

VI-6. LIVABLE STREETS

Streets are the organizing structure and identity of a city. To be a great, livable city, commercial streets need to be celebrated as vibrant, memorable and identifiable public places where people choose to walk and cycle rather than drive to meet their daily needs, to socialize, hold civic events and enjoy community life. Residential streets are to be safe, attractive places for family life, where cars are quiet guests, children freely play and parents enjoy time saved by sharing child-oriented car trips. The key to creating a vital, livable city is ensuring a high-quality environment for the public street realm.

KEY RECOMMENDATIONS

The following key livable street recommendations can create great, safe streets and pedestrian-oriented places, paths and routes:

- **Adopt livable street design guidelines** for key street types in Santa Cruz. Figure 13 presents the main livable streets and their street types.
- **Connect activity centers with pedestrian paths and connections.** Figure 10 maps the key pedestrian connections and linkages.
- **Develop urban design plans** for each area, tailored to the specific land use and public-right-of-way conditions.
- **Update the city's zoning code** to create priority pedestrian frontage areas, including design guidelines, requirements and incentives to create attractive public pedestrian-oriented areas.
- **Develop an educational outreach** and promotion program to encourage walking in Santa Cruz.

MTS VISION

The MTS goals for Santa Cruz's **Livable Streets** are to:

- Offer residents and visitors access to goods, services, jobs and recreation that is convenient, comfortable, efficient and cost-effective for travel without a car.
- Complete an interconnected, safe and efficient bicycle and pedestrian network that is a safe, fun and desirable choice.
- Provide a five-minute to ten-minute walk to transit stops with seamless transfers.
- Manage and reduce auto congestion with minimal impact to residential neighborhoods.
- Encourage drivers to travel at safe speeds (the speed limit in the city of Santa Cruz is 25 miles per hour), making streets comfortable and safe for pedestrians and residents.

- Implement sustainable, environmentally unobtrusive transportation technologies.
- Reduce noise on residential streets.
- Separate tourist and resident routes through the City, especially at the main tourist entry to Santa Cruz along Ocean Street. Do not sign information on local routes where tourists can see them, however provide signage for tourists to use transit. Support tourist use of park and ride lots.
- Use downtown as working model for other areas of the city - not to duplicate, but to learn from.

WORKSHOP COMMENTS

Several key themes emerged from the neighborhood workshops on creating Livable Streets and Neighborhoods:

Activity Center Main Streets & Commercial Corridors

- Favor emphasizing improving the pedestrian environment.
- Concern about loss of on-street parking.

Residential Corridors

- Favor emphasizing slowing down traffic.

City Entries

- Entry themes should be subtle.
- Need thematic unity that reflects Santa Cruz.

Neighborhood Streets and Entries

- Favor emphasizing traffic calming and parking management.
- Favor neighborhood involvement in development of individual neighborhood plans.
- Emphasize traffic calming to reduce speeds and cut through traffic.

Land Use

- Consider modifying zoning to encourage more mixed-use and higher density housing.
- Need more diverse commercial centers that serve neighborhoods.

Other Comments

- Need better public education and awareness.
- Need auto congestion relief plan.

LIVABLE STREET TYPES

Livable street design is organized by streets "types." Street types are designed to serve the activities of a specific place. This section identifies the key street types, their locations and objectives such that -- by applying livable street design guidelines -- they can enhance the quality of life of the entire city.

Major Activity Center "Main Streets"

"Main Streets" at Major Activity Centers support pedestrian activity and multi-modal street design to create livable, vital centers.

Location of Key Streets

Each of the six major activity centers of Santa Cruz have locations for "Main Street" design as shown in Figure 13: the downtown, the beach, UCSC, Harvey West, Mission Street commercial area and the Soquel Avenue Eastside Business District.

