San Benito County
LOCAL
TRANSPORTATION
AUTHORITY
COUNTY EXPRESS

SAN BENITO COUNTY LOCAL TRANSPORTATION AUTHORITY

TRANSIT DESIGN GUIDELINES

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Nelson|Nygaard
consulting associates

COMMUNITY DESIGN + ARCHITECTURE
REGION • CITY • NEIGHBORHOOD • BUILDING

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Anthony Botelho, Director, San Benito County

Doug Emerson, Director, City of Hollister

Local Transportation Authority Staff

Lisa Rheinheimer, Executive Director

Mary Dinkuhn, Transportation Planning Manager

Betty LiOwen, Transportation Planner

Veronica Lezama, Transportation Planner

City of Hollister

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Chapter 1. Introduction

The goal of the San Benito County *Transit Design Guidelines* is to provide information about the benefits of incorporating transit-friendly design in private development projects, making them able to be well served by transit, and encouraging transit use. The Guidelines are designed for use by both planners and developers as a reference tool in the preparation and review of development plans. They are consistent with adopted local transportation policies; however, they are advisory, and not regulatory, to the Cities and County of San Benito.

San Benito County has experienced significant growth in population over the last decade, and serves as a bedroom community to Silicon Valley. Through this grant and the development of these guidelines, San Benito County can design safe, attractive, and accessible transit facilities for everyone, including commuters, school students, and local workers. By encouraging the use of transit both within San Benito's cities and between regional destinations, San Benito can reduce auto congestion and air pollution.

These Guidelines were developed with the input of County planning staff, planning staff of Hollister and San Juan Bautista, the development community, and bus system riders and potential riders. Their input was invaluable in shaping these to be specific to San Benito County. A summary of the public outreach process can be found in the Appendix section.

At every level of government – federal, state and local – as well as among transportation and land use planners, a consensus is emerging on the need to design communities which support a multi-modal transportation system, supporting all modes of transportation, including walking, bicycling, taking public transit, ridesharing, and driving. In California, AB 32 – The Global Warming Solutions Act of 2006, and SB 375 – Sustainable Communities Strategy, recognize the connection between transportation and land use patterns, and encourage higher density development that can more easily be served by transit.

In keeping with this direction toward multimodal communities and reduced auto use, the San Benito County Local Transportation Authority (LTA), in partnership with the Council of San Benito County Governments, has developed these Transit Design Guidelines. The goal of these guidelines is to provide information about the benefits of transit-friendly design, and to encourage the use of design elements that make commercial and residential developments more transit-friendly, both in terms of including design elements that make it possible for a development to be served by transit, and including design elements that will encourage transit use. The topics covered in the *Transit Design Guidelines* for San Benito County and its incorporated cities include:

- Why designing for transit is important to and benefits communities
- What kind of development patterns support the efficient use of transit
- The planning and design review process in San Benito County and its incorporated cities
- What good transit-friendly design looks like
- The types of vehicles to be accommodated
- Guidance on design decisions such as whether a transit stop is needed, where it should be located, amenities that could be provided, and how people will access the transit stop
- Ways to fund and implement transit design elements

The guidelines also include checklists for reviewing proposals and assessing transit stops for needed improvements.

Who Should Use These Guidelines

These guidelines should be used as a reference tool in the preparation and review of development plans, especially for new and infill development that will occur in the county's urbanized areas and other areas that will be served by public transportation. However, these guidelines shall not take precedence over locally adopted policies.

If you are a developer, the guidelines will help you as you prepare plans for review by the county or cities to understand the flow of the planning and review process, especially as it pertains to designing for transit. You'll become familiar with transit-friendly elements county and city planners will be looking for as they review your proposal. As you develop your plan, planners will help you determine whether you need to provide transit stops or access to nearby public transit, and what that should look like. Understanding these guidelines may help reduce requested changes once the plans are reviewed.

For county, city, and transportation agency planners, these guidelines provide information on best practices, a checklist of elements to look for in submitted proposals, and detailed standards and drawings to help decide whether the plans meet county and city objectives. It will also help determine where transit improvements might be made in existing development or to existing stops.

Periodically, County and city planners should coordinate the guidelines with county or city policies; some of the content of the guidelines might also be incorporated into regulatory documents, such as zoning ordinances or subdivision regulations.

What Is Not Covered

Federal, state, county, and local requirements: Any development project is subject to regulation from federal, state, and local ordinances that require projects to meet certain standards. These include regulations from the Federal Highway Administration (FWHA), the American Association of State Highway and Transportation Officials (AASHTO), and the California Department of Transportation (Caltrans). The *Transit Design Guidelines* for San Benito County does not integrate these higher-level design standards and requirements.

These Guidelines are specific to San Benito County, and have integrated elements of local design requirements in force at the time they were written. However, ordinances and requirements change over time; adherence to these guidelines should not be relied on as indicating adherence to all county or city requirements at the time a project is submitted for review.

Americans with Disabilities Act (ADA): Elements of ADA requirements have been integrated into these guidelines and are reflected in standards and drawings showing specific measurements for facilities to access transit, and the arrangement of amenities at bus stops. However, the Guidelines is not a legal document and should not be relied upon for complete conformance to the latest ADA requirements. Reviewers and developers should include an ADA review in their process, separate from a review to insure adherence to these guidelines. Current ADA design standards and guidelines and recommendations by the U.S. Access Board for the design of public rights-of-way are available on the website for the Department of Justice (www.ada.gov).

CEQA: Most development projects in California are subject to some level of review under the California Environmental Quality Act (CEQA). These guidelines are advisory only, are not project-specific, and have not been analyzed in light of CEQA regulations, nor were they subject to CEQA review. Each project should follow any applicable required CEQA process independent of the review for adherence to these guidelines. See the Appendix section for a CEQA Notice of Exemption.

These guidelines are expected to change over time as conditions in San Benito County change . The LTA in coordination with planning staffs of San Benito County, Hollister, and San Juan Bautista will periodically review and update the Guidelines to insure that they continue to reflect current design review processes, contemporary development patterns and density, and types of vehicles in service that should be accommodated.

Benefits of Designing for Transit

Why should we design communities to accommodate transit? Making public transit safe, convenient and accessible to everyone has numerous benefits for both those who use it and those who do not. Some commonly accepted benefits of safe, convenient and accessible transit include:

- **Transportation choice.** When transit is accessible by all modes – walking, biking, driving, or other transit – it allows people greater choice in how they get around, and promotes connectivity among all modes. By designing complete streets, the whole community can benefit from increased bicycle and pedestrian access. Transit-friendly design can provide pedestrian amenities, such as bus stop shelters, lighting, and attractive architectural features, that enhance community aesthetics and improve quality of life.
- **Closing the "last mile" gap.** Every trip begins and ends with walking or using a mobility device (including bicycles). In less densely developed communities, distances between stops can be great, and routes run only on main roads. By improving bicycle access to transit, those who live far from the nearest stop can safely get to the bus, and to their destination after they alight.
- **Reduction in auto use.** When more people use transit, the number of vehicles on the on the road is reduced; this in turn decreases traffic, improves air quality by reducing CO2 emissions, reduces the need for large unsightly parking lots, and decreases auto collisions and accidents with pedestrians and bicyclists.
- **Health benefits.** Providing safe walking and bicycling access to transit encourages people to use these modes to get around, which improves community vitality and public health.
- **Increased social equity.** When everyone can get to transit easily, mobility is increased for all residents, including youth under 16, the elderly, persons with disabilities, low-income families and individuals, and those who voluntarily live without a car. Everyone can get where they need to go more easily, whether or not they drive or own a vehicle. As "baby boomers" become senior citizens, this will become more important.
- **Reduction in household expenses.** When public transit is accessible by everyone, households may be able to reduce the number of vehicles they own, or not own any. This

can free up between $7,000 and $11,000 per year, [1] allowing families and individuals to spend more on housing, food, or other things.

- **Access to the community.** Increased transportation options improve access to employment, medical care, shopping, and recreational opportunities that might not be available for those who do not drive.
- **Supports the transit system.** When ridership increases, transit system efficiency also increases, reducing per-passenger operating costs. This can result in expanded transit service.

Developers can also see direct benefits from planning for transit. Bus transit improves access to developments and can bring more people to it – residents, employees, and customers. A business that is accessible by transit benefits from a broader labor market and customer base. As the population ages, developments that provide lots of ways to get around besides driving can use this as a marketing tool.

Thinking about transit at the beginning of a project also has benefits for a developer. Accommodating buses from the start of the development process can result in lower development costs by possibly reducing required parking areas, thus reducing the amount of property required for development and infrastructure costs. Initial planning and construction of sidewalks, bike lanes, transit amenities and safe pedestrian crossings is easier and less expensive than retrofitting later.

Guiding Policies and Principles

San Benito County's Transportation Policies

The San Benito County Regional Transportation Plan (RTP Draft Update 2010) sets forth goals, policies and objectives to guide policymakers in decisions about transportation planning and financing. The RTP recognizes national and state mandates to serve the mobility needs of people while minimizing transportation-related fuel consumption and air pollution through its planning processes.

The Council of San Benito County Governments adopted general goals and policies to support these larger goals. Regional and local transportation goals align with these larger objectives at the county and city level. Goals specifically related to creating multimodal and transit-friendly communities are:

- The County will prioritize improvements in all modes of transportation, including bus transit, rail, pedestrian and bicycle travel
- The street and highway system will be designed to promote compact urban development and preserve prime agricultural land and protected habitats
- New development within cities is required to dedicate funding for transit stops and signage, and design subdivisions to allow easy access to public transit
- Transit stops and centers should be accessible to everyone, and should include secure bicycle parking
- Priority will be given to development projects near existing or planned bus transit stations

[1] American Automobile Association (AAA), "Your Driving Costs", 2010 Edition

- In general, those involved in planning and building in San Benito County should support and encourage alternatives to the use of autos, including walking, biking, and transit

Designing projects to accommodate transit and transit access needs will help to accomplish national, state, and county-wide objectives as well as meet the spirit of goals stated in Regional Transportation Plan and other planning documents. These Guidelines build on the policies already adopted by local jurisdictions related to transportation and development design guidelines. Properly implemented, the Guidelines will improve transit operations and accessibility, reduce traffic congestion, improve air quality and improve the quality of the entire transportation system, and the health and quality of life in San Benito County.

Design Principles to Support Transit

Designing to accommodate transit is part of a larger overarching goal to better match land uses with transit service to create more livable and sustainable communities. Development projects that support the connection between transit and land use include these fundamental elements:

- Transit-friendly Street Networks: Use street patterns that support transit service (grids rather than cul-de-sacs)
- Bicycle and Pedestrian Access: Include safe bicycle and pedestrian access to the development as well as to and from the transit stop serving the development
- Transit-friendly Site Design: Place moderate or high density housing and employment within walking distance of transit (or include transit routes and stops in their design)
- Mixed Land Uses: Combine uses such as residential, employment, shopping, and public functions within proximity of each other

These are discussed in more detail in Chapter 3, Designing for Access to Transit.

Related Policies and Documents

In addition to the guidance in this document, other county, city, and federal policy documents also provide some specifics on making transit accessible. The following documents were reviewed for this project and provide some guidance on transit-supportive design. They are available on the Internet from the sourcing agency.

Document	Source	Document Date
Standards for Accessible Design	United States Department of Justice	1994
San Benito County General Plan Transportation Element	San Benito County	1990
San Benito County Short Range Transit Plan	San Benito County Local Transportation Authority (LTA)	2008
San Benito County Regional Transportation Plan (Draft)	Council of San Benito County Governments (SBCOG)	2010
San Benito County Bikeway & Pedestrian Master Plan	Council of San Benito County Governments (SBCOG)	2009

Document	Source	Document Date
Hollister General Plan	City of Hollister	December 2005 Amended June 2007
Hollister Downtown Plan	City of Hollister	September 2008
Hollister Municipal Code , Title 17. Zoning, Chapter 18	City of Hollister	December 2008
San Juan Bautista General Plan	City of San Juan Bautista	September 1998

Chapter 2. Planning Together: Government, Transit, Developers, and the Public

The planning process is the forum in which government, transportation agencies, developers, and the public interact to decide on many of the characteristics of the community. If San Benito is to successfully transition from an auto-centric land use pattern to one more supportive of all modes, cooperation between developers and planners must happen very early in the planning process. In a recent study of Transit Design Guidelines[2], 27 agencies with new development that successfully supported transit most often cited two factors for this success: strong support by the local municipality, and transit's inclusion in the early planning for the project. These Guidelines represent San Benito's commitment to supporting transit in the built environment, and will enable developers and planners to coordinate and communicate early in the process.

This chapter describes the planning and review process for San Benito County, Hollister, and San Juan Bautista, and the involvement of the San Benito County Local Transportation Authority in reviewing plans for transit-specific elements.

Planning and Review Process

Developers submit proposals to the jurisdiction in which the development would take place – either San Benito County or one of two incorporated cities, Hollister or San Juan Bautista.

Projects planned in the unincorporated areas of San Benito County are reviewed by County planners for adherence to standards for signage and landscaping. A key theme in San Benito County is preserving the rural character through ordinances pertaining primarily to viewsheds, signage, landscaping, protection of woodlands, and the color of buildings. When reviewing developments for potential linkages to transit, planners look for good stop placement and safe pedestrian access between transit and nearby development.

Projects are submitted to the appropriate city or to the County for review. In the City of Hollister, the Development Review Committee reviews development applications at monthly meetings. These proposals are then sent to the Local Transportation Authority for review on a case-by-case basis. In San Juan Bautista and San Benito County, projects are reviewed by the city planner for adherence to city design guidelines and ordinances.

Elements which might trigger a review by LTA include the density of the proposed development and therefore its potential for riders, or whether it is on or near an existing transit route. Figure 2-1 below provides a table showing land uses and criteria which would be considered for referring the project to the LTA. Figure 2-2 shows the review process for conformance with the *Transit Design Guidelines*.

