

City of Santa Cruz

Pedestrian Master Plan



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Every trip -- whether by automobile, bus, bike, or foot -- begins and ends with walking. Pedestrian access is an essential part of Santa Cruz's transportation system. Encouraging people to walk requires public and private investment in pedestrian infrastructure and care in the urban design of development.

To encourage people to choose walking, a pedestrian system needs offer the fundamental conditions to create the desire to walk: proximity and attractiveness of destinations, directness of pedestrian access, continuity, safe crossings, security, comfort, visual interest and amenities.

This Pedestrian Master Plan describes how to make Santa Cruz a more accessible and walkable city. It presents the City's vision for enhancing pedestrian transportation and provides general guidelines and principles for improving pedestrian facilities and connections. It concludes with short and long-term recommendations.

PEDESTRIAN MASTER PLAN VISION

The vision for Santa Cruz's pedestrian system is to:

1. Enhance the convenience, safety and attractiveness of walking
2. Complete the pedestrian network
3. Support walking as the fundamental connection to all travel modes.

Walking is an opportunity to offer all members of the community a free and independent travel choice, especially for those members who do not drive, such as seniors, children, the disabled and lower income residents.

Goals

The goals for Santa Cruz's pedestrian system are to:

- Provide multiple transportation modes thereby creating a flexible and adaptive transportation system throughout the City of Santa Cruz
- Close all "gaps" in the pedestrian network and connect all major destinations and activity centers
- Ensure that the City's diverse user groups have access to a sustainable and efficient mode of transportation
- Create a system that is "scalable" and responds to changing community needs, and provide flexibility and variety in the City's transportation network

- Adopt design standards for the pedestrian system to assure a high level of user amenities, safety and quality
- Create a transportation network that restores and maintains the quality of life and the quality of the environment in the City of Santa Cruz
- Focus on making transportation modes other than the private auto convenient
- Ensure residents and visitors to the City of Santa Cruz are safe and comfortable on all modes of transportation
- Provide optimal safety for vulnerable populations (e.g., pedestrians, cyclists, children, elderly, disabled)

A key outcome for the pedestrian network is to serve all types of travelers. Ranging from the commuter walking to work on arterial streets, to students traveling to and from school, or people walking to neighborhood shopping centers, all people seek convenience, safety and comfort in a pleasant walking environment.

Existing Policy

"Develop and promote pedestrian travel as a viable transportation mode by developing and maintaining a safe, comprehensive, convenient, accessible and aesthetically pleasing pedestrian system."

-- Santa Cruz General Plan

The 1994 City of Santa Cruz General Plan contains pedestrian goals, policies, programs and projects. The General Plan, the Master Transportation Study, and the Pedestrian Master Plan mutually support each other to promote pedestrian travel.

PRIORITIES FOR THE PEDESTRIAN SYSTEM

Implementation of a pedestrian system in Santa Cruz shall emphasize the following priorities:

1. Complete and maintain the City sidewalk system
2. Improve safety for specific problem areas
3. Adopt pedestrian friendly street design
4. Create pedestrian priority areas
5. Enhance key pedestrian connections

6. Create special pedestrian-only zones
7. Initiate programs to encourage walking

PART 1:

ELEMENTS OF PEDESTRIAN-ORIENTED DESIGN

1. Complete & Maintain the City's Sidewalk System

Completion of the City's sidewalk system is fundamental to providing a walkable community. The 1999 Santa Cruz Walkability Survey provided significant evidence regarding resident walking behavior. The most favorable responses to walking are from the neighborhoods in the City with a better sidewalk system. Lack of sidewalks was noted as a problem at many of the public meetings held to discuss the City Master Transportation Study.

The City maintains about 135 miles of streets. To insure safe access to all destinations it is desirable to have sidewalks on both sides of the street. The completed sidewalk system would amount to 270 miles of sidewalks.

Approximately 50 miles of sidewalk is missing from this system.