Objectives

Consistent with the goals stated in the vision framework, activity center "Main Streets" share the following street design objectives:

- Support adjacent land uses and ground floor pedestrian activity
- Offer easy access to a balanced range of travel choices;
- Provide safety, comfort, convenience for pedestrians and bicyclists
- Support increased transit performance
- Provide orientation and identity to the area and the City
- Encourage more pedestrian-oriented retail frontage

Implementation Priorities

Short-term

1. Transit stops and enhanced bus stops
2. Bike lanes on designated routes and improved bike parking
3. Multi-modal travelway design
4. Widened sidewalks and pedestrian-scaled street lighting
5. Parking strategies and on-street parking as appropriate to support local businesses
6. A landscaping plan that would develop a large tree canopy

7. Pedestrian connections to neighborhoods.

Long-term

1. Tree planting in parking lanes
2. Benches, signage, refuse cans and other pedestrian amenities
3. Design guidelines for retail storefronts.

Commercial Corridors

Commercial Corridors provide cross-town multi-modal design, with an emphasis on mobility for motorists, transit users, and freight delivery.

Street Locations

As shown in Figure 13, Commercial Corridor streets are River Street, Water Street, and segments of Mission Street and Soquel Avenue (between Morrissey and Park Way).

Objectives

Commercial corridors have the following street design objectives:

- Support increased transit performance
- Ensure cross-town mobility and strengthen the connections to activity centers and access to goods and services
- Increase pedestrian-oriented design features that enhance access and protection of surrounding residential neighborhoods
- Include bicycle lanes

Implementation Priorities

Short-term

1. Emphasize transit stops
2. Add bike lanes on designated routes
3. Maintain the existing number of travel lanes
4. Maintain capacity of existing street system including all travel modes
5. Improve bike parking
6. Protect sidewalk safety
7. Design guidelines
8. Multi-modal travelway design
9. Benches and street furniture



FIGURE 13

Long-term

1. Provide a landscaping plan that would develop a large tree canopy
2. Landscape buffers for pedestrians and tree plantings in the parking lane
3. Enhance livability with private property design guidelines

Commercial and Recreational Corridors

Commercial and Recreational Corridors carry a large amount of visitor traffic and provide identity and orientation for the visitor.

Street Location

The main commercial and recreational corridor in the city of Santa Cruz is Ocean Street.

Objectives

In addition to the objectives for Commercial Corridors, these streets add the following:

- Relieve high levels of traffic congestion on summer weekends
- Include measures to limit cut through traffic
- Reduce noise
- Encourage the use of shuttle services, and
- Reduce congestion at intersections.

Implementation Priorities

Short-term

1. Emphasize transit stops
2. Add bike lanes on designated routes
3. Maintain the existing number of travel lanes
4. Maintain capacity of existing street system including all travel modes
5. Improve bike parking
6. Protect sidewalk safety
7. Design guidelines
8. Multi-modal travelway design
9. Provide for ongoing maintenance
10. Benches and street furniture

Long-term

1. Provide a landscaping plan to develop a large tree canopy
2. Landscape buffers for pedestrians and tree plantings in the parking lane
3. Enhance livability with private property design guidelines

Residential Corridors

Residential Corridors provide key intra-city mobility links to major activity centers and other neighborhoods, while preserving and enhancing the environmental quality making residential streets livable.

Street Locations

As shown in Figure 13, Residential Corridor streets are High Street, Bay Street, King Street, Seabright Avenue, Broadway, Morrissey, Branciforte, and Murray Street. The Beach, Beach Flats, Barson and lower Ocean Street corridor are areas also needing livable street improvements.

Objectives

Key design objectives are to:

- Enhance the livability of these streets for the residents who live on and near them
- Protect neighborhoods from speeding traffic
- Support multi-modal travel choices
- Support increased transit performance
- Emphasize pedestrian and bicycle safety and access
- Emphasize landscape design to protect pedestrian and neighborhood livability

Implementation Priorities

Short-term

1. Bike lanes on designated routes
2. Curb extensions to improve pedestrian crossing at intersections
3. High priority speed limit enforcement & Traffic calming
4. Reduce noise levels on the street
5. Attractive and well maintained sidewalks
6. On-street parking

7. Landscape buffers between the sidewalk and the curb

Long-term

1. Pedestrian scaled street lighting
2. A landscaping plan that develops a large tree canopy and
3. Textured crosswalks

City Entries

City Entries establish visitor identity and orientation for the City and major activity centers. City entries mark the city's edge and welcome pedestrians, drivers, bicyclists and transit riders to a special destination.