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[2] *Bus Transit Service in Land Development Planning.* Transit Cooperative Research Program, 2006 www.TRB.org

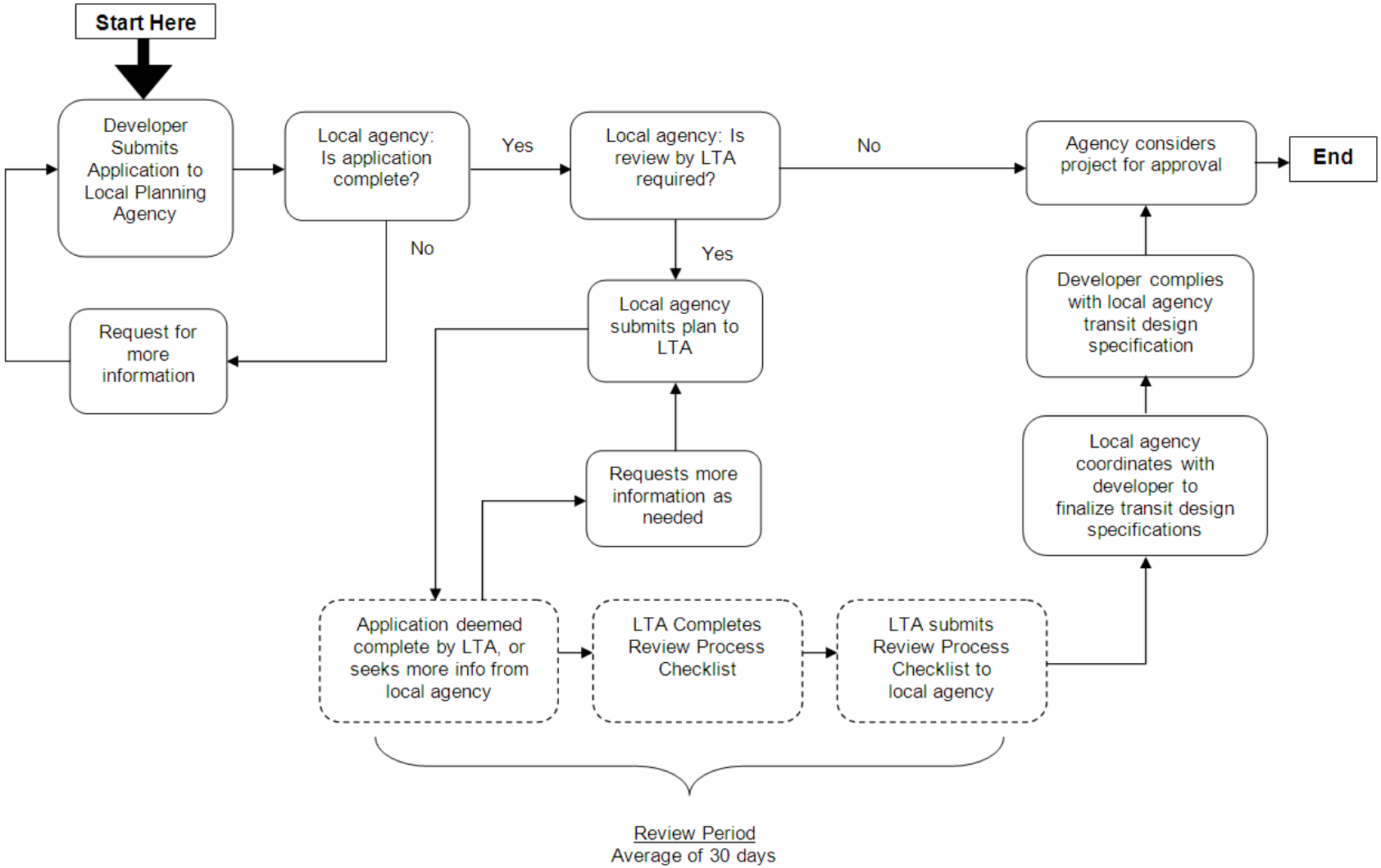
Figure 2-1 Criteria for Project Development Review by the LTA

The purpose of the chart below is to assist local agencies and developers in determining if a proposed or existing project warrants the review of the Local Transportation Authority. If a development has two or more "yes" in the chart below, the project will be referred to the LTA for a Transit Development Review.

Land Use Category	Criteria 1		Criteria 2		Criteria 3		Criteria 4		Criteria 5		Criteria 6	
	New Development?		Reconstruction Project?		Density >15 units/acre?		On a transit existing route?		More than ¼ mile from a bus stop?		Population density > 20 people/acre?	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Residential - Low Density Single Family, Duplex, Mobile Home												
Residential – Multi-Family												
Transient Lodging – Motels, Hotels												
Schools, Libraries, Churches, Hospitals, Nursing Homes												
Auditoriums, Concert Halls, Amphitheaters												
Sports Arena, Outdoor Spectator Sports												
Playgrounds, Neighborhood Parks												
Golf Courses, Riding Stables, Water Recreation, Cemeteries												
Office Buildings, Business Commercial and Professional												

Figure 2-2 Review Process for Conformance with Transit Design Guidelines

The following flow chart shows the process for reviewing projects by local planning agencies and by the LTA.



San Benito County Local Transportation Authority

This section gives a brief overview of transit service in San Benito County, and Transit Authority's role in reviewing development proposals.

The San Benito County Local Transportation Authority (LTA) is a Joint Powers Authority of the City of Hollister, the City of San Juan Bautista and San Benito County. The LTA is the designated Consolidated Transportation Services Agency (CTSA) for the county and in this role provides all of the public transit service in the county. Although the LTA is a countywide agency, public transit services are concentrated in the more densely populated areas of the City of Hollister. The system also provides important regional transit connections in Gilroy at Gavilan College and at the Gilroy Caltrain Station.

The LTA provides four levels of transit service.

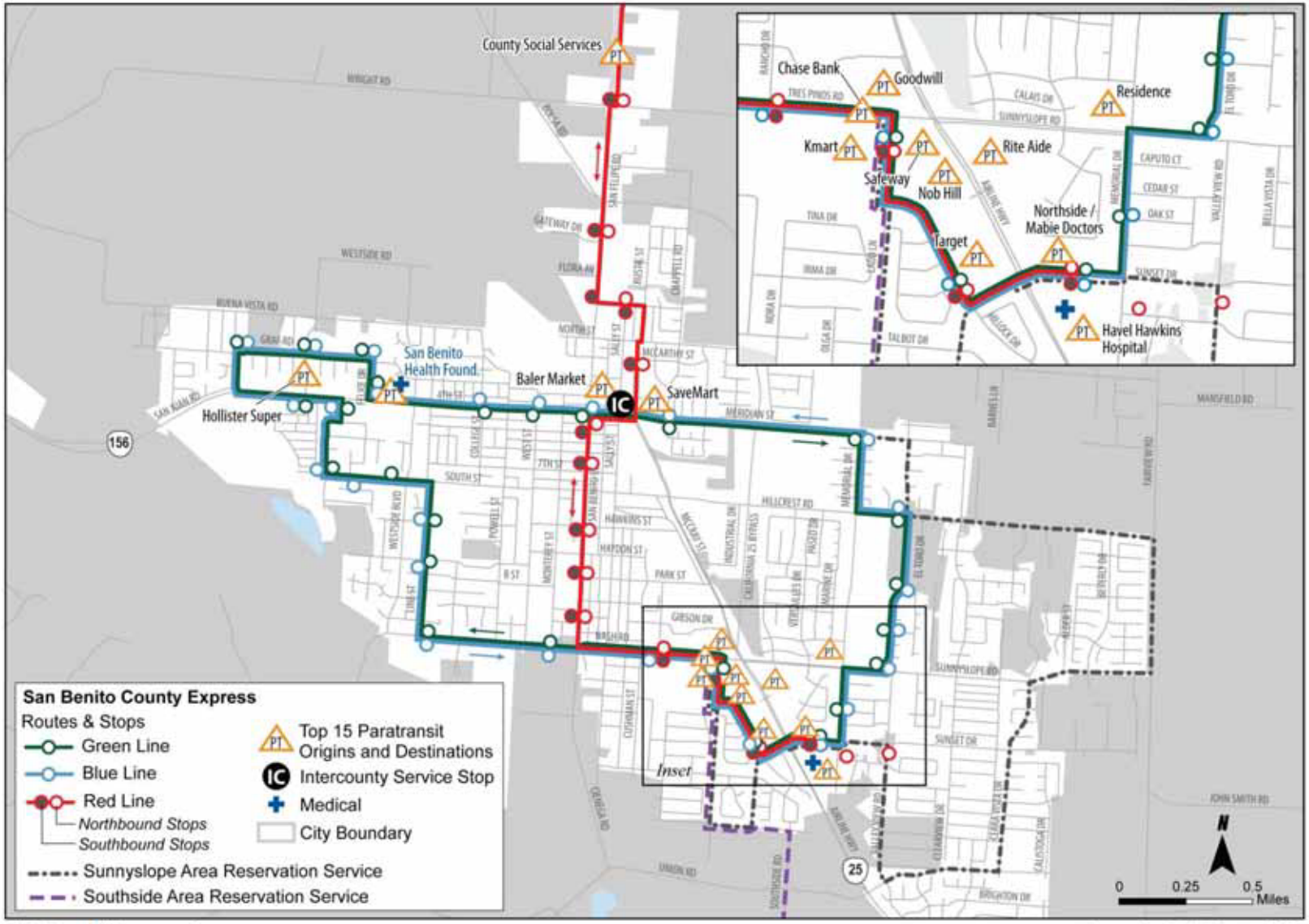
- The *Fixed-route* service provides bus transportation within the City of Hollister on three routes (Green. Blue, and Red).
- The *Intercounty* service connects Gavilan College in Hollister to the Caltrain and Greyhound Stations in Gilroy, and with connecting service to the Santa Clara VTA bus system.
- *Dial-A-Ride* service is provided for the general public in the Cities of Hollister and San Juan Bautista and parts of unincorporated San Benito County. This is a curb-to-curb service.
- *ADA Paratransit* service is provided for those certified as ADA-eligible by the LTA. Both services provide trips within ¾ of a mile of fixed route service. This is a curb-to-curb service.

In addition to ADA service, other demand-response service is available to serve particular segments of the population who either live too far from transit, or are unable to take public transportation.

- *Dial-A-Ride* service is provided for the general public in the Cities of Hollister and San Juan Bautista, and parts of unincorporated San Benito County. This is a curb-to-curb service.
- *Out-of-County Non Emergency Medical Transportation*
- *Senior Lunch Transportation*
- *Medical Shopping Assistance*

Figure 2-3 below provides a map of the San Benito County Express service in Hollister, and shows major destinations and the most frequently requested locations for paratransit service.

Figure 2-3 Hollister Transit System



Source: San Benito County, ESRI

The LTA reviews development project applications referred to them by the county and cities, and is responsible for encouraging vibrant, accessible, multimodal communities that are not entirely dependent on single occupant auto trips on already congested roadways. The LTA's review is a more thorough look at the project proposal to determine if:

- a new bus stop is needed at the development site
- a bus route might be rerouted to serve it
- the proposal includes elements of transit-friendly design
- access to bus stops is adequate
- there is adequate space for buses to stop and to turn around

Planners also look to improve bicycle facilities, and seek opportunities placement of bicycle lanes and bicycle racks within the development, in accordance with San Benito County's Bicycle and Pedestrian Master Plan.

Does This Project Need a Bus Stop?

During review of a proposed development project, the LTA determines whether new service or a new transit stop is needed for the development, based on the following criteria:

- The new development will be a significant origin or destination, and can be expected to generate ridership. This would include schools, shopping centers, community facilities such as a library or swimming pool, and major healthcare facilities.
- The planned development is bounded by a street with an existing bus route, but there is no transit stop within ¼ mile of the development.
- There is an opportunity to restructure an existing route to better serve both existing and new development.

Other reasons stops may be added are that there have been three requests within three months for a stop in a particular location, or that the agency can partner with a developer on the cost of a route.

The project will probably *not* require a new bus stop if it is on an existing route, and there is good pedestrian access from the development to a bus stop within ¼ mile (see Figure 2-1). However even if a development may not need a bus stop, transit-friendly designs for Dial-A-Ride and paratransit services should still be incorporated.

Chapter 4 provides more specifics on where a bus stop should be placed if it is determined that one is needed.

Chapter 3. Designing for Access to Transit

Typical transit trips begin and end either at a passenger's residence or other destination, whether it be a place of work, shop, hospital, school, or another residence. Although transit agencies only have direct control over a transit vehicle, its operation, and the bus stop, transit and planning agencies can encourage a transit-supportive environment that maximizes riders' comfort and safety from the trip's beginning to the end. The following sections of the *San Benito Transit Design Guidelines* address street, land use, and site design practices that will support and enhance the use of transit in San Benito County.

Fundamentally, the principles of pedestrian-friendly design are the same as those that support transit-friendly design. Many of the best practices included in the following sections were adapted from pedestrian and transit design guidelines from around the country.

This chapter focuses on key factors for successful transit environments: easy access to and from buildings to the street, direct routes to transit stops, attractive and safe streets and intersections, functional and comfortable waiting environments, and transit supportive land uses and densities.

Transit-Friendly Land Use Strategies

Compact, mixed-use development can create livable environments that encourage people to use transit, walk, or bicycle to work, school, or on regular errands. Transit-Oriented Development (TOD) is a well-researched and proven set of strategies to create such environments in urban areas served by high frequency bus or rail routes. In smaller cities like Hollister and San Juan Bautista, less frequent bus service and lower land use densities usually require the use of a personal automobile for many trips; and few people could afford to give up car ownership entirely in favor of transit or the use of non-motorized travel. However, several strategies that are at the basis of TOD can be successfully employed in major new development projects in San Benito County today. These are:

1. Compact development;
2. Establishing a mix of uses near transit routes; and,
3. Creation of pedestrian-oriented development in the proximity of existing bus routes.

Compact Development

Compact development is a fundamental requirement for creating walkable communities. Generally, people are willing to walk reasonable distances – 5 to 10 minutes – to destinations such as a neighbor's house, the nearest transit stop, the neighborhood grocery store, the local park, or other destinations. Compactness allows walking and bicycling to become valid travel choices for some of the trips usually taken by car.

Transit can take advantage of compact residential neighborhoods and commercial centers if these are purposefully designed to accommodate transit (see sections on *Transit-friendly Streets* and *Transit-friendly Site Design*). In addition, compact development increases the number of potential rides that have access to transit service. This increase in potential ridership is an

important factor in what quality and level of transit service[3] a transit agency can offer. If residential and employment centers become more spread-out and less compact, transit service becomes more expensive and less convenient.

Residential types such as small-lot single-family homes, duplexes and courtyard homes create more compact forms of residential neighborhoods. These can be supplemented in a transit-friendly way by integrating well-designed multi-family residential development, senior housing, and mixed-use residential development types near existing or new fixed-route bus stops.

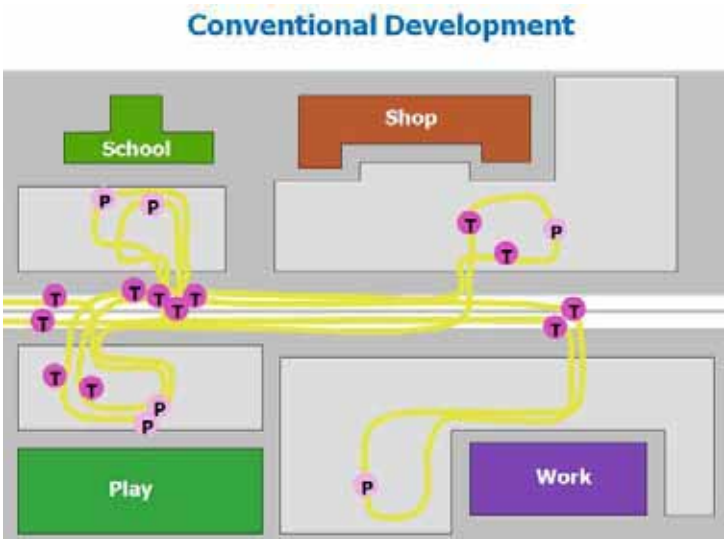
Compact mixed-use centers with community services located at an existing or new transit stop can increase the number of destinations that can be reached by transit or non-motorized travel, and further decrease the number of vehicular miles traveled.