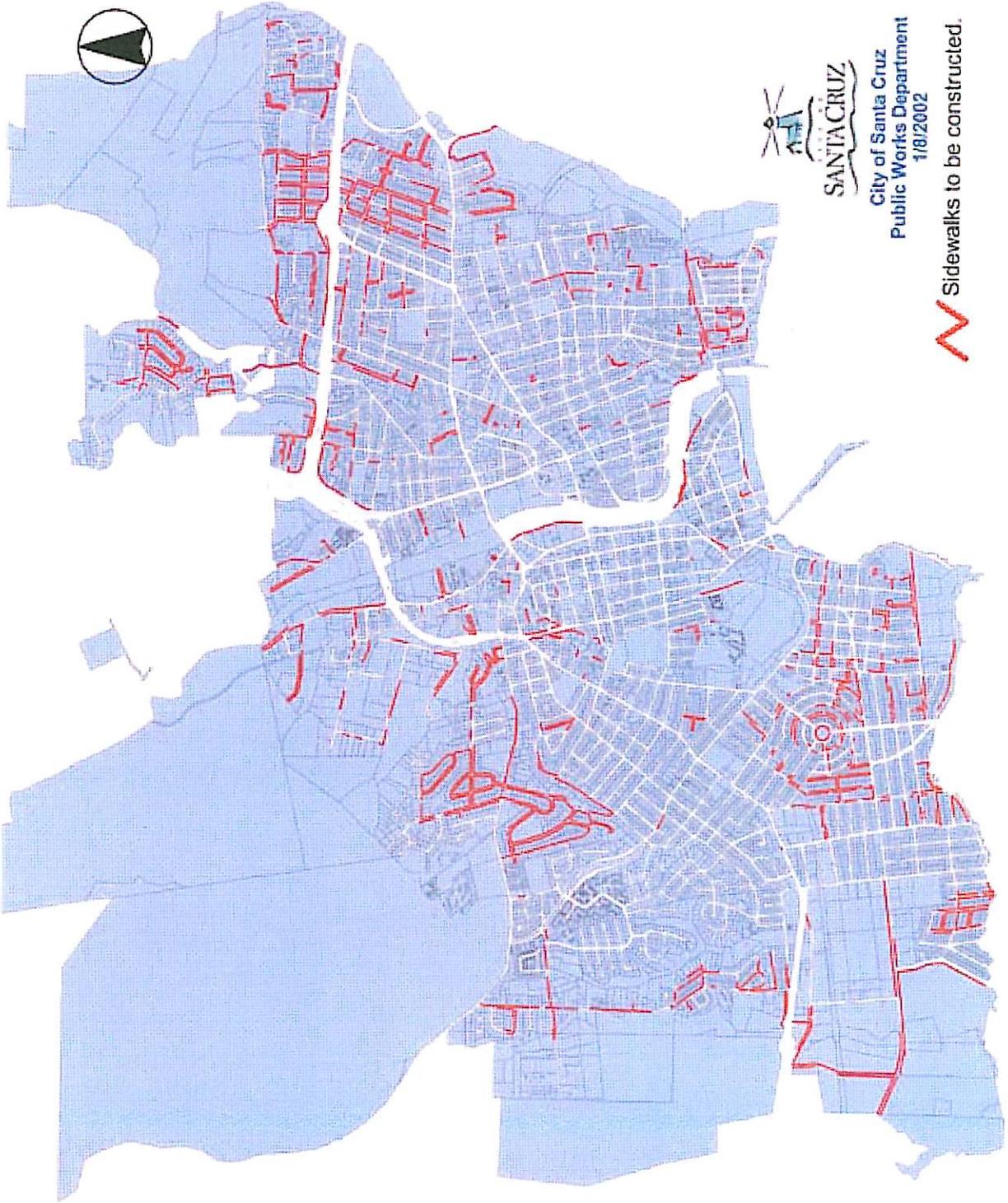
Predominant problem areas are the Upper Eastside and the Westlake area, with large continuous sidewalk links missing. Areas such as the Circles Area and the Seabright Area have many small gaps.

