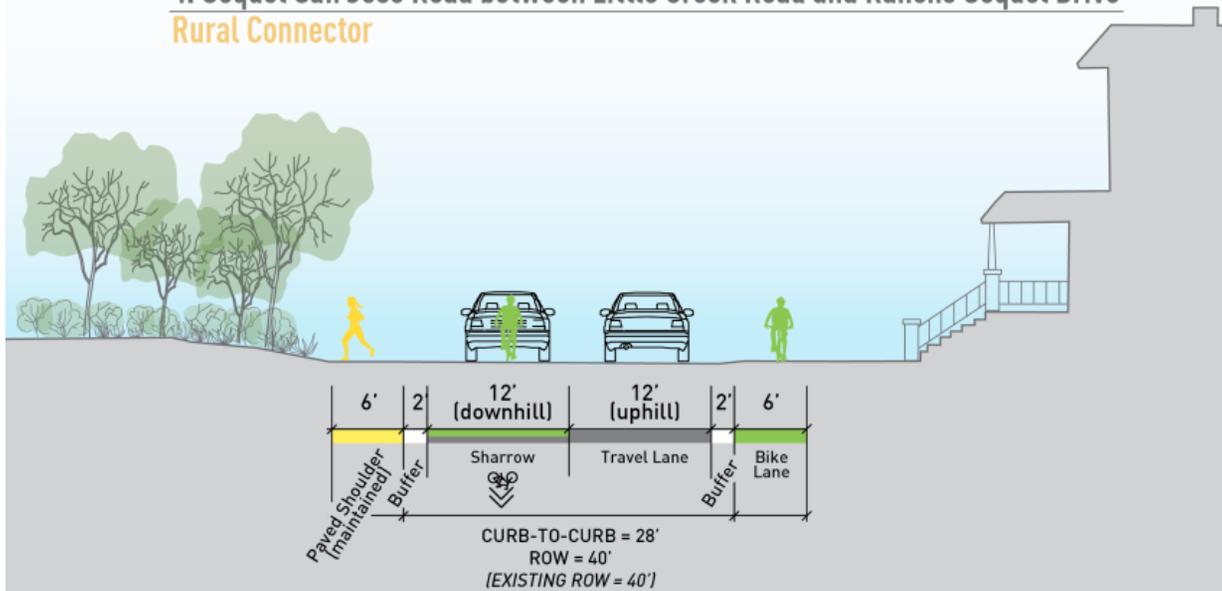
Soquel-San Jose is a rural connector that does not have sidewalks beyond Merlin Way, and on which vehicle speeds can be high. Rural connectors would prioritize vehicles and bicycles. This sample cross section provides for vehicles in two 12-foot travel lanes. Sharrow lanes would be provided for bicycles in the downhill direction, and in the uphill direction cyclists would be provided with two feet of buffering along six feet of paved shoulder that is maintained free of vegetation. In the downhill direction bicycles would typically travel at speeds expected in the vehicle travel lane. While the Rural Connector would not be designed for pedestrians, the downhill shoulder could be accessed by pedestrians even though pedestrian traffic is not common in these rural areas.

Maintaining wide paved shoulders free of landscaping is a strategy that can be used throughout the unincorporated area where sidewalks and bike lanes do not exist. The County should ensure that private property owners do not inappropriately encroach upon public right of way in a manner that reduces area available for pedestrians and bicyclists.

3. Brommer Street between 7th Avenue and El Dorado Avenue
Bicycle Connector



4. Soquel San Jose Road between Little Creek Road and Rancho Soquel Drive
Rural Connector



Appendix B: Transportation Improvements

INTRODUCTION

This list of multimodal infrastructure improvements has been compiled from ideas and suggestions gathered through the process of preparing the Sustainable Santa Cruz County Plan (Plan). The purpose of this list is to highlight improvements that will strengthen connectivity and multimodal transportation in the Plan area. The projects range from small to large investments, acknowledging that in the right locations relatively inexpensive improvements, such as colored intersection markings, painted bicycle lanes and bicycle lane buffers in existing right of way, 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 purpose of this 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) 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 RTP, CIP, County Bike Plan, and the Circulation Element of the County General Plan, in the future. (Some of these improvements are already addressed in the RTP and County plans, often as part of larger, more general projects. They are included here in more specific form to highlight their importance in achieving the sustainability goals for the Plan area.)

Decisions about transportation improvements involve balancing the many goals we have for our transportation network. While adopting a layered network approach to transportation planning can assist with balancing competing demands (Chapter 5), choices will still be necessary at many locations. Retrofitting an existing road network is a particular challenge. Some projects on this list may involve trade-offs among, for example, lane configuration, parking availability, and right of way dedicated to cyclists and to improving the pedestrian environment. Other projects are more straightforward. In all cases, we will be working toward a network that provides all users with efficiency, comfort and safety, to the greatest extent possible.

Note that many of the projects benefit several or all modes of transportation and therefore could appear in several categories of improvements. Where there is overlap, a single project does not appear in more than one category. In addition to the more defined projects on this list, the following should also be considered:

1. Preparation of a master or specific plan for a portion of the medical and employment districts that is likely to undergo substantial change in the near term. The subject area straddles Highway 1, consisting of the portion of Focus Area 1 (Figure 7-2) that is south of Soquel Drive between 17th Avenue and Mattison Lane, and the western half of Focus Area 2 (Figure 7-5), consisting of the area

between 17th Avenue and Rodeo Gulch. This area includes the Palo Alto Medical Foundation medical campus that will be developed at the former Skyview Drive-In site on the north side, as well as the Sheriff Service Center, Nigh/Protiva R-UH housing site, and other large parcels on the south side. A master or specific plan would determine the optimal integrated circulation plan for this area and evaluate funding options for circulation improvements.

2. Preparation of feasibility study to assess a potential new connection across Highway 1 linking the former Skyview Drive-In site to the housing and employment areas on the south side. In addition, new connections across the highway at 17th Avenue and near Cabrillo College Drive should be evaluated.
3. Evaluation of whether there are feasible options for modifying the historic bridge over Aptos Creek to improve conditions for bicyclists on Soquel Drive.

in center turn lanes and relocating parking spaces on the south side to Soquel Business Improvement Association parking lots nearby.