Mix of Uses

Although not every development can include a corner café or retail space, a variety of neighborhood amenities and services such as schools, civic destinations such as post offices and libraries, parks, dry cleaners, banks or medical offices can together act as mixed-use centers. While mixed-use development is often thought of as a vertical combination of residential and commercial uses, horizontal mixed-use (different uses located next to one another as in many small town centers) can also create a desired mix of uses and levels of activity that contribute to the vibrancy of a neighborhood.

Sensitive integration of neighborhood-oriented mixed-use into largely residential neighborhoods can help decrease vehicle trips for daily needs and services, provide a higher foot-traffic location for transit stops, promote walking and biking, and create community social spaces. A higher level of pedestrian traffic can also boost economic activity for adjacent businesses; as people walk by, they will be more likely to stop in to shops than if they are driving. A mix of uses also works to create an active street life in a residential neighborhood or business district. Generally, more compact, walkable mixed-use centers near transit service can contribute to the reduction of vehicular trips by encouraging transit use to access these centers. For example, upon arriving at a compact and walkable mixed use development, visitors can visit multiple destinations without returning to their mode of travel, whether bicycle, transit vehicle, or personal automobile.

[3] Frequency of service and service type (local bus, Rapid Bus, streetcar, etc.)



The illustration to the left shows typical development with separated uses, surrounded by lots of parking.

In this kind of development, in a typical day, a parent might

- take their child to school
- go to work
- pick their child up
- take them to soccer practice
- go to the store
- pick their child up again and
- go home

This very typical daily pattern requires 12 auto trips (as denoted by the "T"s).

This illustration shows a mixed-use development where shopping, offices, schools, and recreation are within walking distance, and parking is shared by different uses.

For a parent to accomplish the same tasks as in the illustration above, they can park once and then walk to the different uses. This cuts the number of auto trips from twelve to two.

Creation of Pedestrian-Oriented Development

The creation of pedestrian-friendly and transit-supportive places involves a combination of multiple strategies described in these guidelines, including those in the *Transit-friendly Streets* section. In the *Transit-friendly Site Design* section below, sets of guidelines address how commercial and institutional development as well as parking lots can be designed to be more efficient, safe, comfortable, and attractive to all users.

Transit-Friendly Site Design

This section offers guidelines on better spatial and functional relationships between streets, sidewalks, buildings, and parking lots, as all have considerable influence on the quality of pedestrian and cyclist transit access routes. In particular, the location of buildings on a given parcel, the orientation of its entrances, how far it is set back from the street, and the ways in

which parking is accommodated, all have a significant impact on whether the development's street frontage welcomes pedestrian travel and activity.

Comfortable access to transit requires a high quality pedestrian environment. "Pedestrian-supportive streets" are designed to accommodate pedestrian travel in an environment that is attractive, safe and comfortable, regardless of their function within the vehicular classification system (i.e., Arterial, Collector, Local). All streets with LTA fixed-transit routes and clusters of destinations that attract frequent paratransit service, as well as streets that provide access to LTA transit routes within a quarter to half mile on either side, should be designed as "pedestrian-supportive streets."

The guidelines in the subsections below address the following aspects of site design:

1. Orientation of buildings and entrances
2. Building setbacks and frontage
3. Parking design:
    a. Location of and access to surface parking lots
    b. Pedestrian circulation through surface parking lots
    c. Screening of parking lots along public sidewalks

Building and Entrance Orientation Guidelines

A strong visual and physical connection (i.e., the quality of the relationship and level of association) between a building and its adjacent neighbors, and between a building's main entrances and the street, is necessary to create comfortable and inviting places for pedestrians in both public and private realms.

Buildings that are oriented toward the street create the opportunity for a strong relationship between activities occurring in buildings and pedestrian activities on sidewalks. When combined with active uses within buildings, such as stores and lobbies, this connection is a prime catalyst for visual interest that can engage and attract pedestrians and transit riders. In addition, both passersby and residents provide surveillance of the street, which is an important factor in making access to transit routes feel safe to transit riders.

The orientation of building entrances toward the sidewalk is important, as this location communicates that the pedestrian is important. In auto-oriented environments, main entrances are often located away from pedestrian routes and toward parking lots or vehicular access ways. Main entrances that have a direct connection to sidewalks or pedestrian passageways emphasize walking and bicycling by making buildings easily accessible to pedestrians and bicyclists.

A hierarchy of entrances provides direction to people approaching a building and clearly defines the front of the building. Main entrances include front doors to residences, residential and office lobbies, and storefronts. Secondary entrances include access to and from parking garages, utility areas, entrances on secondary pedestrian routes, and additional entrances on the same side of a building where a primary entrance already faces a pedestrian route. For example, an office building could be designed to have a lobby that is accessed from the street, as well as a secondary entry from a parking lot or garage behind the building.

Guidelines for Residential Neighborhoods /Mixed Use and Commercial Centers or Corridors

1. The primary façade of buildings should directly face the sidewalk or street.
2. Primary façades should generally be parallel to the alignment of the adjacent street and sidewalk.
3. The façade of a building facing a pedestrian-supportive street should contain the primary entrance(s). Examples of primary entrances include: the front door to a home, the entry to a store, the lobby entry to an office building, or the pedestrian entry to a parking structure. Secondary entrances should be located along secondary pedestrian routes for the occasional pedestrian.
4. In mixed-use and commercial centers and along main streets, primary entrances are encouraged at street corners. Orienting primary entrances to street corners creates definition at intersections, which serve as important meeting points and prominent places of identification.
5. Primary building entrances should front directly on and connect to public sidewalks to maximize support of an active pedestrian environment. Secondary entrances may face minor entry plazas, passageways, and parking areas in the rear or to the side of a building.
6. A clear distinction should be made between primary entrances and secondary entrances. Primary entrances should be designed with more design details to clearly distinguish them from secondary entrances.
7. Where sidewalks are very narrow, entries to nonresidential uses and residential lobbies should be recessed to provide space for people entering and exiting buildings.

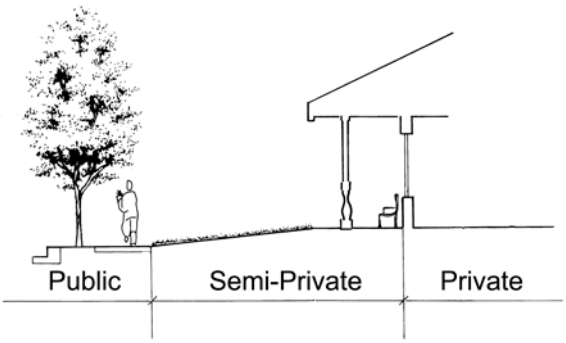
The façade of a building facing a pedestrian-supportive street should contain the primary entrance(s).

An attractive corner entry creates a more inviting public space at the corner.

Building Setbacks

Building setbacks are one of the most important aspects of site design, as setbacks define the physical proximity of building uses and activity to public sidewalks. While large setbacks convey a distant relationship between the street and the building, small (or no) setbacks encourage a closer relationship between activity on the sidewalk and the first floor of the adjacent building. Along transit access routes, it is important that pedestrians feel engaged and safe. This is accomplished through moderate setbacks in residential areas where some level of visual relationship is maintained that allows for the residents along a street to "provide eyes on the street". In mixed-use and commercial centers, no or minimal setbacks lead to highly desirable direct interaction between first floor commercial uses and pedestrians on sidewalks.

Note that locally adopted policies on setbacks take precedence over these guidelines.



Residential Neighborhood Guidelines

1. Residential buildings should avoid excessive front yards. Reduced setbacks result in a more active and interesting pedestrian realm.
2. Multi-family buildings with ground floor residential uses should accommodate landscaping in the setback that both enhances the public realm and provides a sense of privacy for residential units on the first floor.
3. Public/semi-private transitions in residential building fronts, such as stoops and open porches, create a pedestrian-friendly streetscape that encourages interaction with neighbors and an increased sense of activity along the street.
4. In order to improve the sense of safety and security, walls and fences used for screening purposes should not exceed 6 feet in height. Trellises, arbors, and semi open structures are acceptable substitutions for solid walls if landscaping is used to enhance the visual buffer.
5. Walls should <u>not</u> be used to separate residential development from streets with transit routes and other pedestrian supportive streets.

Requirements for Setbacks

County policies and city regulations shall take precedence over these guidelines.

Title 19 of the San Benito County Code defines land use and environmental regulations. The following text related to setbacks is taken from section 19.27.001.

19.27.001 SETBACK LINES FOR BUILDINGS AND STRUCTURES.

(A) No building or structure may be erected within 35 feet of the side line of any state highway; within 65 feet of the center line of any county primary road; or within 50 feet of the center line of any county secondary road.

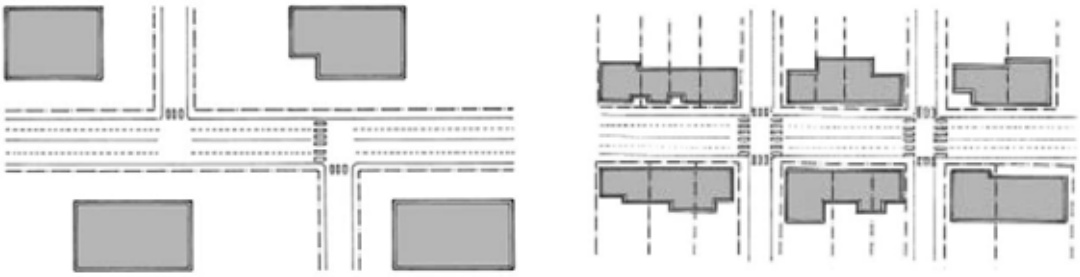
A landscaped setback provides privacy for residents and space for transit stop amenities.

Public/semi private transitions encourages interaction with neighbors and an increased sense of activity along the street.

Walls and other visual barriers in setbacks create an unwelcoming and unattractive streetscape.

Guidelines for Residential Neighborhoods, Mixed Use and Commercial Centers or Corridors

1. In mixed use and commercial areas, development should typically be built with no or minimal setback from the back of the sidewalk.



Locating buildings with no or minimal setback creates a more walkable environment as entrances are closer to the sidewalk, and building facades create an interesting walking environment.

2. Street level building recesses or setbacks greater than five feet from the primary building façade should be reserved for outdoor seating, dining, and/or display of goods in order to avoid unattractive spaces devoid of activity.

In mixed use and commercial areas, development should typically be built with no or minimal setback from the back of the sidewalk.

Transit and Pedestrian Friendly Parking Design

Parking lots fronting on sidewalks should be avoided, as they create an unfriendly pedestrian environment

Surface parking lots are among the least pedestrian-friendly environments in today's urban areas, and they rarely include designated pedestrian walkways that are landscaped to provide comfort and shade. More typically, pedestrian connections between public sidewalks – and transit stops – and the entrances to retail, commercial or office buildings are lacking entirely. Furthermore, expansive parking lots are not only visually unappealing, but they are also "heat sinks"— they generate considerable reflective heat that further discourages pedestrian activity. It is therefore important to reduce the amount of parking needed through targeted parking demand management techniques.

Blank frontages created by parking lots along public sidewalks should also be avoided as much as possible, within local governing policies. New developments should consider locating parking behind or at least to the side of buildings. If designed with pedestrian needs in mind, the frontage of surface parking lots can be made significantly more pedestrian friendly.

Guidelines for Residential Neighborhoods, Mixed Use and Commercial Centers or Corridors

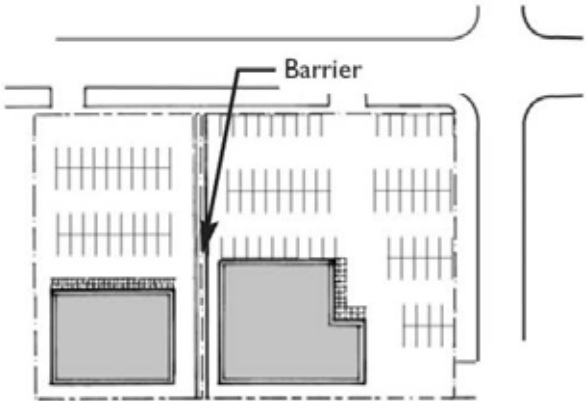
Vehicular Access to Parking

1. Whether parking is relegated to the rear of a lot, incorporated into a building, or placed alongside a building, the access to parking represents a potential conflict point between cars and pedestrians. Driveways encroach on the pedestrian realm. For this reason, driveway and entry design should minimize impacts on sidewalks and not detract from the pedestrian experience.
2. Conflicts between pedestrians and vehicles entering and exiting parking lots should be minimized by locating access points away from streets with transit routes and other pedestrian supportive streets, unless no other reasonable access is available.
3. The use of alleys should be strongly considered in the layout of new residential development as these allow the relegation of garages and parking to the back of a building. This reduces the number of driveways across sidewalks on residential streets.
4. Driveways should be located away from street corners so as to not conflict with potential curb extensions for bus stops and other pedestrian-oriented amenities or landscaping.
5. Where alleys are present, driveways leading to parking lots and loading and service areas should be accessed from the alley. Lots with multiple street frontages and no alley should locate vehicular access along the street with the lesser amount of pedestrian activity – not a pedestrian supportive street.
6. Where entrances into parking garages or to relegated parking behind buildings cannot occur from an alley or be located away from a pedestrian supportive street, such entrances may be located on the pedestrian supportive street if they are integrated into the design of a building (i.e., through the use of breezeways or other architectural features).
7. All loading and service drives should be deep enough to prevent loading and service vehicles from obstructing the sidewalk and roadway; and deep enough to prevent vehicles from extending beyond the front façade of the building they are serving whenever feasible.
8. Driveways should be consolidated and shared with adjacent properties to minimize their encroachment upon sidewalks.
9. Shared driveway agreements should be used for shared parking and loading and service areas.
10. To avoid encroaching on sidewalks and creating uneven pedestrian surfaces, the sidewalk surface should not slope, only the driveway apron should slope; this is the preferred design for disabled access.
11. The paving material and pattern of sidewalks should pass through the driveway's paving pattern, in order to reinforce the continuity of the pedestrian circulation system.
12. For single-family residences circular or loop driveways should be avoided as they create unnecessary additional curb cuts and driveways.