Location

As shown in Figure 13, locations are Empire Grade at Western Drive from UCSC, Highway 1 south, entering the City at Western Drive, Highway 9 at Highway 1, Ocean Street entering from under Highway 1, Soquel Avenue westbound at Capitola, Murray Street westbound at the Yacht Harbor and the Pier (and Yacht Harbor), for seaborne arrivals.

Objectives

The primary objectives of City Entries are to:

- Create sense of arrival and identity to the city
- Separate and distinguish the City from the journey to the City
- Create a sense of place for the City, where speeding traffic slows down
- Create places where visitors can change travel modes away from SOV travel

Implementation Priorities

Short-term

1. Special signage
2. Urban design themes
3. Special pedestrian crossing signals

Long-term

1. Textured intersections
2. Landscaped medians
3. Public art

Neighborhood Streets

Neighborhood streets provide visitor, resident and emergency access to residential property. They are the public center for neighborhood social and recreational life. Neighborhood streets define the environmental character and quality of life for the people who live in Santa Cruz.

Location

Neighborhood Streets are located throughout the residential neighborhoods, as indicated in the City's General Plan.

Objectives

Objectives for neighborhood streets are:

- Safety and security for people of all ages
- Pedestrian and bicycle connectivity and access
- Support for transit and neighborhood shuttles
- Discouragement of car traffic
- Support for public outdoor social space
- Landscape design to preserve neighborhood livability and quality of life

Implementation Priorities

Short-term

1. Traffic calming
2. Bicycle boulevards
3. Raised crosswalks and/or colored asphalt
4. Visitor and non-resident parking management
5. Landscaped buffers between the sidewalk and the curb

Long-term

1. Large tree canopies,
2. Residential scale street lighting
3. Street narrowing
4. Enhanced landscaping

Neighborhood Entries

Neighborhood entries are an opportunity to define the entrance to residential areas and introduce traffic calming elements to reduce cut-through and speeding traffic. The location of neighborhood entries is shown in Figure 13.

Objectives

Street design Objectives are:

- Shift emphasis to non-auto modes;
- Emphasize pedestrian and bicycle safety;
- Enhance connectivity and access to the bicycle network and neighborhood transit shuttles;
- Discourage through and speeding traffic; and
- Give emphasis to traffic calming.

Implementation Priorities

Short-term

1. Neighborhood identity markers
2. Traffic chokers
3. Intersection enhancements at neighborhood gateways for pedestrians
4. Landscaping

Long-term

1. Landscaped medians and traffic circles

IMPLEMENTATION

Short-term Recommendations

Short-term implementation shall focus on ensuring that streets and neighborhoods on Santa Cruz are safe and maneuverable. In addition, there should be reasonable management of automobile congestion to further these goals. The Steering Committee identified the following:

- Conduct traffic calming studies for City neighborhoods
- Install traffic calming devices where needed and desired
- Focus on transportation improvements that contribute to livability and sustainability

- Ensure that neighborhood residents are involved in traffic calming improvement plans
- Implement mechanisms to enforce the citywide speed limit
- Focus on entries and main street activity areas

Long-term Recommendations

Long-term implementation shall focus on:

- Prepare and implement streetscape plans for the major activity centers
- Update the General Plan and Zoning codes to support mixed-use and higher density residential development
- Prepare design guidelines for commercial development to support creating livable streets
- Organize local businesses and residents to support livable street design for Major Activity Centers and Residential Corridors
- Prepare a citywide phasing plan for long-term livable streets implementation

GUIDELINES FOR LIVABLE STREET DESIGN

1. The Street Realm

The street realm is the overall setting in which we experience the character and use of a street. The street realm is composed of the travelway realm, the pedestrian realm and the adjacent land use. The travelway realm and the pedestrian realm occupy the public street right-of-way. The land use context is adjacent the right-of-way. The adjacent land use influences the type, character and intensity of the use of the street.