- Buffered bicycle lanes (Class I) on Brommer Street, from the City of Santa Cruz to City of Capitola.
- Brookwood Drive bicycle connector and connection through Dominican Hospital campus (work with City of Santa Cruz Department of Public Works).
- Chanticleer Highway 1 bicycle and pedestrian overpass, connecting north and south parts of Live Oak (Regional Transportation Commission project, currently in planning stage) (Figures 7-4, 7-7).
- Frontage road, all modes, on the north side of Highway 1 from 17th Avenue east to a new cul de sac, with an exclusive bicycle / pedestrian connection to the existing cul de sac terminus of Mattison Lane (Figure 7-4).
- Bicycle and pedestrian crossing between Mattison Lane and Research Park sides of South Rodeo Gulch Road (Figures 7-4, 7-10).
- Improved bike lane (Class I) and create pedestrian separation from traffic on East Cliff Drive between 7th Avenue and 12th Avenue.
- Bicycle and pedestrian connection from the Monterey Bay Sanctuary Scenic Trail network (MBSST, also known as the Rail-Trail) where it crosses Highway 1 in Aptos, west to the southeast corner of the Rancho Del Mar shopping center and continuing along the rear portion of the Rancho Del Mar shopping center to State Park Drive (Figure 7-14).

LIST OF MULTIMODAL TRANSPORTATION IMPROVEMENTS

Bicycle Connectivity, Safety, and Cycling Appeal

- Cycle track, Soquel Avenue/Soquel Drive (Figure 7-14 and Figure 1, Appendix A). The cycle track should extend uninterrupted from the County / City of Santa Cruz boundary through the medical district, Cabrillo College, and Soquel Village to Aptos Wharf Road.
- This may be facilitated by a combination of re-striping Soquel Drive, modifying storage capacity

- Bicycle and pedestrian connection from Center Avenue in Seacliff to the Monterey Bay Sanctuary Scenic Trail Network (Figure 7-14).
- Complete streets improvements on Spreckels Drive from Soquel Drive south to Moosehead Drive.
- Mar Vista-Highway 1 overpass connecting Seacliff to Mar Vista School and the north side of Highway 1 (Regional Transportation Commission project, currently in planning stage) and enhanced bicycle lanes and markings on Mar Vista Drive and Searidge Road (Figure 7-14).
- Improve crossing at Highway 1 ramps for bicycles and pedestrians, including dashed green lanes and “yield to bikes” signs (Soquel/ 7th Avenue interchange, 41st Avenue, and State Park interchange).
- Increased bicycle facilities, such as secure bicycle parking, at activity centers, express stops, and Park and Ride lots.

Pedestrian Connectivity, Safety, and Walking Appeal

- Pedestrian improvements on Soquel Drive and Soquel Avenue between 7th Avenue and Thurber Lane, pursuant to “Walking Audit, Issues and Opportunities” (Existing Conditions Report, Figure T-7). This includes projects to decrease crossing length at highway ramps, increase visibility at cross walks, fill in sidewalk gaps and remove sidewalk obstructions on Soquel Avenue and Soquel Drive.
- Complete street enhancements, Soquel Drive

through the medical district (Figure 7-4)

- Complete streets enhancements, Commercial Way between 17th Avenue and Soquel Drive.
- Enhanced streetscape on Chanticleer Avenue between Rodriguez Street and the planned overpass at Highway 1.
- Connection from El Dorado Avenue across the MBSST to Simpkins Swim Center.
- Pedestrian improvements on State Park Drive at Highway 1 pursuant to “Walking Audit, Issues and Opportunities” (Existing Conditions Report, Figure T-8). This includes projects to construct curb bulb outs at Searidge Drive, Canterbury Drive and Old Dominion Court, and a high visibility crosswalk at Old Dominion Court.
- Complete street enhancements, State Park Drive, Seacliff to Soquel Drive (Figure 7-14).
- Complete street enhancements, Soquel Drive from State Park Avenue to Aptos Village (Figure 7-14).

New Vehicle Connections and Traffic Congestion Improvements

- Multimodal circulation improvements in the area between Soquel Drive and Highway 1, in association with development of the PAMF medical campus on the former Skyview Drive In property. Extend Thurber Lane southward and create a standard four way intersection at Commercial Way.
- Extend Chanticleer Avenue north across Soquel Drive to Thurber Lane.

- Create new circulation on the south side of Highway 1 between 17th Avenue and Mattison Lane (Figure 7-7).
- Connect El Dorado Avenue to 17th Avenue and provide internal circulation in the north east quadrant of the area bounded by El Dorado Avenue, 17th Avenue, Brommer Street and the Rail-Trail (Figure 7-13).
- Connect 17th Avenue and Paget Avenue to provide internal circulation for the properties adjacent to the MBSST (Figure 7-13).
- Create new circulation through upper 41st Avenue / Soquel Research Park (Figure 7-10)
- Traffic signal at Soquel Drive and Robertson Road in Soquel.
- Evaluate approaches to modify the routing of the Gross Road / Frontage Road connection to 41st Avenue to decrease impacts of traffic in the residential area.
- Frontage road on the north side of Highway 1 between Old Dominion Way and Mar Vista Drive with a connection north to Soquel Drive near the east side of Aptos Square shopping center (Figure 7-14).
- Transit connection hub at a local in the medical district, to include express east-west bus service with access to/from the highway interchange, and elements of Bus Rapid Transit.
- Increase capacity of Park and Ride for the Highway 17 Express bus route.
- Evaluate transit priority at intersections along Soquel Drive (work with RTC and Metro).

Transit

- Enhanced express bus service along Soquel Avenue between Aptos Village and Dominican Hospital (91X). In Aptos, utilize highway ramps at State Park for stops.
- Enhanced Highway 17 express service, new stops at 41st Avenue and State Park Drive.