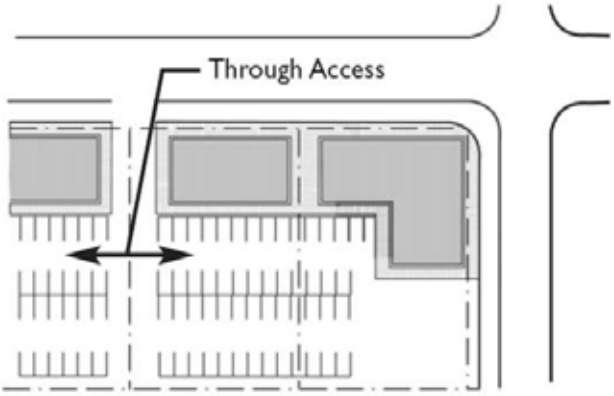
13. The primary access to the main entrance of a single-family residential use should be from a walkway directly connected to the sidewalk. A secondary walkway may connect to the driveway.

14. Pedestrian access to parking areas behind mixed use or commercial development should ideally be provided on both sides of commercial driveways, and at a minimum on the building side of the driveway. Landscaping, lighting and a 5-foot minimum walkway should be provided to offer pedestrians a safe and comfortable place to walk to the parking lot.

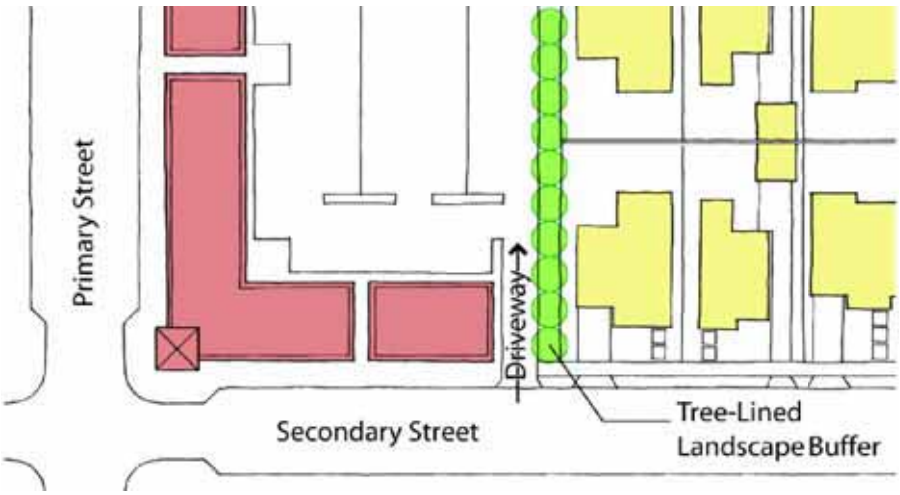
15. Large parking areas (a half- acre or more) should be divided into smaller sub-areas by a building, landscaped streets, or tree-shaded landscaped pedestrian walkways. This can also be applied to keep parking lots to scale with the built environment. In denser downtowns, for instance, lots would be divided at under an acre.



Conventional parking and access configurations are not friendly to pedestrians, as pedestrians must walk long distances from sidewalks, and across unsafe and uncomfortable parking lots.

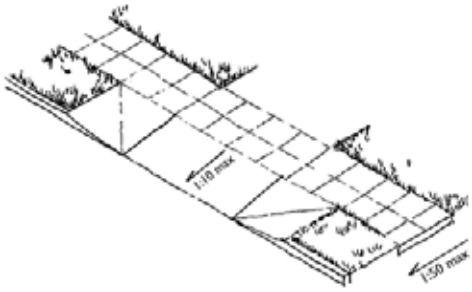


Preferred parking and access configurations have fewer access points from streets, and better connections between parking lots.

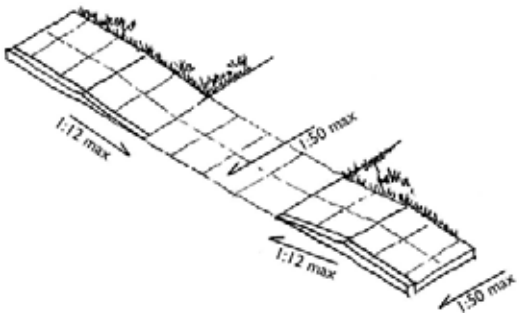


Parking access should be located on the street with lesser pedestrian activity. Parking lots should be located behind buildings.

Parking behind the building is accessed by a pedestrian walkway.



A. Straight, level sidewalk



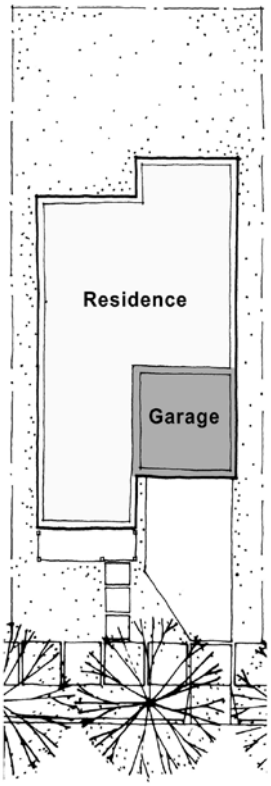
B. Combined sidewalk and driveway

Figure A (left) is a preferred design for driveways where the sidewalk passes straight and level indicating the primacy of pedestrians. Where sidewalk widths are constrained, the design shown in Figure B (right) can be used.

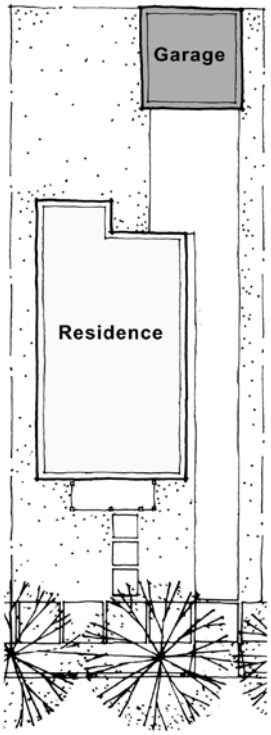
Residential Parking Garages

Residential garages have been a dominant streetscape feature in most residential developments built over the past 50 to 60 years. Where parking garages dominate the street-facing façades of a residential neighborhood, pedestrian environments degrade due to the lack of pedestrian-oriented design elements in architectural façade treatments. The following guidelines address ways in which the impacts of residential garages can be mitigated.

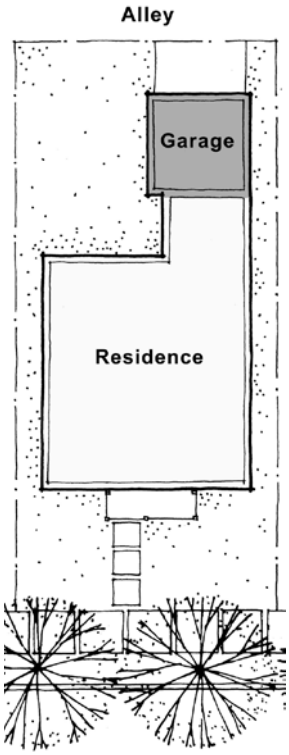
1. Street frontages should not be lined with garages and excessively wide driveways. Garages should be accessed from alleyways to reduce driveway interruptions of the pedestrian realm. Alternately, they should not dominate the façade of residential buildings where they are located at the front of the home.
2. Garages associated with single-family homes, whether attached or detached, should be set back at least 10 feet behind the primary front façade of the residence (while being consistent with local ordinances).



At a minimum, garages should be set back behind the primary façade.



Garages should be located behind a residence.



Where alleys are present, garages should be behind a residence and accessed from an alley.

Screening along Sidewalks

1. Where frontages of surface parking along public sidewalks cannot be avoided, surface parking lots should be screened from adjacent streets and sidewalks to reduce their visual impact on the street and sidewalk. At a minimum, the grill and headlights of vehicles should be screened from view. If possible, screens should incorporate artwork or other decorative features. Most existing parking lots can be retrofitted to achieve this goal without a reduction in parking spaces.

At a minimum the grill and headlights should be screened.

2. Parking areas at the side of a building should have limited street frontage. This frontage should follow the guidelines for screening described below.

3. Parking lot screening should be designed with a varied and layered palette of landscape elements in order to create an interesting and attractive frontage for pedestrians. Elements can include decorative landscape structures (e.g., architectural fences, walls, murals and/or trellises), low planting, trees and lighting. Screening of parking lots should not rely solely on a wall or landscape structure without vegetation. The use of limited palettes (i.e., hedges or a wall and vines) as the sole means of buffering parking may be used for highly constrained lots, but should be limited to frontages where parking lots are exposed for less than 100 feet.

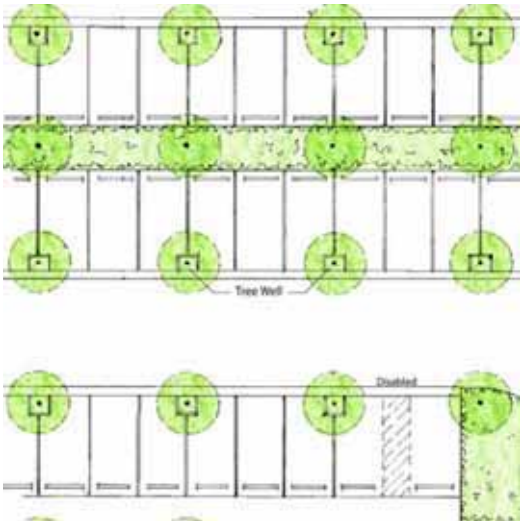
4. The minimum recommended width for landscaping between a surface parking lot and back of sidewalk is 7 feet. This width can accommodate a structural element, such as a wall, and landscaping on both sides. For highly constrained sites, the width of landscape buffers may be reduced to 2 feet for a hedge or a wall with vines.

Screening should be semi-transparent, as solid walls result in an uninteresting streetscape and make both the street and parking lot feel less safe and comfortable.

Pedestrian Circulation & Landscaped Walkways

1. Landscaped walkways through parking lots should be established between public sidewalks – and transit stops – and entrances to retail, commercial, or office buildings.
2. Parking lots and pedestrian walkways through parking lots on adjoining properties should be interconnected whenever possible to allow drivers to park once and then make walking trips to nearby destinations.
3. Landscaping can often be added to existing parking lots with minimal impact on the amount of parking, while greatly improving the pedestrian environment.
4. Drought-tolerant plants should be used to reduce watering needs.
5. Walkways running parallel to the parking rows (perpendicular to parked cars) should be provided for every four rows, and walkways running perpendicular to the parking rows (parallel to parked cars) should be no further than 20 parking stalls apart. Walkways should also be provided at the edges of parking lots.
6. Walkways within parking lots should be raised to standard sidewalk height (typically 6 inches).
7. Where a pedestrian walkway crosses the auto lane, the path should be clearly delineated by a contrasting color, pavement pattern, and/or be raised slightly to form a speed table.
8. Parking lots with over 150 parking spaces should have walkways with adjacent planting areas for trees and other landscaping; smaller parking lots should include this treatment whenever possible.
9. Parking lots and pedestrian walkways should be well-lit with pedestrian-scale lighting to create a safe environment for persons going to and from their cars.

Landscaped walkways should be provided through parking lots to connect to building entrances, transit stops and other destinations.



A parking "orchard" provides evenly spaced trees that provide distributed shading

Attractive walkways within parking lots can help break them up and make them safer and more attractive for pedestrians.

Transit-Friendly Streets

The State of California mandates through Assembly Bill 1358, The Complete Streets Act, that streets safely accommodate the movement of all users. The law defines street users as "motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation." Convenient and safe access to transit (bus) stops largely depends on how well the surrounding street network accommodates pedestrians and bicycles. A well-connected network of streets (as well as pathways and trails) allows pedestrians and bicyclists to access transit stops both directly and conveniently. Within that network, streets that balance the needs of pedestrians, bicycles, automobiles, and buses by design ("Complete Streets") ensure a comfortable walking or biking environment. The following guidance on street design addresses both sidewalks and crosswalks. Private development contributions to a transit supportive environment are discussed in the *Transit-friendly Site Design* section below.

Network Guidance

An interconnected network of streets with continuous sidewalks is essential to providing reasonably direct routes between homes, destinations, and transit stops. This is particularly true in San Benito County, where transit service is not as widespread as in larger urbanized areas, and riders often have to travel several blocks on foot or by bicycle to reach a street with transit service.

Circuitous routes of a poorly connected network result in longer trips and less access to transit.

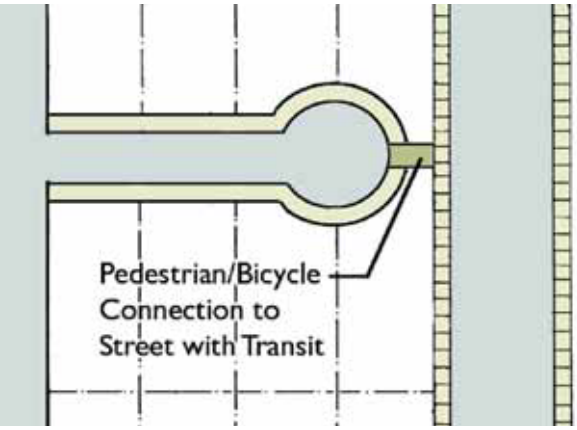
Direct routes of a well-interconnected network improve walking and access to transit.

The interconnectivity of streets is determined by patterns of blocks, buildings, and streets. Where blocks are shorter or include alleys or pedestrian passageways, travelers have more frequent and direct travel options. Short blocks also reinforce a pedestrian's or bicyclist's sense of progress toward the desired destination, making the walk or ride seem shorter and more attractive. This is the case in older parts of Hollister and San Juan Bautista, where the traditional grid pattern supports relatively direct routes to transit stops. On the other hand, where blocks are long and uninterrupted by local streets, alleys, or pedestrian passageways (i.e. non-vehicular paths at the center of a block), fewer connections result in fewer travel choices, and ultimately longer trips to transit stops. In San Benito County, this less interconnected development pattern is generally associated with more recently developed areas. Some examples include: frequent cul-de-sacs, T-intersections, and fewer connections to adjacent development restrict non-vehicular travel options.

The following guidelines promote enhanced route choice and directness for all modes of travel – including transit vehicles. They are intended to inform planning for local street networks and block patterns in new development and, whenever possible, in redevelopment projects.

Network Guidelines

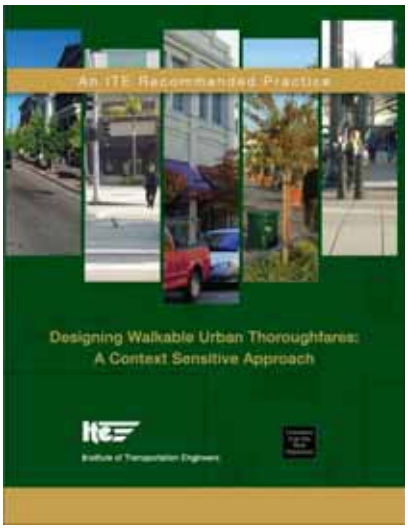
1. New developments should include a network of interconnected streets that accommodate and enhance pedestrian and bicycle access to nearby transit stops.
2. Street alignments should avoid excessive curving, unless required by topography.
3. Continuous sidewalks should be provided on both sides of the street to avoid route discontinuity and unnecessary pedestrian crossings.
4. To avoid creating disconnected and isolated local street networks that create unnecessarily circuitous and long local trips, streets in new developments should connect to streets in existing, adjacent developments.
5. Cul-de-sacs should only be used where continuous streets cannot be constructed due to topographic constraints, natural water features, or similar factors.
6. Where streets are discontinuous for cars, pedestrian and bicycle connections should always be made. This is particularly effective for access to transit if the connections link to a street with transit service and bus stops.