Guidelines

- Design the street realm as an integrated whole.
- Define specific lengths and segments of the street realm as a fundamental part of the adjoining land use area.
- Connect, not separate uses, neighborhoods and districts.
- Use the street realm (segments and intersections) to accentuate "gateways" or entries to land use areas.
- Provide consistency of streetscape features along the length of a street identified as a specific district or area.
- Use intersections as opportunities to transition from one land use area or street type to another.

2. The Travelway

The travelway is composed of the travel lanes, medians, intersections and other elements devoted to vehicle movement. For Main Streets, Commercial and Residential Corridors, the travelway must accommodate both through traffic as well as local traffic.

Guidelines

- In general, provide one to two lanes in each direction as needed by traffic volumes.
- Three or more lanes in each direction should be avoided, as this makes pedestrian crossings difficult.
- It is possible to have traffic asymmetrically divided, where there are three lanes, with two in one direction and one in the other.
- If possible, reduce the number of travel lanes to one lane in each direction, depending on the available right-of-way, the function of the street, and the intensity of adjacent land use.
- Overall width of the travelway needs to balance considerations of the available right-of-way, needs of the pedestrian realm, traffic capacity, and overall street function.
- Review the priorities of the street type to determine travel lane width. Through traffic has longer trip distances and therefore wants higher speeds, suggesting wider travel lanes for faster travel speeds and larger truck and transit vehicles. Inside travel lanes have less friction with local traffic, permitting higher speeds and traffic volumes.
- Review street type design priorities to determine whether local traffic is using the street for site access, on-street parking, or on-street loading and unloading of people or goods. Local traffic has local destinations and therefore can travel at slower speeds and have narrower lanes.

3. Travel Lane Widths

Travel lane width is a function of the use of the lane and the designated vehicle speed. Travel lane width is also determined by the location of the travel lane within the travelway. Inside curb lanes require a wider width, where as travel lanes adjacent to bicycle lanes or shoulders can have narrower travel lanes.

Guidelines

- Vehicle lane widths can vary from a minimum of 9-feet to 12-feet. The standard minimum width is 11-feet, however 10-foot lanes are acceptable in constrained rights-of-way.

- Consider mixed lane widths combinations in street designs, with wider 11 - 12-foot lanes in the center for through traffic flow and narrower 10 - 11-foot curb lanes.
- Combined bike and travel lane widths should be at a minimum of 14-feet without bike lane striping, and 15 - 16-feet with striping.
- Four travel lanes can be accommodated within 40 - 44 feet.
- Consider a 50-foot minimum travelway with left-turn lanes.
- Consider use of parallel alternative routes to minimize the number of travel lanes.
- Consider freight and transit lane requirements.
- Consider reducing the total number of travel lanes to decrease the width of the street for pedestrian crossings.

4. Medians

Medians provide access control, reduce through traffic conflicts, and provide opportunities for traffic control devices, street trees, landscape planting, left-turn lanes, u-turn bay storage and pedestrian refuges.

Guidelines

- Consider using medians to control site access in Main Street areas and Commercial and Residential Corridors to increase the flow of traffic and distribute it to side streets.
- Consider retro-fitting existing medians at intersections to allow ADA pedestrian crossings.
- Identify routes where access control with medians complements regional through-travel objectives.
- Medians should be considered for streets with 4 or more lanes.
- Provide space for traffic control, lighting, landscaping, street trees and pedestrian refuges, speed change lanes, left turn or u-turn storage.
- Provide medians to reduce headlight glare, permit future roadway expansion, smooth traffic flow, reduce conflicts, and deter hazardous left turns from driveways.
- Wider medians can have street furniture and become places.
- It is possible to reduce the number of travel lanes to one lane in each direction, depending on the available right-of-way, the function of the street, and the intensity of adjacent land use. Use of a median with a two-lane street requires sufficient space for cars to pass if a car breaks down or an emergency vehicle

needs to pass a double-parked car. In this case, if the combined bicycle lane and travel lane width is 15 -16-feet, vehicles can pass a stalled car.