Appendix C: AMBAG Population and Employment Trends and Projections

The Association of Monterey Bay Area Governments (AMBAG) is, according to their website, “a Joint Powers Authority (JPA) governed by a twenty-four member Board of Directors comprised of elected officials from each City and County within the region. The AMBAG region includes Monterey, San Benito and Santa Cruz County. AMBAG serves as both a federally designated Metropolitan Planning Organization (MPO) and Council of Governments (COG). AMBAG performs metropolitan level transportation planning on behalf of the region. Among its many duties, AMBAG manages the region’s transportation demand model and prepares regional housing, population and employment forecast that are utilized in a variety of regional plans. In 2008, the State of California adopted legislation that required all MPOs, including AMBAG, to prepare “Sustainable Community Strategies” (SCS), which were to incorporate policies for future land use and transportation patterns

and public transportation funding investments that would lead to reduction in greenhouse gas (GHG) emissions. AMBAG has recently adopted the 2035 SCS for this region (called “Moving Forward Monterey Bay”) in conjunction with the 2035 Metropolitan Transportation Plan (MTP), and both documents together present strategies for where future housing and jobs can be located, in coordination with transportation improvements, to offer shorter commutes and reduced GHG emissions in the future. In the long term, these shifts can act to slow down potentially adverse effects of climate change on our region, while providing additional benefits for quality of life in urban areas.

POPULATION

AMBAG published its 2035 MTP/SCS for public review and comment in February 2014, along with the Regional Housing Needs Allocation Plan for the next Housing Element Update cycle. These documents and projections were adopted in June 2014, including the following breakdown of statewide forecasts of population, housing units, and jobs through 2035 (Table C-1).

HOUSING UNITS

For the whole of the unincorporated county area (“Balance of County”), the forecast is for the following levels of population and housing unit growth from 2010 to 2035 (Table C-2):

- Population +14,488 persons
- Housing Units + 5,388 units

TABLE C-1 POPULATION

Geography	2010	2020	2025	2030	2035	Compound Annual Growth Rate	Change Over Forecast Period
Santa Cruz County	262,382	279,381	287,512	298,095	308,582	0.65%	17.61%
Capitola	9,918	9,119	9,427	9,758	10,088	0.07%	1.71%
Santa Cruz	59,946	66,860	70,058	73,375	76,692	0.99%	27.94%
Scotts Valley	11,580	11,638	11,696	11,754	11,813	0.08%	2.01%
Watsonville	51,199	59,446	61,452	63,607	65,762	1.01%	28.44%
Balance of County	129,739	132,318	134,879	139,601	144,227	0.42%	11.17%

TABLE C-2 HOUSING UNITS

Geography	2010	2020	2025	2030	2035	Compound Annual Growth Rate	Change Over Forecast Period
Santa Cruz County	104,476	111,039	113,168	117,151	120,196	0.56%	15.05%
Capitola	5,534	5,534	5,534	5,537	5,553	0.01%	0.34%
Santa Cruz	23,316	26,890	27,547	28,297	29,355	0.93%	25.90%
Scotts Valley	4,610	4,655	4,692	4,771	4,785	0.15%	3.80%
Watsonville	14,089	16,382	16,933	17,733	18,188	1.03%	29.09%
Balance of County	56,927	57,578	58,462	60,813	62,3315	0.36%	9.46%

EMPLOYMENT

For the whole of the unincorporated county area (“Balance of County”), AMBAG has projected the following levels of job growth from 2010 to 2025, and then from 2025 to 2035, by industry sector (Table C-3).

TABLE C-3 SUMMARY OF AMBAG 2010-2035 JOB GROWTH PROJECTIONS FOR UNINCORPORATED COUNTY AREA

Industry Sector	Job Growth 2010-2025	Job Growth 2025-2035	Total 2010-2035
Agriculture	+236	+101	+337
Construction	+522	+65	+587
Industrial	+48	-17	+31
Retail	+61	+19	+80
Service	+230	+51	+281
Public	+3,299	+1,504	+4,803
Totals	+4,396	+1,757	+6,153

Note: Detailed charts of job growth projections by jurisdiction and by sector are presented on pages that follow.

AMBAG REGIONAL FAIR SHARE HOUSING ALLOCATION (RHNA) 2014-2023 FOR UNINCORPORATED AREA

The Regional Housing Need Allocation (RHNA), to be addressed by the next Housing Element Update that must be adopted by December 2015, is only for a portion of the 25-year SCS/MTP forecast timeframe. The time

period for the RHNA/Housing Element covers 10 years, from January 1, 2014 through December 31, 2023.

The proposed 2014-2023 RHNA for the unincorporated Santa Cruz area is 1,314 housing units, targeted to income levels as shown below. Santa Cruz County must adopt a Housing Element, and demonstrate with the General Plan and zoning code that land is available to accommodate the following numbers of housing units, in a manner that will make them affordable to households at various income levels. The “very low” income category will also address housing for extremely low income households (Table C-4).

The RHNA reflects forecasted growth of housing units at an average of 131 units per year over the 10-year timeframe. The AMBAG SCS reflects forecasted growth of housing units at an average of 215 units per year over 25-year timeframe. The variance between the two numbers stems from both the methodology used to derive them as well as their purpose in the regulatory landscape. The RHNA represents a bare minimum regulatory requirement, while the SCS forecast functions more as an ‘FYI’ for local jurisdictions. Both numbers are within the ranges of building permits issued over the 35-year history of the County’s Measure J growth management system.

TABLE C-4 INCOME LEVELS

Income Level	Number of Units (2014-2023)
Very Low	317
Low	207
Moderate	239
Above Moderate	551
Total	1,314

Appendix D: Tools For Measuring Performance of The Transportation Network and Related Next Steps

Prepared by Daniel Rubins, Lindsey Hilde, and Matt Haynes, of Fehr & Peers

OVERVIEW

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. With a potential shift toward a balanced transportation strategy, as described in the Sustainable Santa Cruz Plan, Santa Cruz County would need to update the methods by which new development and transportation projects are evaluated. This update would include modifications to the General Plan Circulation Element and other implementation documents. This appendix provides a background summary of the Santa Cruz County 1994 General Plan and Local Coastal Program objectives, a description of the current State and regional regulations affecting transportation planning and environmental

analysis, summary of state of practice multimodal analysis methods, discussion of how multimodal level of service (MMLOS) methods apply to Santa Cruz County, the role of the Sustainable Santa Cruz County Plan street type network, and a summary of next steps and recommendations.