Pedestrian pass-throughs (shown in grey, left, and in example, right) provide connections for pedestrians and bicycles to more directly connect in the middle of long blocks or between cul-de-sacs and adjacent arterials.

7. Generally, blocks should not be longer than about 400 feet on any side. Where larger blocks are needed to accommodate mixed use or commercial development, these blocks should include designated pedestrian and bicycle paths that establish internal circulation throughout the larger block.
8. In existing areas where low street connectivity results in poor access to transit, opportunities should be explored to supplement existing pedestrian and bicycle routes with off-street multi-use paths, trails or other short non-vehicular connectors that improve access to streets with transit service.

Street Design Guidance



While a network of well-connected streets addresses a transit rider's desire for direct route options, other street design characteristics are equally important, such as functionality, comfort, and safety of the transit access route.

Today, despite rising rates of bicycle use, roads continue to be optimized for automobile use. As personal automobile use surged following World War II and suburbanization took root, wider roads were built to accommodate contemporary demand, as well as anticipate future auto-oriented growth and use. More people used automobiles as their primary mode of transportation and towns and cities went to great lengths to accommodate them. In many communities, such a large percentage of the land was locked into roads and parking lots that they became unwelcoming to people. Accordingly, the needs of transit users, pedestrians and bicycles were not afforded equal attention in the design of streets and the allocation of public right-of-way.

However, in recent years the concept of multimodal streets—"Complete Streets"—has gained broad acceptance. These streets are designed with consideration for all users, including pedestrians, bicyclists, transit, drivers, and automobiles, and are increasingly being built in communities across the nation.

Complete Streets are designed to enable safe access for all users. Every street has its own unique characteristics, but each typically includes sidewalks, bike lanes or wide paved shoulders, special accommodation for transit, comfortable and accessible transit stops, frequent crossing opportunities, median islands, accessible pedestrian signals, and curb extensions. They not only focus on balancing the allocation of available right-of-way between travel modes, but also take into consideration the function of the street as a public place. Many Complete Streets deliberately engage with adjacent land uses, providing room for sidewalk cafés or public interaction. Designing streets thoughtfully, with consideration for all modes of transportation, encourages comfortable and safe travel for all users and adds value to the community.

Direct sidewalk connections to building entrances are desirable, as they promote walking and transit use as viable modes of transportation. Of course, sidewalks do not simply facilitate pedestrian movement and access to transit—they are also important social spaces. In order to create such a comfortable and attractive environment, the sidewalk must be wide enough to accommodate movement and social interaction in addition to transit amenities.

Intersections represent critical points along the paths of bicyclists, pedestrians and transit users. The design of safe and convenient crossings at intersections and mid-block locations – particularly across roadways with more than two travel lanes – is therefore of critical importance to ensure safe transit access.

AB 1358 – The California Complete Streets Act of 2008

AB 1358 requires city and county General Plans to include policies and provisions to accommodate the circulation of all users of the roadway, including motorists, pedestrians, bicyclists, children, seniors, individuals with disabilities, and users of public transportation.

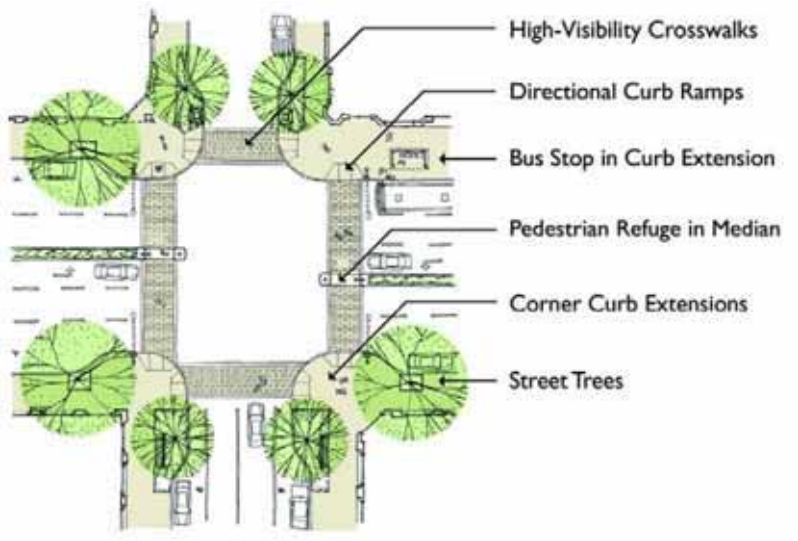
Improve Safety for all Roadway Users - AB 1358 will make our roads safer and more convenient places for Californians who choose to walk, ride a bike, or take transit. Safer roads enable more people to gain the health benefits of choosing an active form of transportation, and benefit everyone by reducing traffic congestion, auto-related air pollution, and the production of climate-changing greenhouse gases.

Encourage Healthy Physical Activity - Complete streets encourage physical activity. Public health experts are encouraging walking and bicycling as a response to the obesity epidemic. Complete streets can help. One study found that 43 percent of people with safe place to walk within 10 minutes of home met recommended physical activity levels. Residents are 65% more likely to walk in a neighborhood with sidewalks.

Reduce Greenhouse Gas Emissions - It has never been more important to improve our air quality and complete streets are a key strategy for doing that. Our communities are facing asthma epidemics as well as other related illnesses. The evidence that climate change is happing is now undeniable. Complete streets offer communities a tool to meet the standards set in this landmark law. If each resident of a community of 100,000 replaced one car trip with one bike just once a month, it would cut carbon dioxide (CO2) emission by 3,764 tons per year.

Reduce Fuel Consumption and Pollution - More than half of commute trips, and three out of four shopping trips are less than five miles in length. These short trips are the most polluting and least efficient in terms of fuel consumption, but many could be made by bicycling and walking. Complete streets allow this to happen.

Source: AB 1358 Fact Sheet, Office of Assemblyman Mark Leno



An intersection designed for vehicles, bicycles, pedestrians and transit includes high visibility crossings, corner curb ramps and curb extensions, refuges for pedestrians to wait in medians on long crossings, trees and amenities like bus stop shelters and pedestrian scale lighting.

General Street and Intersection Design Guidelines

1. Travel lanes on all streets used by transit vehicles should be wide enough for vehicles to operate safely and at a reasonable speed, and the combined "clear" or "through" space provided by adjacent lanes should be sufficient for transit vehicles to maneuver around other vehicles. Fire department standards typically address the latter; in San Benito County, standards indicate a range from 18 feet (two nine-foot lanes) as a minimum, to 24 feet where there are four or more developed lots on the street. For a standard 40-foot bus, which may be close to nine feet wide including side mirrors, a minimum lane width of 11 feet is required to ensure safe passing widths when buses operate in both directions on the same street.
   Standards for the City of Hollister indicate a minimum width between curbs of 40' for cul-de-sac, residential, and collector streets.[4] In addition, the minimum travel lane width for Hollister is 12'. San Juan Bautista follows Hollister's standards for lane width.

2. All new streets should be designed for the safety and comfort of bicyclists and pedestrians, with particular attention paid to more vulnerable groups like children, the elderly and people with disabilities, consistent with the Unites States Department of Transportation Complete Streets guidelines.[5]

3. All streets and walkways shall meet the requirements of the Americans with Disabilities Act.

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[4] City of Hollister Design Standards, May 1992
http://www.usspecbook.com/files/specs/hollister-california-design-standards.pdf

[5] http://www.fhwa.dot.gov/environment/bikeped/policy_accom.htm

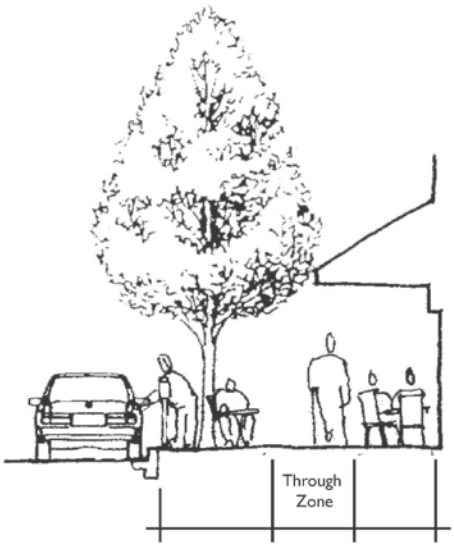
4. To the extent feasible under local codes, the geometric design of streets and intersections should follow guidelines provided in the Institute for Transportation Engineers' *Designing Walkable Urban Thoroughfares: A Context Sensitive Approach: An ITE Recommended Practice*. Likewise, the geometric design of residential streets should follow the guidance of the Institute for Transportation Engineers' *Traditional Neighborhood Development Street Design Guidelines: An ITE Recommended Practice for Residential Streets*, *Third Edition.*
5. At intersections, the tightest turn radii should be used for normal-sized personal vehicles, in order to slow vehicles as they turn and cross the pedestrian realm. Larger vehicles such as delivery trucks and fire engines that seldom use the street should be allowed to cross the centerline to make turns.
6. At intersections, consider the use of raised crosswalks, raised intersections, or curb extensions to reduce vehicle speed and reduce conflicts with crossing pedestrians.
7. Curb ramps at crosswalks should be perpendicular to the curb to maximize convenience for wheelchair users. The San Benito County Bikeway and Pedestrian Master Plan addresses location and design of these facilities.
8. On all wider streets (more than one lane in each direction), "ladder" style pavement markings in crosswalks should be used to improve driver visibility of the crosswalk.
9. Corner curb extensions should be incorporated where appropriate to narrow crossing distances, accommodate bus amenities, increase pedestrian visibility, and slow motorists.
10. Where applicable, mid-block crosswalks should be installed to provide access to bus stops located away from safe crossings at controlled intersections. Refer to the Institute for Transportation Engineers' *Designing Walkable Urban Thoroughfares: A Context Sensitive Approach: An ITE Recommended Practice* for further guidance on the safe design of mid-block crossings.

A raised crossing causes vehicles to have to slow and eases pedestrian crossing.

A midblock crossing.

Sidewalk Guidelines

1. Additional, more detailed design guidelines are provided in Appendix C of the San Benito County Bikeways and Pedestrian Master Plan. The following guidelines supplement those guidelines for areas served by transit.
2. Along streets lacking on-street parking, and higher traffic volumes (> 15,000 ADT), posted speed limits of 35 mph or higher, and more than one lane in each direction, the landscape buffer should be 6 to 8 feet wide in order to provide more separation between pedestrians and moving traffic.
3. The dimension of the landscape buffer between the paved walking surface and curb should be based upon speed and volume of adjacent vehicle traffic and whether on-street parking, an effective buffer, is provided (see *Designing Walkable Urban Thoroughfares: A Context Sensitive Approach: An ITE Recommended Practice* for further guidance).
4. Landscaping and particularly street trees should be included in the design of sidewalks and – where applicable – medians. Trees can calm traffic, provide shade, provide a visual break of paving surfaces on wider streets, and can beautify the street's overall appearance.
5. On streets where higher levels of pedestrian activity are expected, street trees should be planted in tree wells covered with grates to allow for frequent pedestrian circulation between parked cars and the sidewalk area.
6. A sufficient unobstructed sidewalk through-zone should be provided to allow pedestrians to walk side-by-side, push strollers or wheelchairs, and other activities without having to dodge pedestrians moving in the opposite direction. At a minimum, a 5-foot throughway should be provided.
7. Curb extensions should be installed at street corners to increase sidewalk space for transit stops, bicycle parking and other street furniture.



Bicycle Guidelines

1. All bikeways, bicycle storage, and other associated facilities should conform to the standards and plans detailed in the San Benito County Bikeway and Pedestrian Master Plan.
2. As stated in the Bikeway and Pedestrian Master Plan, transit agencies operating in San Benito County should continue to allow bicycle access on all buses with bus mounted bicycle racks. Bicycle travel to bus stops should be enhanced to make the transfer between bicycle and transit travel as convenient as possible. Enhancing access could include bikeways connecting the community to bus stops and additional bike racks at bus stops.

On streets with higher traffic volumes, striped bicycle lanes should be provided.

Additional Guidelines

Additional, more detailed design guidelines are provided in Appendix B of the San Benito County Bikeways and Pedestrian Master Plan.

Special Considerations for Demand Response Services

The LTA's demand response services (Dial-a-Ride, Paratransit and Specialized Transportation) provide curb-to-curb or door-to-door service for the elderly and disabled. Though these are not traditional fixed-route services, they regularly provide service to and from destinations such as local senior centers, hospitals, senior living facilities and other social service providers for individuals that do not live near a traditional fixed route. In California, senior citizens have the highest rate of traffic-related pedestrian deaths of any age group. In 2000, 40% of all traffic-related pedestrian fatalities and 12% of injuries were people 65 and older.[6] It is important to ensure the ability of at-need populations to safely and conveniently find and access demand response services and their facilities.

[6] California Task Force on Older Adults and Traffic Safety, Traffic Safety Among Older Adults: Recommendations for California, Center for Injury Prevention Policy and Practice, San Diego State University (no date).

Demand Response Guidelines

1. Civic and institutional uses such as hospitals, community centers and public service providers, as well as major retail and entertainment destinations, should include conveniently located and clearly marked areas near their entrances where demand response vehicles can easily drop off and pick up patrons. Parking lots for these facilities should include a conveniently located, ADA-accessible parking space for demand response vans.
2. Key destinations served by demand response should clearly display information about demand response service, routes, and eligibility. People are often less likely to know how and where demand response runs because vehicles are not as identifiable as typical buses and do not follow standard routes. Making this information clearly available can help inform people of this crucial service, and how it may be able to serve them.
4. Senior centers, hospitals, and senior living facilities, should prominently display wayfinding signage that indicates the location of and route to demand response pick-up locations. The route to the pick-up point should be the safest and most direct, as well as ADA-compliant.
5. At the demand response pick-up/drop-off location, wayfinding signage should be provided that points passengers to nearby destinations, including senior centers, hospitals, senior living and other social services facilities. Any identified routes should be the safest and most direct, and ADA-compliant.
6. Shelter, seating and other amenities should be provided at high-frequency demand-response stops either through the joint use of a fixed-route stop, or by providing a dedicated paratransit stop that includes various amenities (in accordance with Chapter 4).
7. Safe street crossings, curb ramps, audible signals, and other accessibility improvements should be installed at intersections near high frequency demand response stops.
8. At joint demand response and fixed-route transit stops, all seating and signage must comply with applicable ADA standards.
9. Particular attention should be given to creating seamless transitions between accessible routes in the public right-of-way[7] and those on private property.