5. Intersections

Intersections provide interconnectivity to the street, bicycle, transit and pedestrian network. They are the juncture and stopping point for changing direction, and their spacing sets the basic street and block fabric of a walkable city. Safety, convenience and efficiency of intersection design should:

Guidelines

- Permit all turning and weaving movements unless there is a compelling reason to do otherwise.
- Give priority first to through traffic movements. Then cross traffic. If necessary followed by access road traffic.
- Set turning radii and the configuration of medians to ease pedestrian crossings. Ease of turning for cars and larger vehicles are secondary considerations.
- Extend medians as far into the intersection as the sidewalk. Medians can be held slightly back at intersections to apply for a continuous pedestrian crossing, especially if there is a raised crossing.
- Provide multi-modal intersection design as a standard.
- Locate pedestrian crossings at intersections, rather than at mid-block crossings.
- Discourage capacity improvements that may increase pedestrian wait at crossing locations, discourage pedestrian activity, bicycle use and on-street parking.
- Encourage innovative intersection signals to reduce ROW expansion for turn lanes.
- Ensure that traffic signals reflect mode balance.
- Encourage innovative designs that reduce right-of-way needs.
- Encourage shared access points.
- Separate street access from driveway access.

6. Pedestrian Realm

The pedestrian realm extends from the vehicle travel way to the edge of right-of-way and can include land adjacent to the right-of-way. The pedestrian realm is composed of the sidewalk, on-street parking and loading, transit-oriented design elements, and bicycle lanes. The pedestrian realm includes on-street parking because drivers leaving their cars are pedestrians. The pedestrian realm includes bicycle lanes because cyclists stop to get on and off their bikes within the bike lane.

A functional, safe pedestrian realm is vital for successful multi-modal street design. The pedestrian realm serves several functions, including:

1. Serving local land use by providing pedestrian access to commercial and residential buildings
2. Serving transit by providing convenient pedestrian connections to transit and between land uses and transit facilities
3. Providing open space and public outdoor activity space to the city and the region
4. Providing a buffer for adjacent properties from the congestion, noise and pollution of the street

Guidelines

- Attend to pedestrian safety, as well as ease and comfort of pedestrian access. Pedestrian safety and comfort are directly related to the width of the sidewalk and the extent of pedestrian buffering from traffic. See discussions below for sidewalk and landscape buffer design. The pedestrian realm needs buffering from faster regional through traffic. See discussions on providing on-street parking as a buffer from faster moving traffic.
- Provide physical spatial definition to reduce the impact and dominance of through moving traffic on the safety and comfort pedestrians. Physical spatial definition of streets also provides a sense of place, enhancing the status of the street and adjacent property values. Provide a continuous row of street trees (relatively closely spaced), providing buildings facing the street, building street frontages, and edge treatments.
- Orient land uses to the street to increase and focus pedestrian activity to support ease of access to and use of public transit.

7. Sidewalks

Sidewalks are usually designed too narrow and are crowded with public and private furniture, including kiosks, benches, newspaper racks, trash cans, bus shelters, cafe tables and chairs, trees, people, etc. Sidewalks end-up as obstacle courses.

In addition to the functions and purposes of sidewalks as discussed earlier in the pedestrian section, sidewalks also provide visual as well as physical access to adjacent land uses. Sidewalk design should:

Guidelines

- Provide a continuous pedestrian sidewalk connection to link destinations within activity centers.