The next steps section is a chronological description of the components for updating the Santa Cruz County General Plan Circulation Element, implementation documents, and transportation performance measurement framework in a manner that balances among transportation modes. This framework includes a list of qualitative and quantitative performance measures that may be used for analysis at 1) the system-wide, General Plan level for future cumulative analysis, and 2) the project-level, using a “multimodal connectedness checklist” to evaluate individual development proposals and transportation projects. These performance measures would align with the Sustainable Transportation Analysis & Rating System (STARS) used by the Santa Cruz County Regional Transportation Commission (SCCRTC) in preparing the Regional Transportation Plan, the Caltrans Smart Mobility Framework, and performance measures developed from the forthcoming SCCRTC Santa Cruz County Unified Corridor Investment Plan.

INTRODUCTION

As with many other General Plans in California and across the United States, the Circulation Element of the *Santa Cruz County 1994 General Plan and Local Coastal Program* uses a metric called level of service (LOS) to measure traffic operations. The County Circulation Element also includes an average commute vehicle occupancy objective, a target mode shift and, for

consistency with the Monterey Bay Unified Air Pollution Control District, an objective to reduce vehicle miles traveled (VMT).

The General Plan Circulation Element has a vehicle LOS C policy objective for streets and intersections countywide. However, due to constrained conditions (e.g., construction cost or physical constraints) a vehicle LOS D standard (i.e., minimum acceptable operations) is applied for many of the county streets. The vehicle LOS method only considers automobile delay and is insensitive to walking, bicycling, and transit conditions. Traditional vehicle LOS analysis methods actually consider bicycles and pedestrians to be an impediment.

As a result, performing only a traditional vehicle LOS analysis, while appropriate for some situations, can have unintended consequences for other travel modes and often leads to overbuilt vehicle infrastructure. For example, changing signal timing to reduce automobile delay can affect pedestrian accessibility by increasing the waiting time for pedestrians crossing the street. Because of the drawbacks of traditional vehicle LOS analysis, new goals and policies are being adopted in some jurisdictions to evaluate all modes of transportation when preparing a Countywide transportation system and when assessing the effects of new development or transportation projects.

BACKGROUND

1994 County General Plan Objectives, Policies and Programs

The Circulation Element of the Santa Cruz County *1994 General Plan and Local Coastal Program* expresses community transportation objectives, policies, and programs. These are supportive of travel by all modes of

transportation in the County, of balancing each travel mode and of avoiding expanded roadways and intersections that conflict with benefits such as the ability to provide enhanced multimodal facilities, urban design amenities, and economic vitality.

The General Plan Circulation Element also has objectives to increase the average commute vehicle occupancy, lower the automobile person mode split for all trips, and manage the increase in vehicle miles traveled. Specifically, the General Plan includes the following multimodal objectives:

Objective 3.1 Vehicle Miles: To limit the increase in Vehicle Miles Traveled (VMT) to achieve as a minimum, compliance with the current Air Quality Management Plan.

Objective 3.2 Vehicle Occupancy: To increase the average number of persons per commute vehicle to 1.35 persons per vehicle while pursuing a goal of reducing automobile trips to a maximum of 60 percent of all trips through encouragement of alternative transportation by transit, bicycles and walking.

The General Plan also has a level of service objective and policy to manage and maintain vehicle capacity on the local street system:

Objective 3.12 Level of Service: To ensure that development shall not create traffic which will exceed acceptable levels of service on surrounding roadways.

Policy 3.12.1 Level of Service (LOS) Policy: In reviewing the traffic impacts of proposed development projects or proposed roadway improvements, LOS C should be considered the objective, but LOS D as the minimum acceptable (where costs, right-of-way requirements, or

environmental impacts of maintaining LOS under this policy are excessive, capacity enhancements may be considered infeasible). Review development project or proposed roadway improvements to the Congestion Management Program network for consistency with Congestion Management Plan goals.

Proposed development projects that would cause LOS at an intersection or on an uninterrupted highway segment to fall below LOS D during the weekday peak hour will be required to mitigate their traffic impacts. Proposed development projects that would add traffic at intersections or on highway segments already at LOS E or F shall also be required to mitigate any traffic volume resulting in a 1% increase in the volume/capacity ratio of the sum of all critical movements. Projects shall be denied until additional capacity is provided or where overriding finding of public necessity and/or benefit is provided.

As discussed in the next section, in some cases it may be desirable to elevate the priority of a particular travel mode or set of users (e.g., transit priority street, or bicycle lanes) to enhance local or regional circulation and connectivity, and fit within the local context.

Considering State and Regional Transportation Plans and Regulations Including Draft Updates To CEQA Guidelines

Over the past ten years, the state of California has adopted state legislation to address climate change and streamline CEQA evaluation of transportation (including AB 32, SB 375, SB 743, and AB 1358). Specifically with the passage of Assembly Bill (AB) 32, the Global Warming Solutions Act of 2006, the State of California committed itself to reducing greenhouse gas (GHG)

emissions to 1990 levels by 2020. SB 375 provides guidance on how curbing emissions from cars and light trucks can help the state comply with AB 32. AMBAG's first MTP/SCS was adopted in June 2014.