ADA paratransit pick-up stop, Tri-MET, Portland, OR

[7] These should follow the recommendation described in U.S Access Board's publication for access to public rights of way.

Chapter 4. Transit Facility Design Guidelines and Standards

This chapter discusses factors to be considered when designing facilities to accommodate transit, and gives specific guidelines for transit facility design.

Vehicle Characteristics

Fixed-route transit buses are often categorized by the length of the frame of the bus. It is important to note that the length refers to the measurement of the bus frame excluding the bumpers; length is also added by bicycle racks, if present. Thus, a standard 40' bus is actually slightly longer than 40' when the front and rear bumpers are included. Buses can be designed to have either a high floor or a low floor (which has become the industry standard). Typically, buses require a 12' wide travel lane.

There are four basic types of transit buses:

- Light Duty and Cutaways (Under 30')
- Standard transit bus (usually 35' or 40')
- Commuter/Park-&-Ride (40' or 45' coach)
- Articulated bus (60')

Currently the San Benito LTA uses primarily "cutaway" vehicles up to 30' long; however, they may use 40' buses in the future. This section discusses all of these vehicles; in planning for transit-friendly development, planners and developers should assume a 40' bus will need accommodation in the future. The following table shows the vehicles in use by the LTA (2009).

Figure 4-1 Vehicle Inventory, LTA, 2009

Number	Length	Width	Used for	Passengers	Wheel chairs
3	16'	6'	Demand Response	5	1
10	23'	8' – 6"'	Demand Response and Fixed Route	12 to 14	2
1	25'	8' – 6"'	Demand Response and Fixed Route	23	2
3	28'	8' – 6"'	Demand Response and Fixed Route	14 to 23	2
1	31'	8' – 6"'	Gavilan route	23	2
2	35'	8' – 6"'	Fixed Route	37	2

Small Buses (Cutaways)

Small suburban neighborhood routes, lower ridership routes, or demand-response routes tend to be best served by smaller buses, commonly referred to as "cutaways". These vehicles allow for more flexibility than larger buses and are able to operate on smaller neighborhood roads in lower density areas. Cutaways have bus bodies wedded to truck chassis, are usually less than 30' in length, and seat between 12 and 25 ambulatory passengers with two wheelchair tie-downs, one door in the front of the bus for ambulatory passengers, and one door in the rear for the wheelchair lift.

This type of bus comprises the greater part of LTA's vehicle inventory, and is used for both fixed-route and demand-response service. It is important that all plans for development accommodate this kind of vehicle, since they are used throughout all communities to transport the elderly, people with disabilities, and youth. Accommodations may include providing a place for the cutaway to come onto the property out of traffic, room to park where passengers can safely board and alight the vehicle, and space for the vehicle to turn or loop around to get back onto the nearest street.

Demand Response Service in San Benito County

The LTA provides a variety of *demand-response* services. These differ from regular routes in that passengers call the transit service to arrange a ride for a specific day and time. These services include:

County Express:

- Dial-A-Ride
- Paratransit

Specialized Transportation

- Out-of-County Non Emergency Medical Transportation
- Senior Lunch
- Medical Shopping Assistance

Figure 4-2 Cutaway Bus

Standard "Local Route" Heavy-Duty Buses

The most common type of bus that transit agencies use for local routes is the 40' bus, which seats between 38 and 44 ambulatory passengers (depending upon the seating configuration) and has room for an additional 40 standees. Typically, each 40' bus has space for two wheelchairs and is equipped with a wheelchair lift. They are also often equipped with a retractable bike rack protruding from the front of the bus that allows two bikes to stand upright.

Though 40' buses tend to be the "standard" in most fleets, shorter buses such as 35' and 30' vehicles are also commonly used for lower ridership local routes, or very curvy routes requiring a flexible turn radius. The 35' bus holds about 35 ambulatory passengers.

The San Benito LTA uses two 35' buses for fixed route service. The LTA is interested in acquiring more 40' buses for future service.

Figure 4-3 Standard 40' Bus

Commuter Buses

A 40' bus with standard "urban service" seating configuration isn't really appropriate for use on long distance, freeway-oriented routes. For that reason, most transit agencies use "Over-The- Road" buses (OTRB). These 45' coaches have a single door at the front, reclining-high back seats, arm rests, foot rests, tray tables, reading lamps and upgraded suspension for a smoother ride. Some also have electrical ports and Wi-Fi connections for laptop computers.

OTRBs are becoming more wheelchair accessible. Newer models have wheelchair lifts and at least one wheelchair tie-down. Currently some transit agencies such as Golden Gate Transit are putting horizontal style bike racks in the 'luggage' compartments underneath the bus.

The San Benito LTA does not own a 45' commuter bus, but may purchase one for longer fixed-route trips. Should a commuter bus be added to the fleet, it may be used primarily from park-&- ride locations or may circulate on major arterials. Developers with property adjacent to large intercity roads should design their development to accommodate a bus of this size.

Figure 4-4 Commuter Bus

Articulated Bus

Articulated buses are often used for local service in high ridership areas. An articulated bus is an extra long vehicle (60') with two connected passenger compartments that can seat up to 65 passengers. The two sections of the bus are connected by a joint mechanism that allows the bus to execute tighter turns than a standard 40' bus. San Benito LTA will most likely not have use for these very large buses in the foreseeable future.

Transit Facility Standards

This section discusses the factors to be considered when deciding where a bus stop should be situated and gives detailed guidelines for bus stops sites. While each stop should be looked at individually because of the large number of factors involved, the following general guidelines can be initially applied.

The Federal Transit Administration sponsors the Transit Cooperative Research Program (TCRP), which is managed by the Transportation Research Board of the National Academies. In 1996, the TCRP published *Guidelines for the Location and Design of Bus Stops (Report 19),* a highly detailed report going into depth on all aspects of bus stop design and placement. This section of the guidelines draws selectively from the TCRP report, emphasizing its application in rural and low-density urban settings, as appropriate for San Benito County. For more detailed information on any of the guidelines in this section, please consult the TCRP report, available in its entirety on the internet[8].

Considerations for Rural Stops

Currently, the LTA's County Express focuses its service within the City of Hollister, with connections to other areas of density. In anticipation of stops being added in rural areas of the County, this section highlights things to consider when putting a bus stop in an undeveloped setting.

Access to the Stop

Undeveloped areas typically do not have sidewalks. When installing a rural transit stop consider adding a sidewalk from the nearest intersection, with a curb ramp. This will enable riders, including people with disabilities, to access the stop on a safe pedestrian path separate from the roadway, where there may be very fast-moving traffic. This also provides a firm surface regardless of weather conditions. Landscaping should be cut back for sightlines between the bus and waiting passengers, and to provide a sense of personal safety.

Amenities at the Stop

A rural stop should have a raised concrete landing pad to provide a stable waiting surface, where all passengers, including those in wheelchairs, can board and alight safely. The pad should have a non-slip surface. Signage should be consistent with urban and suburban signage for the system. This branding assures passengers that they are at an active stop. Rural routes typically don't run very often, so a schedule for routes serving the stop can be exceptionally helpful.

Stop Siting and Configuration

In a rural setting, there may be great distances between intersections, and the route may be on a road with no signals or stop signs. In this case, if a stop is near the intersection of another road, a far side bus bay may be the best configuration. This allows the bus to get past the intersection before stopping, and the bay allows the bus to get out of traffic, which may be moving at high speeds. As shown in the Figure on Bus Pullouts, the bay will vary in length, depending on the

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[8] *Guidelines for the Location and Design of Bus Stops,* Transit Cooperative Research Program, 1996 http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_19-a.pdf

posted speed limit of the road. The bay should be long enough to allow the bus to accelerate back into traffic.

As noted above, most of the stops in San Benito County are in more developed urbanized areas. The following sections address the placement and configuration of bus stops in more typical developed areas.

Bus Stop Spacing

All aspects of a trip by bus – walking to the stop, the time on the bus, and walking to the final destination – are affected by the location and spacing of bus stops. Numerous studies have shown that people will walk up to ¼ mile to a bus stop, and up to ½ a mile to a major transit hub such as a train station or a ferry terminal. Placing stops within ¼ mile of places where people live or congregate – "trip generators" – serves both riders and the bus system.

As a bus proceeds along its route, it stops when passengers indicate they wish to alight, or where passengers are waiting to be picked up. With every stop, the bus has to slow down and stop; pick up and/or drop off passengers, and then re-accelerate, sometimes having to fight back into the traffic flow. Having too many bus stops may be convenient for those who don't want to walk far, but makes trips very time-consuming. Riders traveling longer distances won't take transit that stops so frequently that transit travel times are twice as long as driving times or longer. Optimal bus stop spacing balances the need to make stops convenient and safely accessible with the need to keep a reasonable average speed of the bus.

Stop spacing is based on several factors which interact with each other. First is anticipated ridership, which is in turn affected by density and type of development being served. In a downtown area, stops should be regularly spaced at intervals of ¼ mile or less, so that no one on the route is more than 500 feet from a stop. In suburban and rural areas, there may be no "typical" distance, but rather, stops are placed at major origins and destinations, and at transfer points. Thus distances between stops can vary widely.

Stop spacing should also be linked to the type of service using the stop. Local, limited, rapid, and express service vary in the number of stops they serve to match the designed service. Local service has the most closely spaced stops, and express service has very few, or has clusters of stops at the start and end points of the route, and very little in between.

The following guidelines for bus stop spacing, provided by the Transportation Research Board, show recommended distances between stops based on different types of development. It is recommended that San Benito County follow these guidelines, in conjunction with providing stops at major trip generators, such as schools, libraries, community centers, healthcare facilities, and shopping areas.

Environment	Spacing Range (feet) Minimum & Maximum		Typical Spacing (feet)
Core areas of Central Business Districts	300	1000	600
Urban areas	500	1200	750
Suburban areas	600	2500	1000
Rural areas	650	2640 (1/2 mile)	1250

In planning a new development, both proposers and planners can step through these decisions to see if a stop should be:

- if the development faces onto a street with an existing bus route, determine if the existing stop is convenient and accessible to potential riders coming to or leaving the new development.
- If a stop is nearby but is not immediately next to a trip generator, consider relocating the stop to be closer to or directly at the new development.
- If the existing stop is within the spacing range above and also serves a significant origin or destination, some analysis should be done to determine if an additional stop is needed at the new development.

Over time there is a tendency for stops to be added to bus routes, as requests for service in front of more locations are accepted. Care should be taken not to proliferate stops, as this will slow service and make transit less attractive. When stops are as frequent as every or every other city block, it may be useful to comprehensively re-examine the location of all stops.

Bus Stop Placement

Reasonable distances between stops and placement at trip generators can help a system attract riders. In addition to making stops convenient, the most critical factors in bus stop placement are safety and avoidance of conflicts with other modes. The placement of the stop must also allow efficient operation of the vehicles. The following table shows elements to consider in stop placement.

Safety	Convenience	Operations
Protection from passing traffic	Access for bicycles, pedestrians, and people with disabilities	Adequate curb space and adjacent parking restrictions and delivery zones
All-weather surface to step from/to the bus	Proximity to major trip generators	Volumes and direction of pedestrian activity through intersections
Proximity to crosswalks and curb ramps	Proximity to transfer points for other routes	Volumes and turning movements of other traffic
Pedestrian-level street lighting	Proximity to the stop for the same route in the opposite direction	Impact of the bus stop on adjacent properties

The following section looks at the various options for siting a stop in order to achieve safety, convenience, and efficiency based on different circumstances.

Choosing a Bus Stop Location

The most critical factors in choosing among near-side, far-side, and mid-block bus stop placements are safety and avoidance of major conflicts that would otherwise impede bus, car, or pedestrian flows. Pedestrian safety is particularly important; the potential for accidents is higher where there are high volumes of traffic, multiple lanes in each direction, and significant trip generators on both sides of the road. Other factors include:

- Intersection geometry and impact on intersection operations
- Potential need for future passenger amenities
- Adjacent land use and activities
- Bus signal priority (e.g. an extended green suggests far-side placement)
- Bus routing (e.g. does the bus turn at the intersection)
- Transfer opportunities (e.g. if bus routes operate along two intersecting streets, providing of one near-side and one-far-side stop can allow passengers to transfer without crossing travel lanes)
- Parking restrictions and requirements
- Pedestrian access, including accessibility for persons with disabilities
- Physical roadside constraints (e.g. trees, poles, driveways)
- Ridership potential
- Presence of bus bypass lane
- Traffic control devices[9]

The conditions listed above are the existing conditions, and do not take into account changes which may be made in order to accommodate a bus stop, including signal prioritization or changing curb lines.

The final decision on the location of a particular bus stop requires on-site evaluation by transit staff.

Near-side, Far-side, and Midblock Placement

In urbanized settings, the location of bus stops is defined in terms of its position relative to the nearest intersection.

- *Near-side*: The stop is placed prior to the intersection, that is, before the bus would pass through the intersection on its path of travel
- *Far-side*: The stop is placed so that the bus travels through the intersection to the far side before it stops

[9] *Transit Design Guidelines Manual*, Amador Regional Transit System/LSC Transportation Consultants, 2008

- *Midblock*: The stop is placed within the block such that it is not affected by intersection traffic.

While consistency of placement is desirable, traffic conditions, space constraints, and adjacent land use can affect the location of a specific stop. There are advantages and disadvantages to each type of placement.

The following table, Figure 4-5 Comparative Analysis of Bus Stop Locations, provides information on when each stop location is recommended, and summarizes advantages and disadvantages of each location.