Maintaining the sidewalk system is also a priority. A sample survey of sidewalks done in 2001 indicated that an estimated 50% of the City's existing sidewalk system is in need of repair. In combination with closing the sidewalk gaps, an estimate to complete and improve the sidewalk network approaches \$25 million. Several approaches to completing these gaps are available:

- Identify problem sidewalks and send notices to the owners about the need for repair.
- Send notices to all owners of parcels with missing sidewalk about the restrictions and requirements for sidewalk.
- Record notices to provide an incentive for repair prior to sale.
- Develop a grant or other funding sources to assist owners in the maintenance and installation of sidewalks.

2. Pedestrian Safety

Particular locations of greater-than-average pedestrian activity can benefit from site-specific design improvements.



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Public Works Department
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 Sidewalks to be constructed.

High pedestrian collision locations should be analyzed for safety improvements. Example "hot spot" strategies and locations include:

- Providing more frequent protected crossings by adding traffic signals on busy streets such as Ocean, Mission, Soquel, and Water Streets
- Implementing pedestrian friendly design treatments and signalized pedestrian crossing at the East Cliff/Hiawatha intersection
- Implementing pedestrian friendly design treatments at the East Cliff/Jessie Street intersection
- Implementing pedestrian friendly design treatments at the Soquel-Water Morrissey Intersection

3. Pedestrian-Oriented Design

Pedestrian-oriented design is the act of creating safe and attractive places and connections between places. When we walk along a trail to the beach or stroll downtown window-shopping, whether we choose to walk is based on how our environment supports our needs for walking.

Assuming destinations are located within reasonable proximity, people prefer to walk through places where it is convenient, safe, attractive, and visually interesting. Good pedestrian-oriented design in residential areas fosters social interaction. Great street design in commercial areas creates vibrancy, identity and supports economic activity.

General Design Considerations

Pedestrian-oriented design should adhere to the fundamental principles of directness, continuity, safe crossings, security, comfort, visual interest and amenities. It encompasses both the public right-of-way and private development. Pedestrian oriented design is comprised of street and urban design standards, guidelines and values that result in truly desirable places to walk. Design considerations below cover:

- Intersection design
- Sidewalks and pedestrian paths
- Traffic Calming
- Streetscape plans
- Crossings

Intersection Design

Develop a prototypical pedestrian-oriented intersection design that emphasizes the following characteristics:

- Increase visibility of pedestrians using high visibility ladder-style marked crosswalks and illumination on all corners
- Ensure good sight distance for motorists and pedestrians by trimming vegetation, removing sight obstructions at corners, and restricting parking close to intersections
- Provide appropriate crossing times at signalized intersections with timing set to the walking speed of predominant users (e.g. children and elderly travel at 3 feet per second)
- Redesign intersection signal timing to give greater consideration to pedestrians; this can be done by giving more time to pedestrian delay
- Install curb extensions to shorten crossing distance and increase pedestrian visibility, while avoiding interference with bike lanes and bus movements
- Provide pedestrian signal heads, easily accessible and consistent pushbuttons; locate pushbuttons on medians on long crossings and countdown pedestrian signals
- Decrease curb return radii to 10 feet to shorten crossing distance on residential streets and 15-25 feet on transit and commercial and industrial serving streets
- Add texture or color changes in crosswalk pavement, especially at neighborhood entries to make more visible
- Eliminate high speed and free-flow right turns; replace with conventional corners or with pedestrian friendly slip lane design
- Minimize pedestrian/vehicle conflicts through appropriate signal phasing (e.g. avoid conflicting permissive vehicle turns on high pedestrian volume intersections)
- Restrict right turns on red at high pedestrian volume locations, such as schools
- Set stop limit lines back 3-4 feet from crosswalk at controlled intersections and 20 feet back at mid-block and other uncontrolled locations to increase driver visibility of pedestrians
- Provide a median refuge at both sides of crosswalk at crossings greater than two lanes wide

- Give preference to curb ramps that provide two directional ramps instead of a diagonal ramp at the corner of intersections. Design ramps with side curbs so vehicles cannot easily drive on the sidewalk while turning the corner
- Provide a painted crosswalk on all legs of a signalized intersection