With the passage of SB 743 (signed on September 27, 2013) in certain situations a substandard level of service (LOS) may no longer be used as a criterion to identify significant impacts under the California Environmental Quality Act (CEQA). A draft of proposed revisions to the CEQA guidelines to implement SB743 was circulated by the Governor's Office of Planning and Research in August, 2014. The draft revisions recognize new focus on transportation impacts related to vehicle miles traveled (VMT), induced vehicle travel, and local safety. The draft text includes provisions for:

- Vehicle miles traveled to replace vehicle LOS as the sole basis for identifying significant impacts for land use projects.¹ This analysis would include measures to reduce the development project related VMT.
- Evaluation of induced travel to evaluate the effects of roadway capacity expansion on VMT and greenhouse gas emissions. The addition of general purpose highway or arterial lanes in urban areas may generally indicate a significant impact due to induced travel. Whereas, managed lanes, transit, and active mode projects would likely not result in significant impacts.
- Lead agencies may also consider localized effects on transportation safety.

¹ Vehicle miles traveled is the number of vehicles multiplied by the distance traveled by each vehicle.

To meet the objectives of SB 743 regarding transportation evaluation of land use and transportation project under CEQA, the Sustainable Santa Cruz County Plan and General Plan Circulation Element update would need to:

- Promote reduction of greenhouse gas emissions
- Promote the development of multimodal transportation networks
- Promote a diversity of land uses

Assembly Bill 1358, also known as the California Complete Streets Act of 2008, requires cities and counties to include complete streets policies in their general plans. These policies address the safe accommodation of all users, including bicyclists, pedestrians, motorists, public transit vehicles and riders, children, the elderly, and the disabled. These policies can apply to new streets as well as the redesign of corridors. Additional resources and processes for developing complete streets to meet the needs of all users are collected in the “Monterey Bay Area Complete Streets Guidebook”, published in August, 2013.

STATE OF PRACTICE FOR MULTIMODAL ANALYSIS

With this focus on a balanced transportation analysis, Santa Cruz County may want to modify how it evaluates the effects of individual development and transportation projects on the transportation system. Implementation of multimodal policies is still evolving, so there is no single method that has been adopted within the industry or local communities. However, there are a number of methods that provide the County with options for various modes and level of quantitative analysis. In addition, many of these methods move away from strictly quantitative

methods, user experience, and priority between transportation options. A combination of these methods determined by local community values and resources are typically integrated into a transportation performance measurement framework.

Multimodal Level of Service (MMLOS) Methods

To understand the range of available options, we have prepared a summary of Multimodal Level of Service (MMLOS) methods that have some level of multimodal capabilities. The most appropriate MMLOS method(s) for a local community depends on unique situations related to the mode of evaluation (e.g., auto, transit, bike, etc.) and setting (e.g., urban, suburban, rural). These methods vary in data needs and complexity. The multimodal methods are briefly described below.

- **Tiered Level of Service Policy** – A tiered level of service standard varies the minimum acceptable LOS standard based on the context of the transportation system and adjacent land uses. Typically the tiered level of service standard applies to vehicles. A lower level of service standard provides an incentive for mode change along transit corridors or neighborhood destinations (e.g., parks, schools, library, etc.). This tiered LOS approach used in cities like Morgan Hill, Redwood City, Mountain View, and San Jose, allows neighborhood areas to maintain a visually appealing urban environment and support travel by transit and active modes.
- **Multimodal LOS in the Highway Capacity Manual (HCM 2010)** – The *2010 Highway Capacity Manual* (HCM 2010) provides detailed instruction on calculating LOS for Vehicles, Transit, Pedestrians, and Bicycles on urban streets (at the link and segment levels) and at signalized and 2-way stop intersections. Pedestrian and Bicycle LOS are

integrated into HCM 2010's multimodal LOS, allowing analysis to compare trade-offs between modes; however, this approach is not sensitive to the local context and only considers variables within the right-of-way. Transit LOS is calculated at the segment and facility level for public transit systems operating within the roadway network. Alternatively, simulation models can be used to measure performance (i.e., person-delay) for all modes within a transportation network.

- **Person Delay** – Simulation models can be used to measure performance in terms of “person-delay” for all modes within a transportation network. This method provides a better decision-making tool for developing improvements to promote efficient movement of people, rather than a single mode, through an intersection. It also facilitates the development of the multimodal mitigation measures. It is useful in analyzing higher occupancy travel modes such as bus rapid transit (BRT) or the influence of a grade-separated crossing, as it accounts for benefits or impacts to all facility users.
- **Built Environment Factors** – The built environment is generally understood to have a strong influence on transportation choices and the quality of service for different modes. While the built environment includes both land use and transportation infrastructure, most LOS applications focus on the latter, identifying elements of the built environment that fall within the public right-of-way and under public control. At the heart of this approach is the question, “To what extent do roadway features that include pedestrian and bicycle friendly designs impact a traveler’s perception of that facility?”
- **Layered Networks/Street Types** This approach, which is suitable for General Plan-level analysis, designates modal emphasis by street to create a complete streets network. Layered networks

recognize that while all traveler types need to be accommodated within a community no single street can accommodate all transportation users at all times. The layered network concept envisions streets as systems, each street type designed to create a high quality experience for its intended users. A layered network approach can also use context sensitive land use and mode overlays to enhance additional transportation modes.

- **Pedestrian/Bicycle environmental quality indices (PEQI/BEQI)** – The San Francisco Department of Public Health (SFPDH) developed the Pedestrian Environmental Quality Index (PEQI) and Bicycle Environmental Quality Index (BEQI) to measure the impacts of built environment on pedestrian and bicycle environmental quality, activity, and safety. The PEQI and BEQI were developed in consultation with transportation professionals and travel behavior researchers.
- **Automobile Trips Generated (ATG)** – Some jurisdictions, including San Francisco, Paso Robles, Emeryville and others, have recently eliminated or are considering eliminating their LOS policies altogether. Instead, an approach to system evaluation is based on automobile trips generated (ATG) by a new development. The premise is that instead of evaluating transportation impacts on a case by case basis, applicants pay a transportation fee proportional to the number of new automobile trips generated, which in turn funds transportation improvements on a local scale for all travel modes.
- **Level of Traffic Stress** – The Level of Traffic Stress (LTS) method evaluates bicycle Quality of Service (QOS) by measuring *low-stress connectivity*, defined as “the ability of a network to connect traveler’ origins to their destinations without subjecting them to unacceptably stressful links.” Based on Dutch standards for bicycle facility design, the method

classifies bicycle facilities on a scale from one to four. Better scores are assigned to facilities with low exposure to auto traffic and easy crossings at intersections, indicating low-stress environments which are attractive to many types of cyclists.