Figure 4-5 Comparative Analysis of Bus Stop Locations

Near Side Stops

Recommended Situations	Advantages	Disadvantages
• When the bus must stop in the travel lane • At an intersection controlled by a stop sign (thus the bus stops only once) • Where the accumulation of buses in a far-side stop would exceed the space allotted	• Minimizes interferences when traffic is heavy on the far side of the intersection • Allows passengers to access buses closest to the crosswalk and intersections, thereby minimizing, walking distances to connecting transit service • Results in the width of the intersection being available for the driver to pull away from curb • Eliminates the potential of double stopping • Allows passengers to board and alight while the bus is stopped at a red light • Provides driver with the opportunity to look for oncoming traffic, including other buses with potential passengers	• Increases conflicts with right-turning vehicles • May result in stopped buses obscuring curbside traffic control devices and crossing pedestrians • May cause sight distance to be obscured for cross vehicles stopped to the right of the bus • May block the through lane during the peak period with queuing buses • Increases sight distance problems for crossing pedestrians

Far-Side Stops

• At complex signalized intersections, so the bus can travel through the green signal without stopping, and the signal may provide breaks in traffic for re-entry • On routes where buses make left turns at intersections. Once a bus negotiates a left turn, a far-side stop provides a more appropriate service point. • Where dedicated right turn lanes are present; the right turn traffic is not impeded, and the right turn lane can be used as a "queue jump" (see Figure 4-7, Street-side Factors). • The effectiveness of a far side stop may be helped by bus priority signalization, so that the bus does not have to stop twice (once for the red light and again after the intersection).	• Minimizes conflicts between right turning vehicles and buses, providing additional right turn capacity • Minimizes sight distance problems on approaches to intersection • Encourages pedestrians to cross behind the bus • Creates shorter deceleration distances for buses since the bus can use the intersection to decelerate • Results in bus drivers being able to take advantage of the gaps in the traffic flow that are created at signalized intersections	• May result in the intersections being blocked during peak periods by stopped buses • May obscure sight distance for crossing vehicles • May increase sight distance problems for crossing pedestrians • Can cause a bus to stop far-side after stopping for a red light, which interferes with both bus operations and all other traffic • May increase number of rear-end accidents since drivers do not expect buses to stop again after stopping at a red light • Could result in traffic queued into intersection when a bus is stopped in travel lane

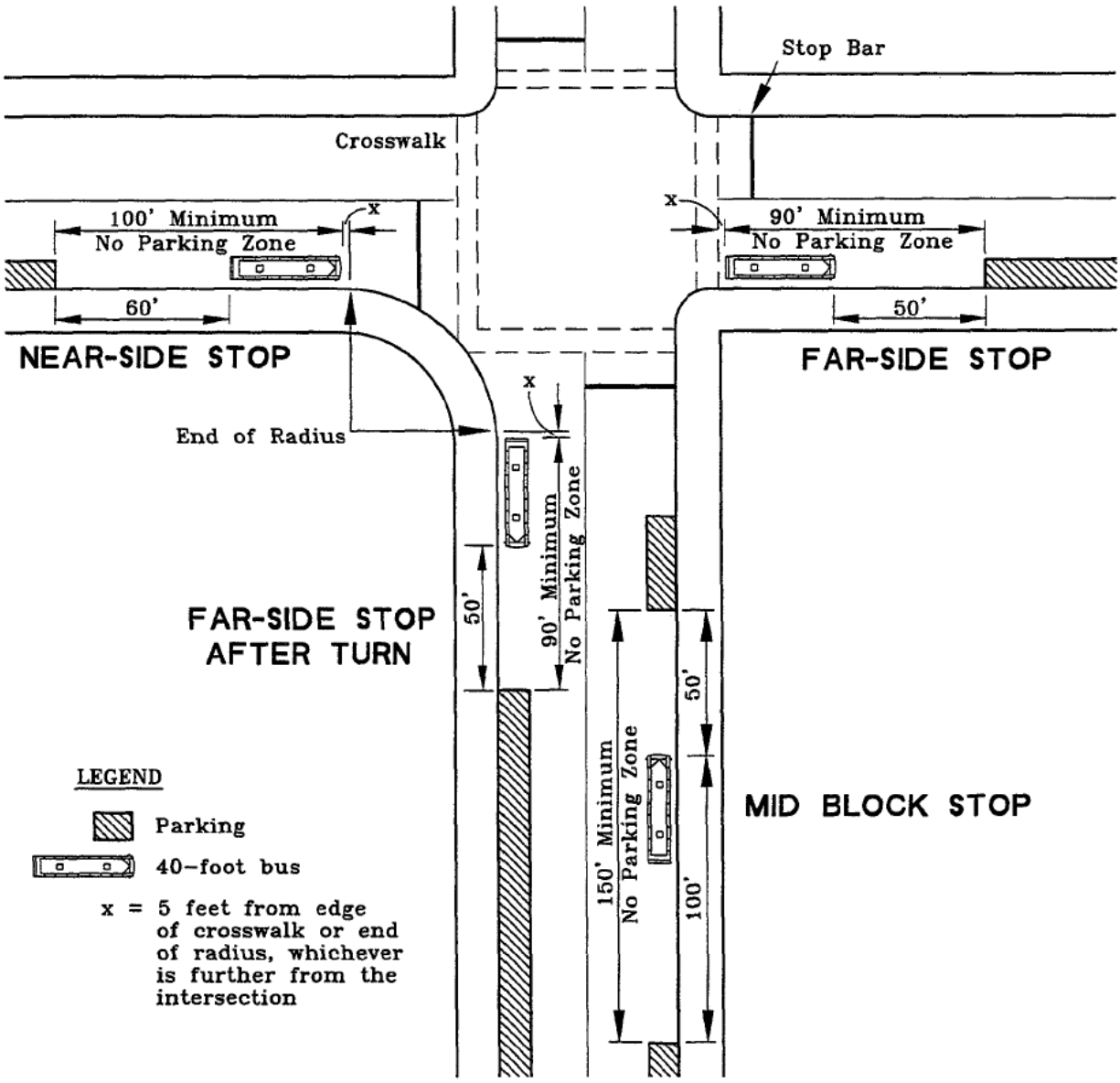
Mid-block Stops

• Where multiple routes require long loading areas • Locations generating a larger passenger volume in an area not near an intersection. • Bus turnouts are most effectively located in a mid-block bus stop zone.	• Minimizes sight distance problems for vehicles and pedestrians • May result in passenger waiting areas experiencing less pedestrian congestion	• Requires additional distance for no-parking restrictions • Encourages patrons to cross street at mid-block (jay-walking) • Increases walking distance for patrons crossing at intersections

Source: Guidelines for the Location and Design of Bus Stops, TCRP Report 19.

Figure 4-6, Bus Stop Zone Design Types & Dimensions, provides guidelines for distances for far-side, near-side, and mid-block stops, including the length of the space required for the bus and the distance from the corner, where applicable. For all of these site designs, where more than one bus may be present at a time, the length of the bus landing area should be increased appropriately.

Figure 4-6 Bus Stop Zone Design Types & Dimensions



Notes:

1) Add 20 feet to bus stop zones for an articulated bus.

2) Increase bus stop zone by 50 feet for each additional 40-foot bus or 70 feet for each additional 60-foot articulated bus expected to be at the stop simultaneously.

Source: Guidelines for the Location and Design of Bus Stops, Transit Cooperative Research Program, 1996

Siting the Bus Stop: Curbside, Bulbs, and Bus Bays/Pullouts

Traditionally, buses are provided space at the curb in the parking lane to allow passengers to board or alight on streets and roads with sidewalks. This placement allows minimal delay to the bus, easy access for passengers, and easy re-entry into traffic. If the stop is discontinued or moved, there is minimal expense. However, traditional bus stops can cause traffic backups, which in turn may cause drivers to swerve around the bus in an unsafe manner.

To address such safety concerns, various designs for sidewalk and curb layouts have been developed. For example, in an area where there is a lot of pedestrian traffic, good sidewalk connectivity, and lower traffic speeds, *bus bulbouts* allow minimal delay to the bus as it is not pulling in or out of traffic. It also removes fewer parking spaces than curbside stops, decreases the distance pedestrians walk to cross the street, and provides more room for passengers to wait. This configuration is especially appropriate where a large number of people are anticipated, for example, at a school. The disadvantages are that it too causes traffic backups, and is more costly to build and to relocate.

Under some circumstances, a *bus bay* or *pullout* may be the best solution. A section of the curb is indented so that the bus can fit fully into the parking zone and out of the lane of traffic. A bus bay is not generally used in an urbanized area, but might be installed if:

- The stop is on a major highway with high speed conditions
- Bus layovers are expected
- Bus parking in curb lane is prohibited
- The right turn lane is used by buses as a queue jumper lane

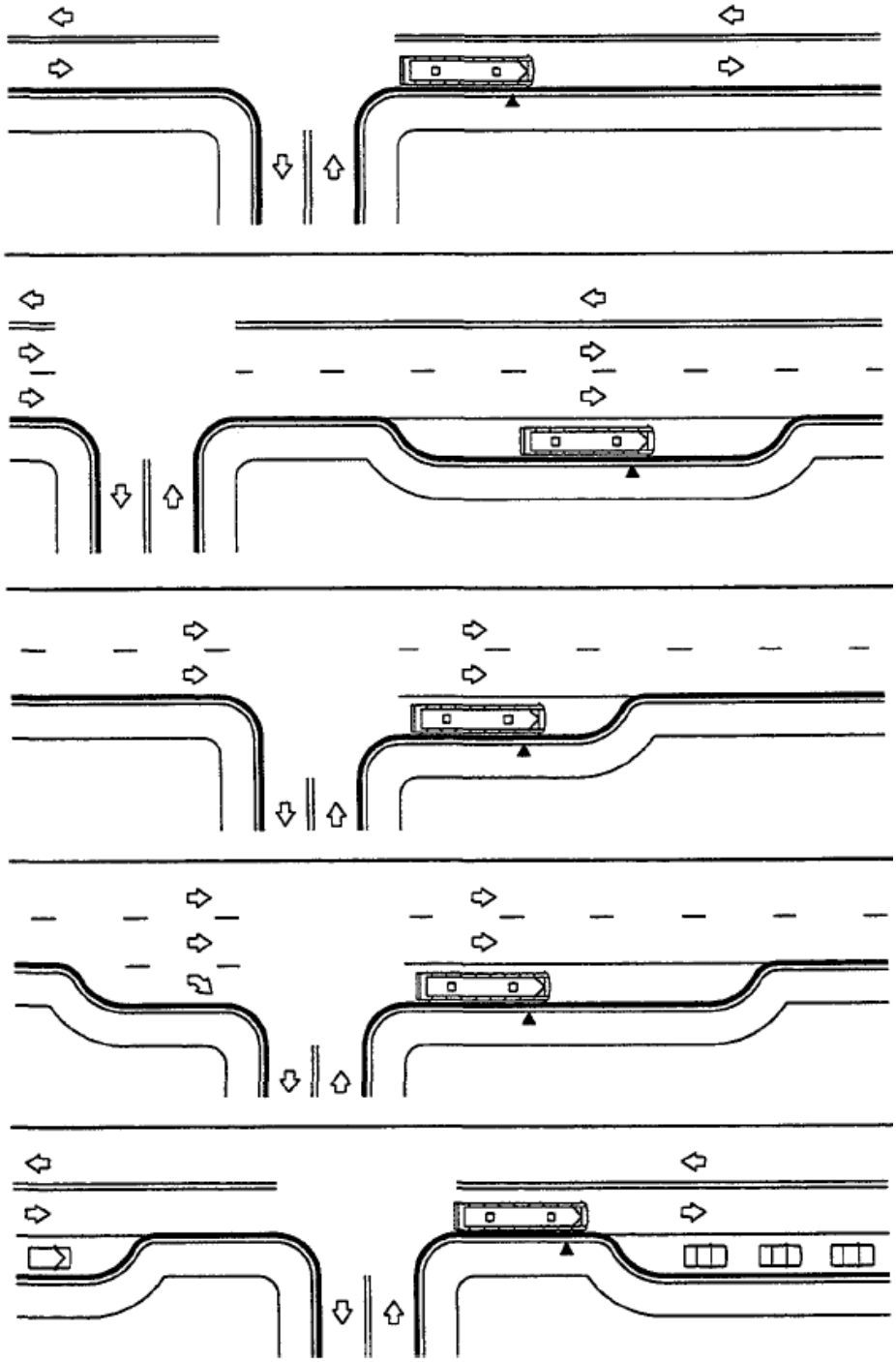
A bus bay allows passengers to board out of the travel lane, and minimizes traffic delays. However, it can be difficult to re-enter the travel lane, and like a bus bulb, is costly to build and to re-locate. Some guidelines recommend that bus bays not be used unless in conjunction with signal preemption technology, which will assist in getting the bus back into the travel lane.

Figure 4-7, Street-Side Factors & Types of Stops, shows diagrams of curbside stops, bus bays, and bus bulbs. This diagram also illustrates the use of a right-turn only lane as a queue jump for buses to get to far-side stops.

The recommended length of an urban or rural pullout varies with the posted speed limit of the roadway. It is important that adequate driver sight distance be maintained at the pullout, as the bus will be required to leave and enter the roadway at speeds less than the posted speed limit. This is especially true for rural pullouts, as the posted roadway speed limits and actual vehicle speeds are generally higher at rural locations. See Figure 4-8, Bus Pullout Specifications, below, for a detailed diagram.

A bus pullout may not require the distances specified in the diagram. A far-side pullout will not require an approach taper, while a near-side pullout will not require a departure taper. However, a mid-block pullout must have both an approach and a departure taper, allowing it to swing out into the traffic lane, and will require the full dimension as shown.

Figure 4-7 Street-Side Factors & Types of Stops



Curbside Stop

Bus Bay

with acceleration and deceleration lanes

Open Bus Bay

Queue Jumper Bus Bay

with acceleration lane

Bus uses the right-turn lane but goes straight to get ahead of vehicular traffic.

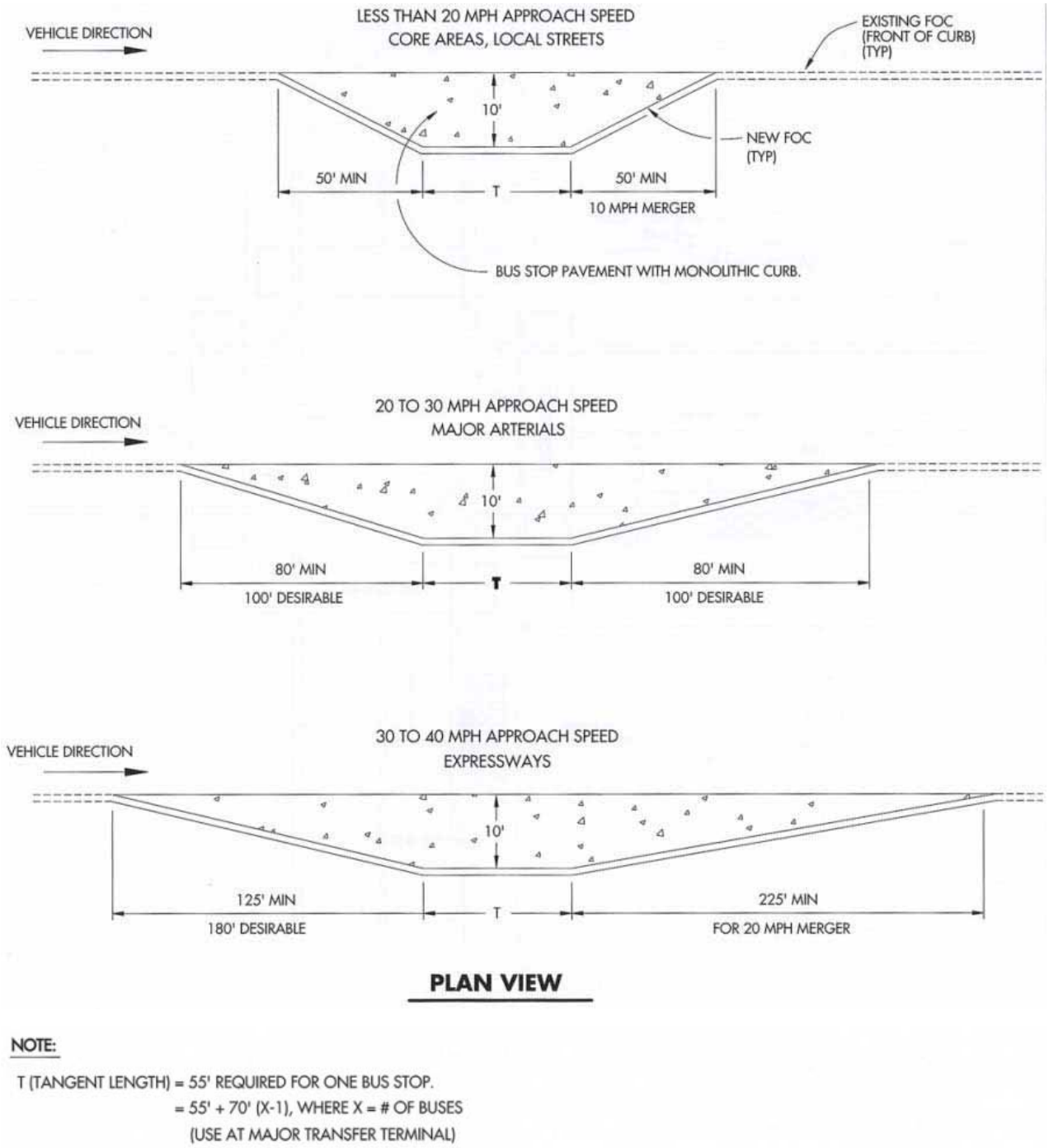
NUB

(also Bus Bulb or Curb Extension)

Source: *Guidelines for the Location and Design of Bus Stops,* Transit Cooperative Research Program, 1996

Figure 4-8 Bus Pullout Specifications

The following diagram shows typical bus pullout configurations, varying depending on the anticipated speed of the vehicle.