- Provide adequate width for all sidewalk uses, including loading and unloading of people at on-street parking, through walking traffic, window shopping traffic, and use of street furniture. See illustrations and table of minimum sidewalk functional widths.
- Provide a minimum 5-foot clear zone along the sidewalk for people to walk. This is the minimum turning circle for a wheelchair, and is an American with Disabilities Act requirement every 200-feet on a walkway with a slight slope. The absolute minimum is a 4-foot clear zone with a 5-foot by 5-foot area every 200-feet. It is desirable to have the 5-foot clear zone relatively straight; at a minimum a 4.5-foot straight zone would be desirable.
- Provide an absolute minimum 8-foot wide sidewalk in commercial areas, with 12 to 15 feet as a desirable width. Sidewalk widths of greater than 12-feet provide space for pedestrian amenities, expression of local business activity to spill out onto the sidewalk, and for a leisurely walking pace with out through traffic dominating the pedestrian realm.
- Provide pedestrian scaled lighting to provide a separation from street traffic and spatial definition that is human scale.
- Consider special paving treatments to separate the pedestrian realm from the travelway realm at intersection crossings.
- Prioritize and complete the pedestrian system for major arterial streets with wide gaps between pedestrian connections.
- Provide pedestrian and sidewalk improvements as standard for new and redeveloped street projects.
- 5-feet provides two-way pedestrian traffic and ADA minimum clearance. This applies to residential and non-commercial land uses.
- 6-feet combines two-way pedestrian traffic, window shopping and streetscape elements within the 6-feet. This applies to lower intensity commercial areas.
- 8-feet combines two-way pedestrian traffic, window-shopping, and a 3-foot street furniture zone along the curb. The street furniture protects pedestrians from traffic.
- 10-feet provides an opportunity for street furniture to be located along the curb or along the storefronts.
- 10-feet with Transit Stop is tight to have a bus shelter, but sufficient for a bench.
- 12-feet provides an opportunity to create an outdoor dining or cafe space on the sidewalk, with up to 7-feet clear for seating.
- 12-feet with Transit Stop is sufficient for a transit shelter.
- 15-feet provides an opportunity for a variety of outdoor use of the sidewalk for shopping or dining, with ample area for high levels of pedestrian activity.

8. Street Trees

Street trees are indispensable to street design. Street trees, along with the overall width of the street, the height and use of the adjacent buildings and the volume of traffic, are a primary element in providing a sense of safe separation from traffic and defining the character of a street. Without street trees a wide regional street is dominated by traffic and appears barren. This reduces attractiveness for pedestrian activity, the status of the street and adjacent property values. Street trees serve several functions:

1. Street trees separate and define the boundary between the pedestrian realm and the travelway, reducing the impacts of the volume, speed and noise of through and local traffic.
2. Street trees provide tranquility to the street, slowing the pace and intensity of street activity, enhancing the well being of pedestrians and drivers.
3. Street trees provide shade in the summer and allow sunlight in the winter.
4. Street trees reduce the automobile scale of wide streets to human scale.
5. Street trees provide an urban design element giving identity and orientation to the street, as well as provide status and prestige to addresses along the street.
6. Street trees can reinforce the design and hierarchy of the citywide street system.

Guidelines

- Provide a continuous, uniform and closely spaced tree plantings to create a continuous canopy along the length of and across the width of the street. Street trees planted within medians need to continue all the way up to the street intersections. Tree spacing should connect to form a continuous tree canopy over the street. A minimum spacing as low as 12-feet is possible depending on the tree species. London Plane trees can be spaced from 15 to 25 feet.
- Plant street trees in planting strips in areas with less intensive pedestrian and commercial activity, or tree wells with tree grate in areas with more intensive pedestrian and commercial activity.
- Plant street trees within the center median. Trees planted within the median reduce the perceived width of the street.
- Consider that trees do not need to be one species. Tree species can alternate to provide variety.
- Deciduous trees are preferable. They provide summer shade and allow winter sun.
- Consider planting street trees in narrow sidewalk conditions, those with 8 feet or less, between on-street parking spaces adjacent to the curb in the street.
- Provide a minimum size of 3 feet by 3-feet for trees planted in tree wells with tree grates. 4-feet by 4-feet is a recommended size.

- Provide regular maintenance. Trees are an investment that requires replanting and pruning in order to maintain a continuous tree canopy over the street.

9. On-Street Parking and Loading

On-street parking is essential to establishing a vital pedestrian realm. On-street parking can be found on many of the best designed streets in the world, and proportionately, on-street parking is more often found on great streets than not. On-street parking cannot by itself, in today's car ownership levels, meet the demand created by adjacent land use. Nevertheless, on-street parking serves several purposes:

1. On-street parking supports local economic activity of merchants and visitor needs of residents by providing access to local uses.
2. On-street parking increases pedestrian safety by providing a buffer for pedestrians from traffic.
3. On-street parking increases pedestrian safety by creating "friction" or interference to through moving cars reducing traffic speeds.
4. On-street parking increasing pedestrian activity on the street. Since people rarely find parking in-front of their destination, they end up walking to their destination, providing more exposure to ground floor retail, and increasing opportunities for social interaction.
5. On-street parking increases local economic activity by increasing the visibility of storefronts and signage.
6. On-street parking supports local land use access and can reduce development costs for small business by reducing needs for on-site parking.
7. On-street parking provides space for on-street loading, increasing the economic activity of the street and supporting commercial uses.