Sidewalks and Pedestrian Paths

- Wherever possible require that new sidewalks adopt a parkway design to maintain a level walking surface on driveway approaches and to provide space for tree planting
- Monitor pedestrian facilities to identify and remove obstructions and barriers to walking, such as street signs and lampposts; the objective is a 5 foot clear area
- Ensure streets and pedestrian paths provide clear lines of sight to increase feeling of security, avoiding vegetation, recesses, and blind areas that screen lines of sight

Traffic Calming

- Develop area-wide traffic calming plans to improve pedestrian safety and comfort, and reduce speeding and cut-through traffic
- Develop traffic calming plans for specific street segments, commercial areas, and internal to Activity Centers

Streetscape Plans

Develop streetscape plans to improve the safety, comfort and attractiveness of streets to encourage walking. Plans should:

- Include landscaping, textured paving, open spaces and plazas, pedestrian-scale lighting and urban design elements, amenities and screening of unattractive walls and uses
- Preserve planting strips along sidewalks
- Review and refine building design standards to provide pedestrian-oriented scale, street orientation, pedestrian amenities, such as seating and protection from weather
- Design streets for pedestrian inhabitation by orienting balconies, terraces, and yards to the sidewalk, making buildings transparent to the street with large windows, use of canopies and awnings to draw people closer to buildings, and adding pedestrian scale signage

- Augment general street illumination with pedestrian-scaled lighting highlighting entrances, paths, and intersections. Decrease glare associated with high intensity road lighting fixtures, and provide indirect lighting of sidewalks. Avoid over-illumination of pedestrian areas that create shadows and pedestrian insecurity. Illumination levels of .2-foot candles are desired minimums in residential areas and should increase to .9-foot candles in commercial and industrial areas. Crosswalk illumination should be .5-foot candles in residential areas and 2.0-foot candles on arterials.

Crossings

- Develop citywide street crossing improvement guidelines that include crosswalks, illumination, curb extensions, median refuges, corner sidewalk widening, signs, signal control, signal heads, and landscaping.