Local communities and the Florida Department of Transportation have adapted multimodal methods for local application within their communities, including:

- **Charlotte, North Carolina** – In 2007 the City of Charlotte, North Carolina, developed a method to assess street design features that impact pedestrians and bicyclist crossing signalized intersections. This method can be used as a tool to assess and improve pedestrian and bicycle levels of comfort and safety through intersection design features. The results can be compared with those for motor vehicle LOS of an intersection and weighed according to user priorities.
- **Fort Collins, Colorado** – Fort Collins created MMLOS standards for its streets in the late 1990's and has continued to refine them. Fort Collins standards consider both route characteristics and high priority land uses, such as public schools, that require a higher LOS for pedestrian and bicycle modes. The City prioritizes connectivity in its Bicycle Plan and Pedestrian Plan in order to eventually create a fully-connected grid of bike and pedestrian facilities.
- **Florida Department of Transportation (FDOT)** – Florida DOT (FDOT) developed a multimodal evaluation tool in 2009 based on the *2000 Highway Capacity Manual*, *Transit Capacity*, and *Quality of Service Manual*, and the Landis Bicycle and Pedestrian LOS Models. The tool allows for two levels of analysis: generalized planning, appropriate for broad applications such as a statewide or regional and long range estimates, and preliminary

engineering, appropriate for facility designs and alternatives analysis at the project level.

The list of multimodal performance measures is continually evolving and in some cases groups of measures are used to evaluate a transportation project. Examples include the STARS tool and the Caltrans Smart Mobility Framework, described below.

- **Sustainable Transportation Analysis and Rating System (STARS)** – The Santa Cruz County Regional Transportation Commission prepared the *2014 Santa Cruz County Regional Transportation Plan* using the STARS tool to select and prioritize the projects on the constrained project list. The STARS tool is a voluntary transportation project planning and evaluation tool similar to Leadership in Energy and Environmental Design (LEED) for building projects. Performance measures address goal and policy topics such as access & mobility, health, safety, equity, economic benefit, cost effectiveness, climate & energy, ecological function.
- **Smart Mobility Framework** – The *Smart Mobility Framework* report creates guidelines for Caltrans and other State agencies to use when planning improvements to the State, regional and local transportation systems in a manner that integrates land use and transportation decisions and responds to the States economic, equity and environmental goals, including benefits to climate change and other sustainability concerns. This system of performance measures is correlated with a system of land use “place types” to describe the full range of contexts and policy objectives throughout California. Innovative performance measures include: location efficiency, reliable multimodal mobility, public health and safety (including speed suitability), climate and energy conservation, social equity, and sustainable economy (including effects on productivity, system

resources, performance optimization, and return on investment).

Vehicle Miles Traveled for Systemwide MMLOS Analysis

Vehicular transportation is a major contributor to greenhouse gas emissions. Growth in vehicular transport is a direct result of population and employment growth, which generate vehicle trips to move goods, provide public services, and connect people with work, school, shopping, and other activities. Growth in travel (especially vehicle travel) is due in large part to an urban development pattern in which these destinations are dispersed. Systemwide measures typically report an aggregate travel characteristic like vehicle miles travel (VMT) which incorporates the availability and effectiveness of multimodal travel options. Specifically, a systemwide performance measure used to quantify the amount of vehicle travel is vehicle miles traveled (VMT). VMT is also an important input to GHG analysis since the amount of travel and conditions under which the travel occurs directly relate to how much fuel vehicles burn. The systemwide VMT performance metric can change with modified multimodal transportation options and land use patterns. Furthermore, SB 743 has focused attention on the analysis of VMT for transportation purposes.

The primary limitation of VMT measurement is that VMT is not directly observed and therefore cannot be directly measured. It is calculated based on the number of vehicles, multiplied by the distance traveled by each vehicle. The amount of VMT can be obtained through extensive surveys of residents, visitors, and employees, or using a validated travel demand model that estimates vehicle demand. VMT estimates derived from TDF models are dependent on the level of detail in the

network and other variables related to vehicle movement through the network. The volume of traffic and distance traveled depends on land use types, density/intensity, and patterns as well as the supporting transportation system.

HOW MMLOS APPLIES TO SANTA CRUZ COUNTY

The remainder of this memorandum discusses the general information that Santa Cruz County should consider when evaluating the form of MMLOS it will use for analyzing project specific impacts on the transportation system.

Methods and Modes Evaluated

Table 1 summarizes which modes of travel can be evaluated with each of the MMLOS methods. Three of the methods focus solely on the pedestrian and bicycles travel modes, and one focuses solely on bicycle travel. The other five methods include procedures for analyzing pedestrian, bicycle, transit, and auto modes. Two of the methods can also be applied to truck access within the community.

Evaluation Approach – Computational, Checklist, or Combination

Implementation of the Sustainable Santa Cruz County Plan and update of the General Plan Circulation Element objectives and policies that prioritize each of the travel modes will need to address key questions including:

- Is this an enjoyable place to walk or bicycle?
- Is transit convenient?

- How are tradeoffs between modes considered in transportation improvements?

Among others, answering these questions can take one or more forms of computational analyses, qualitative checklists, or a combination of analysis and checklist:

- Computational
 - Tiered Level of Service
 - HCM 2010 MMLOS
 - Person Delay
 - Automobile Trip Generation
- Checklist
 - Charlotte, North Carolina
 - Built Environment Factors
 - Layered Networks/Street Types
- Combinations
 - PEQI/BEQI
 - Fort Collins, Colorado

Because the current state of the practice does not define a single method there is flexibility to adopt, modify or combine techniques from each category that will address the specific needs of the County. Further, each of these techniques requires different levels of data in their application. The computational approaches require a substantial amount of data as compared to the checklist approaches. Therefore, the level and amount of data required should be a key consideration in which analysis techniques the County chooses to implement in order to balance between addressing the policy requirements and the cost to evaluate individual projects.