Guidelines

- On-street parking lanes should be narrow, no greater than 7-feet, to minimize the overall width of the street curb-to-curb distance. 8 feet is the maximum. Greater widths make the adjacent travel lane appear too wide and encourage speeding.
- Provide on-street parking as a traffic calming buffer for pedestrians from faster moving traffic.
- On-street parking should be primarily parallel parking. Parallel parking reduces traffic speeds with the parking movements. Parallel parking is also safer for backing out, as a car does not need to pull out as far into on-coming traffic as required for diagonal parking.
- Diagonal parking is appropriate where there is a high demand for on-street parking and there is available right-of-way to support diagonal parking. At

intersections, diagonal parking can be removed to create pedestrian bulb-outs to reduce the width of street required for pedestrian crossing.

- On-street parking provides areas for sidewalk extensions at transit stops, increasing the pedestrian accessibility to transit.
- If more parking is needed, consider public parking structures, below grade structures under adjacent land uses, or linear below grade structures under the street right-of-way with access ramps along on-street parking.

10. Bicycle Lanes

Main Streets and Commercial and Residential Corridors are primary routes for bicycles within the City. Therefore they require features that support bicycle traffic. Cars and trucks endanger cyclists when they share the travelway, and cyclists who share the pedestrian way endanger pedestrians. Therefore, there is a need for separate right-of-way space for bicycle movement.

Bicycle traffic tends to be either short trips to local destinations, which are slower moving travel for errands or leisure, or long trips, which are for recreation or commuting and tend to be fast moving. Bike lanes may act as a buffer for pedestrians from traffic.

Guidelines

- Provide bike lanes within the street right-of-way for short bicycle trips to local commercial areas.
- Provide bicycle connections to special destinations (activity centers, schools, recreational areas). Bicycle lanes should serve same areas as autos.
- Consider separate bike paths from auto travel lanes for long bicycle trips
- Consider providing parallel bike routes in areas with high traffic and narrow right-of-way. In narrow right-of-way consider removing bicycle lanes to increase sidewalk widths, when parallel routes are available.
- Require striped bicycle lanes along Main Streets and Commercial and Residential Corridors.
- Provide the shortest bicycle path, with parallel routes when appropriate.
- Design for bike safety at all intersections with bicycle lanes.
- Consider providing places for bike parking on site; provide on sidewalks or on-street in lieu of auto parking where appropriate.
- Provide maintenance and street cleaning at bicycle lanes to improve bicycle travel safety.

11. Public Transit

Main Streets and Commercial and Residential Corridors provide the primary access and mobility routes for the city, and are therefore the best locations for features which support pedestrian access to transit.

To encourage the mode shift to transit, access and use of transit must be convenient and efficient both in time and in cost to be an attractive option. Key design considerations are to:

Guidelines

- Provide pedestrian access to transit in lower density residential and commercial neighborhoods and corridors by providing continuous pedestrian connections from the land use areas to transit stops. In less dense residential areas, pedestrian connections do not need to be continuous as long as they provide pedestrian access from the land uses to Main Streets and Commercial and Residential Corridors.
- Provide sufficient sidewalk space for transit passenger loading and unloading, waiting and information service. See discussion under sidewalk width. In densely developed commercial areas require sufficient sidewalk space of at least 10 feet to provide bus shelters.
- Orient bus shelters away from the street to protect transit riders from winter weather conditions.
- Transit-oriented features should serve as amenities for surrounding land uses/activities.
- Leverage desired transit facilities from development.

12. Streetscape Features

Streetscape features serve pedestrian and outdoor activities, as well as provide lighting and signage for motor vehicle drivers. Streetscape features are the elements that furnish the street environment to enhance community livability.