4. Pedestrian Priority Areas & Activity Centers

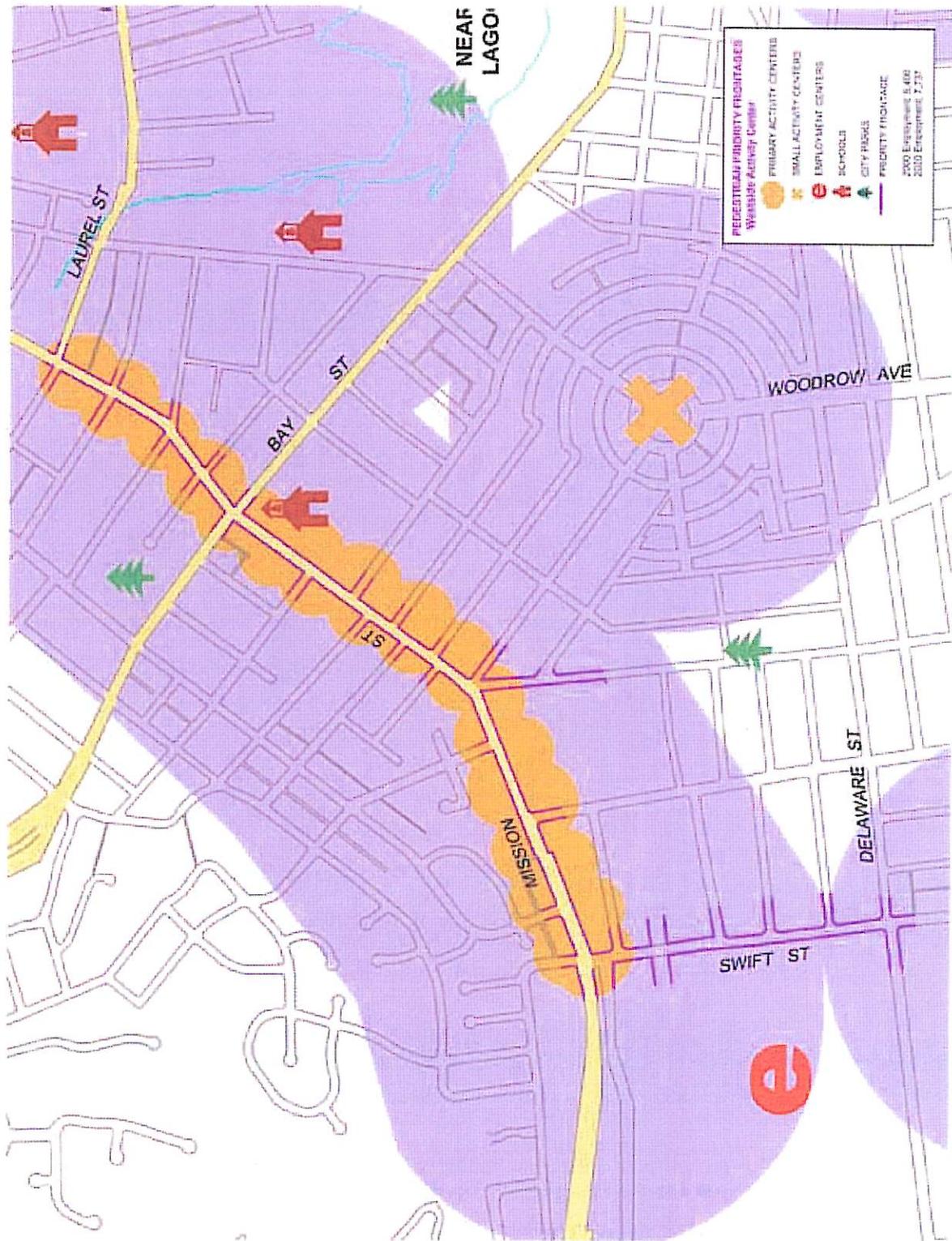
Major Activity Centers

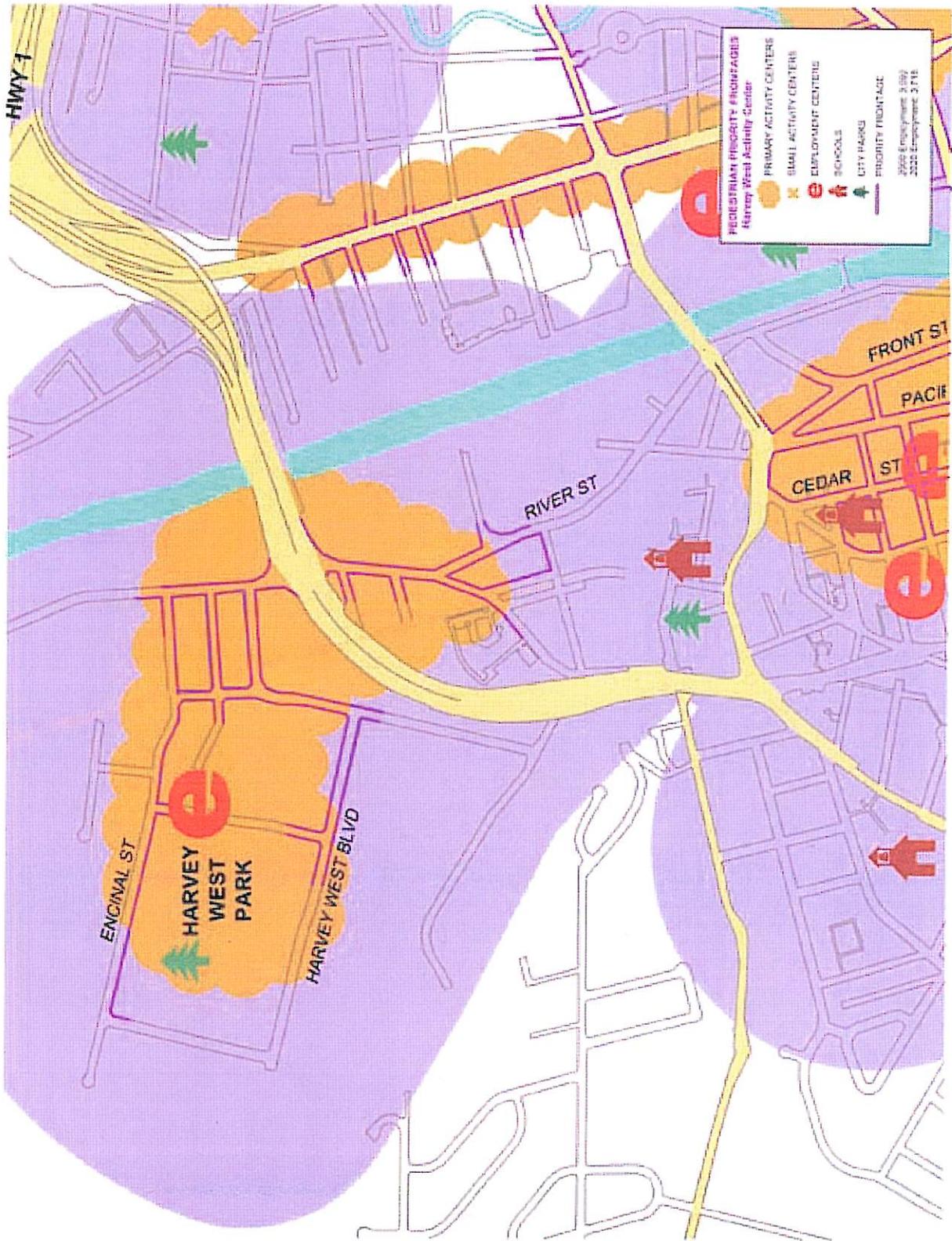
Urban design analysis of the existing physical structure of the City identified six major activity centers and several activity areas throughout the City. The analysis considered the location, intensity and types of uses, the street and block pattern, and the natural features. The six major activity centers are:

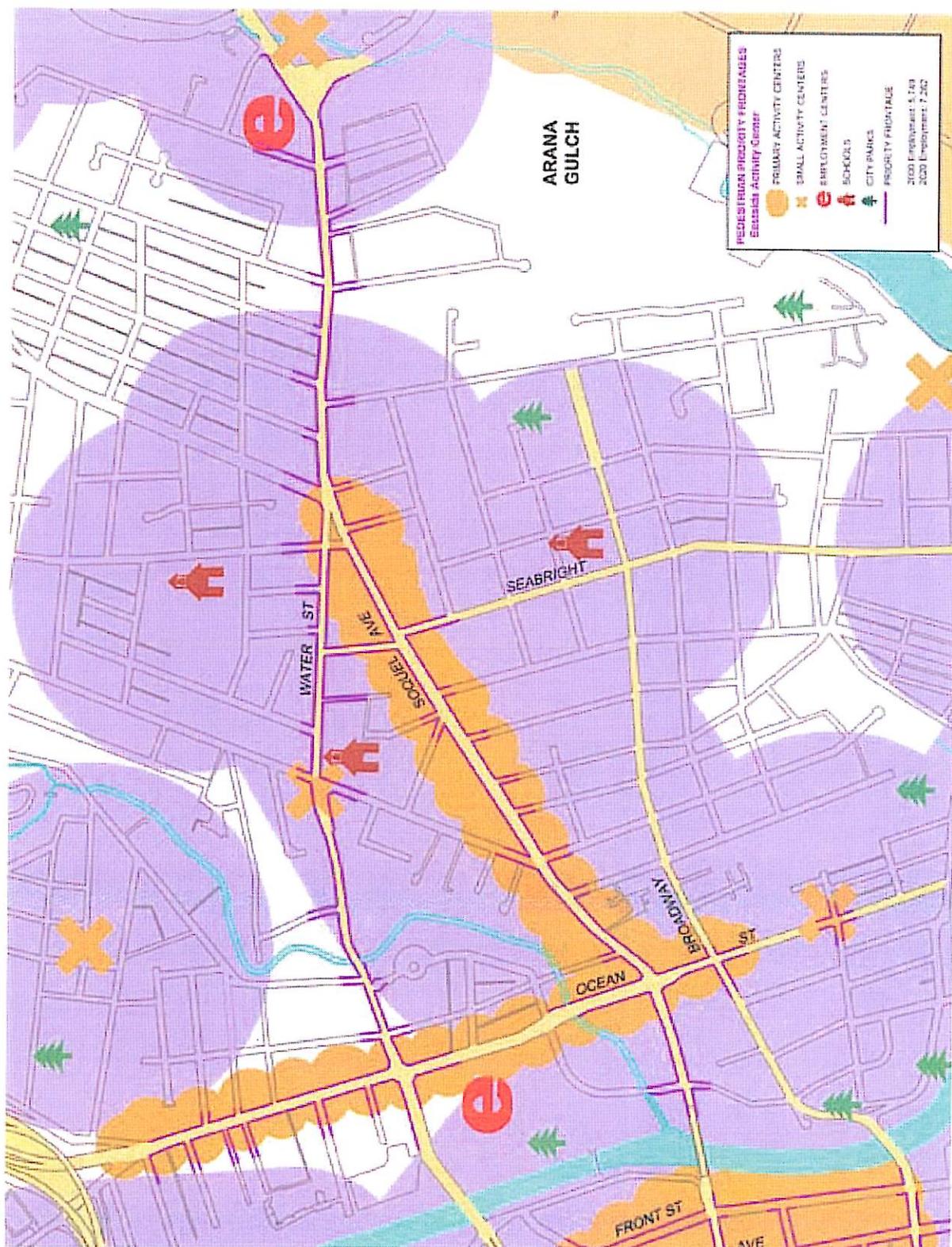
- The Downtown
- The Beach
- UCSC
- Harvey West
- Mission Street Commercial Area
- Soquel Avenue Eastside Business District.