Table 1
Multimodal Analysis Methods – Modes Analyzed

Method	Pedestrian	Bicycle	Transit	Auto	Trucks
Tiered Level of Service Policy	✓	✓	✓	✓	
HCM 2010 MMLOS	✓	✓	✓	✓	
Person Delay	✓	✓	✓	✓	✓
Built Environment Factors	✓	✓			
Layered Networks/Street Types	✓	✓	✓	✓	✓
PEQI/BEQI	✓	✓			
Automobile Trip Generation	✓	✓	✓	✓	
Level of Traffic Stress		✓			
Charlotte, North Carolina	✓	✓			
Fort Collins, Colorado	✓	✓	✓	✓	
Florida Department of Transportation	✓	✓	✓	✓	

Source: Fehr & Peers 2014.

The STARS tool and the Caltrans Smart Mobility Framework are examples of combined techniques, which use quantitative and qualitative measures to evaluate a proposed plan or project.

SUSTAINABLE SANTA CRUZ COUNTY PLAN: STREET TYPES NETWORK

In order to create a balanced transportation system, the Sustainable Santa Cruz County Plan includes a Street Type network to prioritize movement of people that recognizes the community values. The streets 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. In addition, street types help define each street’s user priorities and frame the planning context for infrastructure needs. Taken together, these designated streets create a balanced transportation system.

Layered Network/Street Types

The Layered Networks/Street Types network is an emerging approach to multimodal planning that builds upon Complete Streets principles and State regulations and requirements. In some cases, it is also referred to as a Complete Streets Network, Complete Systems, Street Typology, or Layered Network approach, as it assures that all modes are addressed in the larger system of roadways, but acknowledges that trying to serve competing modes on individual streets sometimes fails to result in first-rate facilities. A Street Types network prioritizes certain modes on certain streets, providing continuity for the chosen mode while accommodating other modes or encouraging use on parallel networks.

Providing selected treatments for a prioritized mode on selected streets can improve efficiency for that particular mode while ensuring increased safety for all modes. A Street Type network plan is a guiding policy for multimodal transportation system investments by public and private entities to achieve a complete transportation system.

TRANSPORTATION PROJECT PERFORMANCE MEASURES

Performance measures that can help guide the prioritization and implementation of projects, and therefore progress toward the well-connected, balanced transportation network that is envisioned by the Sustainable Santa Cruz County Plan, are listed below. Performance measures are the basis for determining which projects and programs provide the most positive change, and in which areas, for the cost. The following performance measures are recommended to be used to prioritize the transportation improvement projects mentioned in the Plan:

- Improves overall street connectivity
- Improves pedestrian safety and access to activity centers
- Improves bike safety and access
- Creates safe routes to transit and increase opportunities to ride transit
- Improves management of parking supply and access to park-and-ride lots
- Create livable public spaces around activity centers
- Reduces vehicle miles traveled
- Reduces traffic congestion

- Consistency with other plans and projects

The following section builds on the Sustainable Santa Cruz County Plan transportation performance measures by providing a chronological description of the components for updating the existing Santa Cruz County General Plan transportation performance measurement framework. Recommendations for system-wide performance measures for Program/General Plan level analysis and for project-level multimodal connectedness checklist for individual land development and transportation projects are described.

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 transportation system. The County will need to explore 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 benefits 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 developments occur, to ensure that the street system is optimized for steady, safe, and orderly traffic flow

operations, and to ensure balance among the modes 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. The planned transportation network would take into account available and potential funding sources such as local and state funding sources to address existing deficiencies and an updated Transportation Improvement Area fee program to address future transportation system expansion due to new development.

2. Develop Systemwide Performance Measures for Program/General Plan Level Analysis:

Using the performance measures listed in the previous section as a starting point, the County would refine and adopt systemwide performance measures such as vehicle miles travel (VMT), to determine consistency with the goals of the land use and circulation elements of the General Plan and to evaluate cumulative conditions. Using VMT as a primary program-level performance measure would make it possible for the County to take advantage of the potential CEQA streamlining of projects within the 2035 Metropolitan Transportation Plan/Sustainable Communities Strategy 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 Type 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 be used to supplement traditional vehicle LOS standards. The checklist could vary based on the street user priorities and may include a mixture of quantitative and qualitative performance measures. To address a spectrum of transportation and land use projects, a combination of a built environment checklist, 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 30 minute walking/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: Careful consideration should be given to how vehicle LOS analysis is used, especially in transit corridor areas. Specifically, where there is greater emphasis on transit and active modes of travel it is recommended that other performance measures like person delay also be used to more accurately evaluate the effects on the transportation system and to more accurately evaluate the person mobility at a specific location.

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 the 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 speeds has secondary affects that degrade mobility for 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: Parking Master Plan, Street Design Guidelines, and the Safe Routes to School Program.

- 5. Prepare Transportation Demand Management (TDM) Program:** To provide guidance and articulate expectations, a TDM program should be established,

including a TDM plan and 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 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. In areas where schools are in close proximity such as Soquel Village, school day start and end times could be considered for change and/or staggering.

6. Prepare Transportation Impact Analysis (TIA)

Guidelines: Develop and adopt transportation impact study guidelines that specify the process by which impacts from 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, reduction in VMT and the development of a balanced transportation network for all modes. Roadway widening should be evaluated in the context of potential impacts to community character, convenience for non-auto modes, environmental cost of additional pavement, safety, and cost/benefit.

7. Community Review: The processes and methods of planning for a multimodal transportation system should be presented to decision makers and the public for review and comment. Presentation should be based on project specific examples and include the data needs, information provided and criteria used for determining impacts. Any proposed updates to the General Plan would also include environmental documentation, evaluation and thorough public input.