Guidelines

- Provide pedestrian scaled lighting to provide a separation from street traffic and spatial definition that is human scale.
- Provide continuity of streetscape features along the length of a street identified as an Activity Center.
- Provide pedestrian kiosks, benches, newspaper racks, trashcans, bus shelters, cafe tables and chairs to increase the number of opportunities for people to socialize and spend leisure time outdoors along public streets.

- Provide opportunities for "stationary" pedestrian activities, which are activities that create people presence to a public place or street. Stationary activities are either standing or sitting, where people choose to stay in a place to observe or participate in public outdoor activities. Seating can be either primary (chairs and benches, such as that found at a cafe or a transit stop) or secondary seating (low walls, steps, fountain edges, where people spontaneously collect). People typically stand while waiting, while talking, or observing. Kiosks and newspaper racks provide settings for this type of behavior, as well as building frontages that are up to the public right-of-way. Having a setting, which supports people watching and gathering, is fundamental to supporting community livability.

13. Landscaping and Planter Strips

Planter strips provide an opportunity for pedestrian buffering and a decorative streetscape element. Planter strips provide identity to an area, increase pedestrian safety and enhance the aesthetics of community livability.

Guidelines

- Provide sufficient maintenance to ensure the quality of the planting areas are maintained.
- Preserve existing mature trees through flexible street design.
- Encourage agreements with private developers/landowners to plant/maintain trees.
- Increase the allowable street tree canopy by overhanging bike lanes and on-street parking.
- Differentiate Main Streets and Corridors from neighborhood streets by the design and plantings of landscape strip and tree wells.
- Consider sight distance, liability and safety issues in landscape design.

14. Adjacent Land Use

The adjacent land use forms the third part of the street realm. It is composed of those land uses which can orient buildings to the street, type of street frontage for those uses, land use edge treatments, transitions for changes in land use and available right-of-way width and buffers.

Guidelines

- Provide activities for daily living within walking distance to allow independence to those who do not drive, especially the elderly and the young. Facilitate independence of mobility and access for the dependent, or disadvantaged groups, poor, minorities, elderly and disabled.

- Provide appropriate building densities and land uses within walking distance of transit stops to facilitate public transit to become a viable alternative to the automobile.
- Support the physical definition of streets and public spaces as places of shared use by appropriate urban architecture and landscape design. Social activities occur in substantially greater frequency when the quality of the physical environment is high.
- Create safe and secure environments through the design of streets and buildings, but not at the expense of accessibility and openness.
- Balance adequately accommodating the automobiles and respecting the pedestrian and the form of public space through the appropriate design of streets. Streets are the public spaces of the city.
- Create comfortable and interesting pedestrian environments to support public outdoor activity. Properly configured, street design should encourage walking and enable neighbors to know each other, protect their communities and evolve socially.

15. Land Use Edge Treatments

Land use edge treatments, the strip of land adjacent to and visible from the public right-of-way, are an opportunity to enhance the identity and status of a street. Land use edge treatments are for those land uses that do not orient buildings to the street, such as commercial corridors and residential neighborhood streets.

Guidelines

- Provide a landscaping buffer for buildings which do not face the street.
- Require a 5' feet landscape strip along property line and parking for corridors with buildings setback from the street.

Most Intense Development.

Buildings are located adjacent to the right-of-way with recessed entries.

Intense Development.

A landscape buffer provides separation between commercial corridor parking and the pedestrian realm.

Less Intense Development.

A wide landscape buffer provides separation for the pedestrian from traffic, and a large planting area for street trees.

Employment Centers.

A landscape buffer screens the employment parking or service areas from public view, enhancing the identity of the street.

16. Transitions

"Transitions" refer to changes in land use, right-of-way width or street type. Transitions are typically neglected aspect of urban form, and therefore are unattractive leftover planting areas. Transitions are opportunities to create gateways to signify the end of one land use area to another.

Guidelines

- Locate transitions at change in land use.
- Locate transitions at intersections.
- Provide identity and continuity of street by providing landscape plantings as shown in the transition designs for land use edges for street types.

From Main Street to Commercial Corridors

Use the parking landscape bulb as a landscape transition from the wider right of way of a Main Street to a narrower travel way of a Commercial Corridor. A sign or other monument can be used to identify the change from one land use area to another.