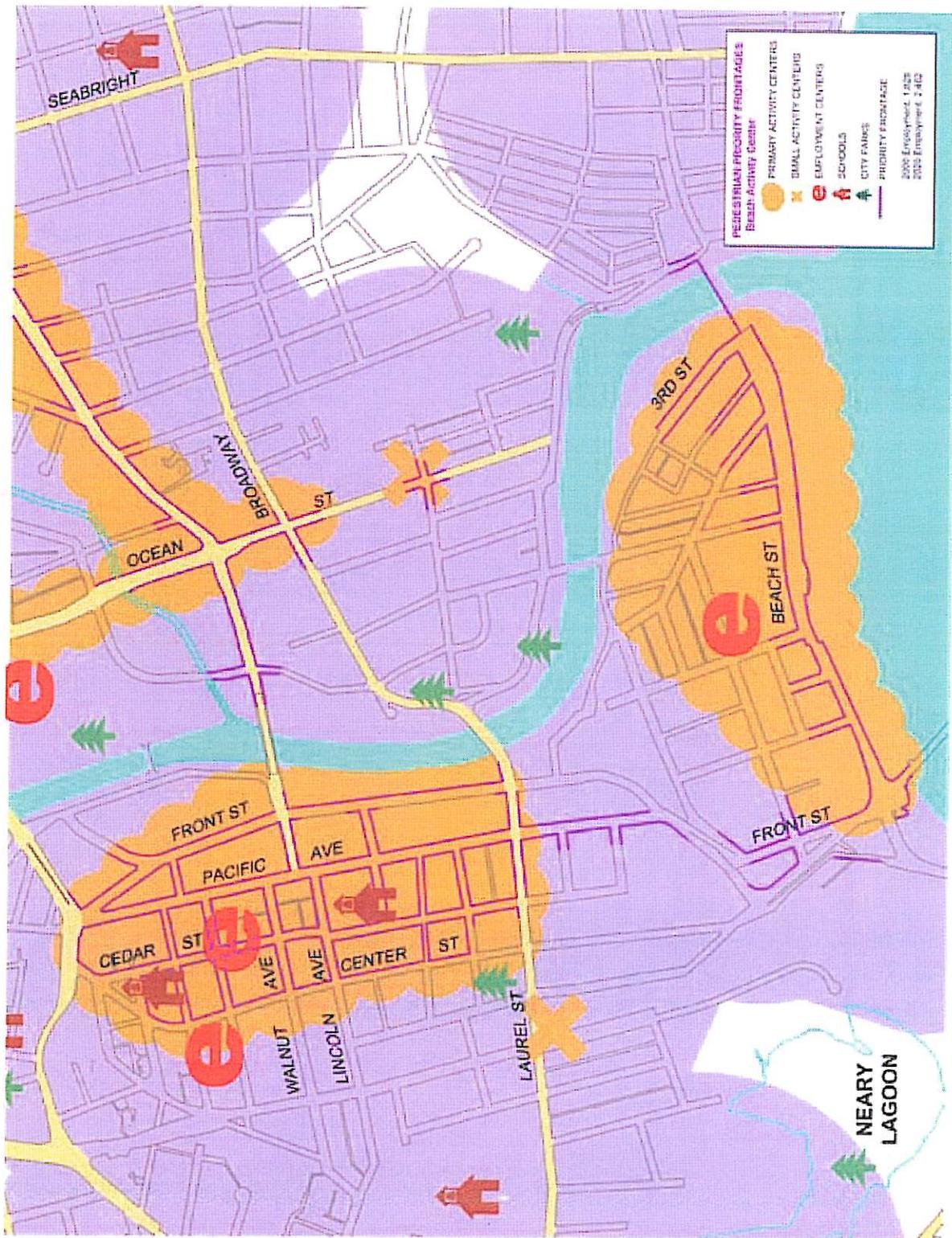
The centers form the heart of Santa Cruz. They are the hub of the City's economic, educational, recreational, cultural and social life. Each major activity center has a distinct focus, identity, function and sense of place.

The six activity centers are a high priority for implementing pedestrian oriented design to enhance internal circulation as well as access to the centers from the surrounding neighborhoods. Prioritizing pedestrian-oriented design for these areas will not only draw people to these centers, it will encourage them to stay longer and combine trip purposes, reducing auto dependence.









The key recommendation is to adopt major activity center "pedestrian priority areas" -- based on the 1/4- to 1/2-mile walking distance of neighborhoods to activity centers -- with a focus on priority pedestrian building frontages and streetscape improvements to promote walkable communities and mixed-use development.

The four figures illustrate pedestrian priority street frontages for the six activity centers. The Pedestrian Master Plan recommends the following to enhance the pedestrian environment in Major Activity Centers:

- Complete the sidewalk and wheelchair access ramp system
- Focus on the proposed sidewalk assistance program
- Develop long-term streetscape plans that include wider sidewalks, street trees, pedestrian lighting, street furniture, and other pedestrian amenities
- Remove pedestrian barriers to walking and improving sidewalk maintenance
- Provide pedestrian-activated signals, multi-modal intersection design and crossings
- Add traffic signals on busy streets to facilitate crossing such as Ocean, Mission, and Soquel
- Provide more frequent crossings to shorten the distance between protected crossings; a 300 foot maximum standard is recommended
- Investigate red light and video speed enforcement at major streets such as Mission Street. Advocate for and work with Caltrans to initiate the use of these tools.

Activity Areas

Activity Areas are less intensive than Major Activity Centers, and attract less intensive pedestrian activity. They are:

- Concentrated employment uses (i.e. the County offices)
- Neighborhood stores that provide for some of the daily needs of the residents who live within walking distance (i.e. Murray Street and Seabright)
- Elementary, middle and high schools
- Local parks

The pedestrian design focus for activity areas is for safety and aesthetic improvements in these quieter residential and employment areas. The design