8. Adoption of MMLOS Standards: 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 MMLOS for project-level analysis.

Appendix E: GUIDING PRINCIPLES FOR FUTURE OF EAST CLIFF VILLAGE SHOPPING CENTER SITE

The East Cliff Village Shopping Center is a six-acre site located at 21511 East Cliff Drive in the “Live Oak” unincorporated area of Santa Cruz. The Center was originally developed in the 1960s and is considered outdated. The property owner is preparing to propose some new improvements at the site, and is also contemplating more comprehensive improvements in the future. The site is also considered an “opportunity site” within the plan area of the “Transit Corridors Plan for Sustainable Communities” (TCP) being prepared by the County of Santa Cruz. In order to obtain community input regarding possible new uses and to develop a vision for a sustainable and economically vibrant site, two community workshops were held. Information presented by the property owner and the county’s economist, and the public comments made at the April 29th Community Workshop were analyzed by county staff and used to

generate the following possible “Guiding Principles”.

- **Land Use Categories.** Consider a mix of land uses at the site in order to respond to a range of community needs and ensure the long-term economic viability of the center. Appropriate uses include those such as neighborhood- and community-serving retail, personal and professional services, medical and health-related uses, restaurants and coffee shops, and offices. The location near beaches and the harbor area can also serve tourists and visitors. A hotel development could be appropriate if restaurants and other neighborhood-serving uses are also included on the site. Residential uses may be appropriate at the rear of the site adjacent to existing residential areas. Residential uses may also be appropriate within new 2- or 3-story mixed use buildings over ground floor non-residential uses, however the ground floor spaces must have high ceilings to accommodate modern retail needs, and residential uses should be set or “stepped” back from the lines of the ground floor below so that the upper floor residential uses appear more subordinate to the ground floor uses. Consider the location, size, and configuration of the site when determining the most appropriate land uses.

Ideas from workshop participants:

- “Eyes on the neighborhood” desired
- Need to activate – too overparked
- Restaurants and coffee shop with outdoor seating
- Community health clinic and health uses supported

- Office space like Next Space
- Mixed Use
- Residential set back from street
- **Timing of Development Phases.** Given the likelihood of phased development, consider a development agreement between the County and developers that would require that community amenities such as a coffee shop or restaurant, spaces that accommodate “public” events such as the farmer’s market, outdoor seating areas, and high-quality frontage landscaping be included with any proposal for residential development.

Ideas from workshop participants:

- Support phased development – but concern will build only residential and won’t make other improvements
- Does need to be financially feasible
- Give current businesses right of first refusal
- **Community Space.** The final site plan for the property should incorporate a significant public gathering space appropriate for the continued operation of the Live Oak Farmer’s Market and other community events. Further, uses that activate the street frontage through outdoor dining, patios, or café-style seating should be encouraged.

Ideas from workshop participants:

- Love the farmers market

- Activity or event space
- Build a sense of community
- Comfortable gathering spots and outdoor seating
- Fountain
- Green area
- Open area for public gatherings
- Dog friendly

- **Circulation Improvements.** Access to the site should be easy and safe for pedestrians, cyclists, and transit users of all ages, as well as for automobiles, and be integrated into the surrounding neighborhood grid to the greatest extent possible. Circulation should ensure that users of the site have safe places to walk to, from, and around the property, and that conflicts between modes of travel are minimized.

Ideas from workshop participants:

- More pedestrian access/walking corridors
- Sidewalks & bike lanes make this kind of place work
- More accessibility to the neighborhoods
- Accessible (for a wheel chair)
- Better traffic control
- Public transportation essential to all

development

- Young families need a nice destination to walk to

- **Neighborhood Character.** New development should reflect the architectural and natural aspects of the surrounding neighborhood, responding to both the scale and features of other buildings in the area. There are some remaining examples of “Live Oak” architecture that should be considered (farmhouse, rustic, quaint). Recognition of proximity to beaches and the harbor could also be reflected in the character of development. Consider incorporating wide landscaped areas, a water feature, and “green”/recycled materials.

Ideas from workshop participants:

- Keep quaintness
- Signage, identity need to be developed for a "sense of place"
- Right landscaping/right palette color
- Use of natural materials
- Live Oak needs a visual/architectural identity along thoroughfare
- Attractive landscaping
- Fountain

- **Site Design.** The East Cliff frontage should be nicely landscaped along the streetscape and include a focal point. Structures should be located at the front of the

property but further back than the usual ten-foot front yard setback; perhaps about twenty feet so that the site offers an inviting and attractive human scale at the frontage. Structures at the front of the property should be single-story, with any second or third story elements being stepped further back. Landscaping should be expanded to soften the streetscape and parking areas, and to maintain an attractive environment for users of the property. Any three story development should be located such that significant shadows are not cast on adjacent residential parcels.

Ideas from workshop participants:

- Second stories should be offset from ground floors
- A place where people can walk, with plantings
- Store fronts closer to street
- Keep scale low in front
- Make the site inviting, with active uses and visibility through the site to draw people in

- **Desirable Commercial Uses.** Community members expressed very strong support for restaurants, coffee shops and other food uses, especially with related outdoor seating opportunities to enliven the shopping center. A small drug store and “post office” such as a UPS store could be supported.

Ideas from workshop participants:

- Small Grocery Store – perhaps a New Leaf Market, or something like A.J.’s at Soquel/Park Avenue

- Coffee shop/café – like Live Oak Coffee or People’s
- Restaurant, brewery, pub, winery tasting room
- Deli/sandwich shop/café/bakery – like Kelly’s or Gayle’s or the Buttery
- Ice Cream Shop – like Penny Ice Cream who attends the Sunday Farmer’s Market
- Dry Cleaners
- Post Office – realize won’t be USPS, but perhaps like a private UPS Store
- Pharmacy/Drug Store – like the small CVS in Deer Park Center in Aptos
- Small-scale retail, artist’s shops/galleries, surf shop
- Uses that recognize the beach-going and surfer-oriented visitors and residents in the area

Appendix F: Existing Conditions Report

Appendix F is provided under separate cover due to its length.

Appendix G: Public Participation

Appendix G is provided under separate cover due to its length.