NOTE:

T (TANGENT LENGTH) = 55' REQUIRED FOR ONE BUS STOP.
= 55' + 70' (X-1), WHERE X = # OF BUSES
(USE AT MAJOR TRANSFER TERMINAL)

Drawings not to scale

Bus Stop Layout and Amenities

Passenger amenities at transit stops encourage transit use by providing a comfortable and functional waiting environment. Typical amenities include an easy-to-spot flag sign and logo, a shelter with weather-protected seating, lighting, and information on transit service and wayfinding, a trash/recycling receptacle, and bicycle racks. The investment in such bus stop amenities conveys to transit riders and non-riders alike that transit service provided by LTA is of high quality and is a valued and valuable service to the community.

In order to enhance the quality of transit services provided by LTA, it is recommended that the agency upgrade the functional and visual qualities of its bus stops and other facilities throughout San Benito County. These Transit Design Guidelines provide the minimum requirements for functional aspects of laying out the recommended amenities at LTA's bus stops. Determining a consistent visual appearance of amenities and buses might occur through a process led by LTA and informed by a variety of local stakeholders. This type of visual branding to gain broader community recognition has been successfully used by many transit agencies throughout the country, and includes the selection of a coherent set of amenities (shelters, benches, signage, route maps, trash/recycling receptacles and lighting) as well as the visual appearance of busses (bus wrappers) and logos.

With wait times for fixed-route service in San Benito County ranging between 20 and 60 minutes, and up to 30 minutes for demand response services, the quality of bus stop amenities, protection from the elements, and scheduling information takes on greater importance than in areas with more frequent bus service. While shelters are not necessarily needed at stops used only for alighting or with very low boarding numbers, they are a highly desirable core amenity for all other stops due to the need for protection from rain, wind, and summer sun in San Benito County.

The LTA recognizes that the goal of installing a consistent fleet of shelters can only be accomplished through a long-term program. Progress toward this goal can be made by installing shelters at all new stops in the system and by retrofitting those with the highest ridership numbers in the system.

Amenities and Layout Guidelines

1. All stops in the system, except for those with very low boarding numbers and where only alighting activity occurs, should include the following amenities: LTA flag sign, LTA shelter that includes seating (minimum bench length 6 feet), wheelchair space, lighting, and transit information (schedule and route information), as well as a combined trash/recycling receptacle.
2. LTA should develop a consistent visual appearance for all bus stops by adopting a set of standard and optional amenities for installation at its bus stops and high frequency demand response stop locations (see example of a set of amenities in Figure 4-9).
3. Where advertising panels that may limit views into and around the bus stop are integrated in the shelter, they should be installed "downstream" of traffic flow to give an approaching bus driver a view of the interior of the shelter.
4. Stops with very low numbers of boarding should, at a minimum, include an LTA flag sign, transit information (schedule and route information),[10] and a combined trash/recycling receptacle.

[10]Should the LTA implement real-time bus arrival information system in the future, the system's display should be prominently mounted within the shelter.

5. At stops where lighting levels are below 1.5 foot-candles and a shelter is not planned for the foreseeable future, the installation of a solar powered street light should be considered. The photo below is an example of a light fixture that integrates lighting, flag sign, and transit/route information into a single amenity.
6. Optional way-finding signage should be added at stops with the highest boarding activities.
7. Paratransit stop locations with high levels of boardings and alightings should be treated like a fixed-route stop.
8. Flag sign logos for LTA fixed-route and paratransit services should clearly distinguish the two services to avoid confusion.
9. Where electrical connections to provide lighting inside of shelters cannot be easily provided, shelters should be fitted with photovoltaic panels to provide the necessary electricity.
10. All amenities should be made of durable high quality materials that resist graffiti and wear, and visually reinforce community identity through quality design.
11. Amenities should only be installed after sufficient funds have been identified for proper maintenance, to avoid a situation where poorly maintained transit facilities become a detraction for transit riders, adjacent businesses and residences, and the general public.
12. Depending on local conditions and whether curb extension or pullouts are used, amenities should be laid out according to Figures 4-10 through 4-15.
13. Bicycle parking should be located in curb extensions near bus stops where higher numbers of bicycle riders are found to board LTA busses.
14. The clearances for obstruction free travel around bus stop areas indicated in Figures Figure 4-9 through 4-13 should be strictly observed.
15. News racks should be consolidated in decorative multi-unit news racks (see photo below) and be located outside of bus stop waiting areas in order to avoid conflicts with boarding and lighting activities and with the general pedestrian circulation throughout the bus stop area.
16. All bus stop amenities and bus stop layouts have to adhere to ADA minimum standards. Please refer to the latest ADA guidelines and recommendations of the U.S. Access Board. Refer to Easter Seals' excellent recommendations on accessible transit stop design in Toolkit for the assessment of Bus Stop Accessibility and Safety.

PV-Stop by UrbanSolar integrates a light with flag sign and route information.

Newspaper racks should be consolidated into decorative multi-unit news racks.

Figure 4-9 Examples of Typical Bus Stop Amenities

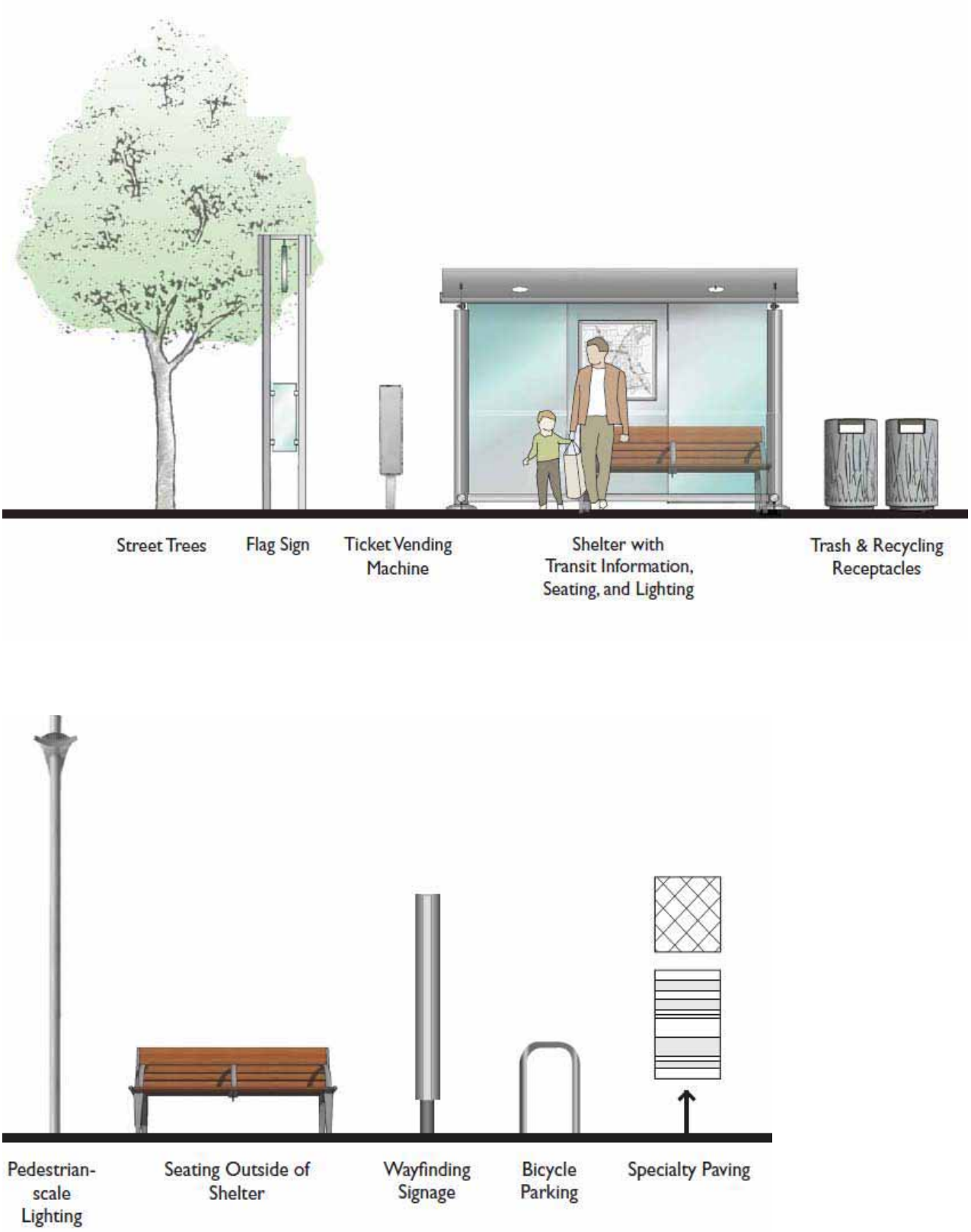
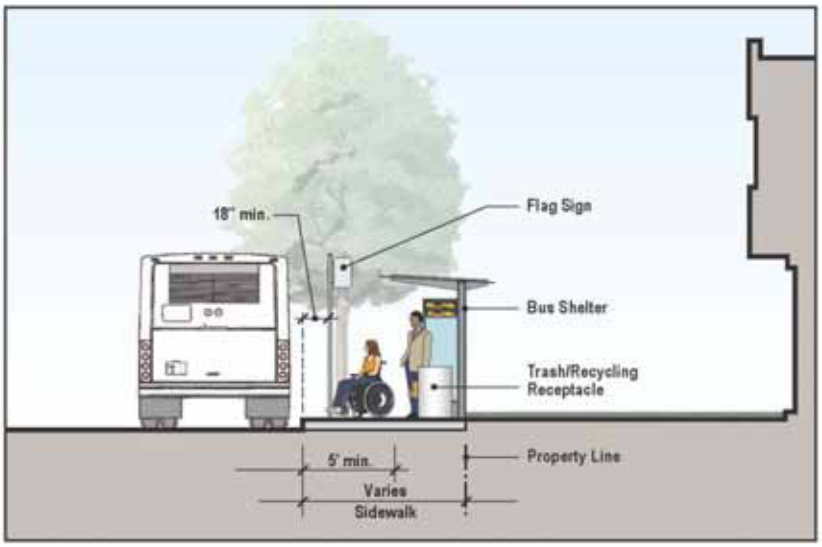


Figure 4-10 Bus Stop Concept: Narrow Sidewalk, no Curb Extension

Stop without curb extension and with narrow sidewalks
Acceptable where pedestrian volumes are low



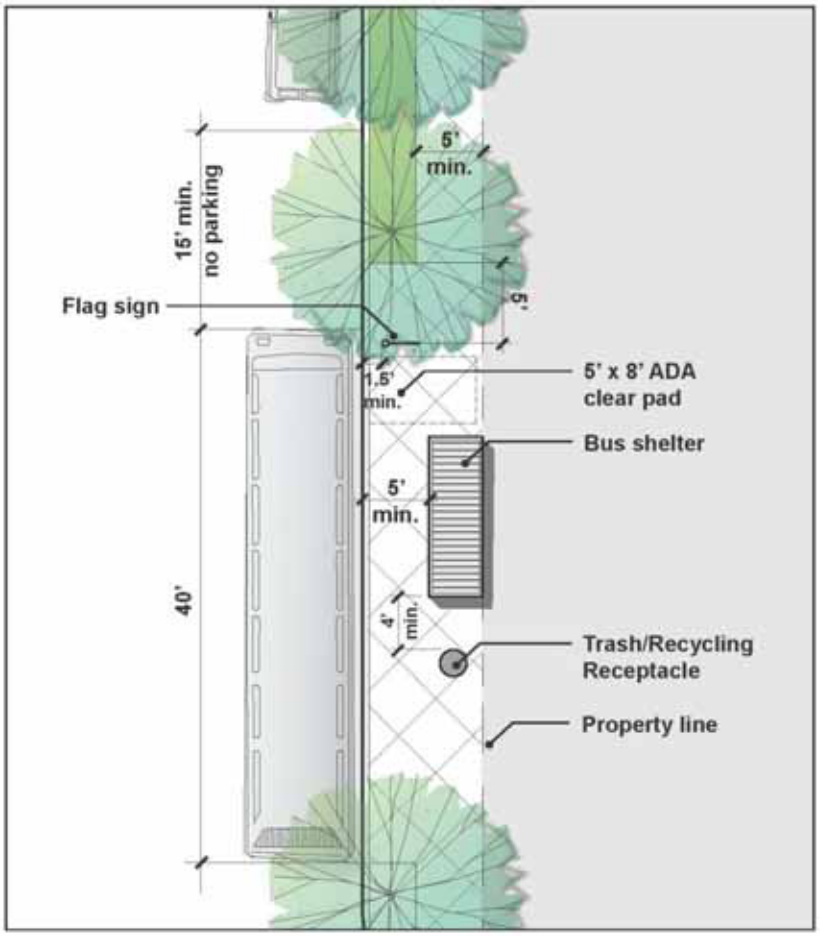
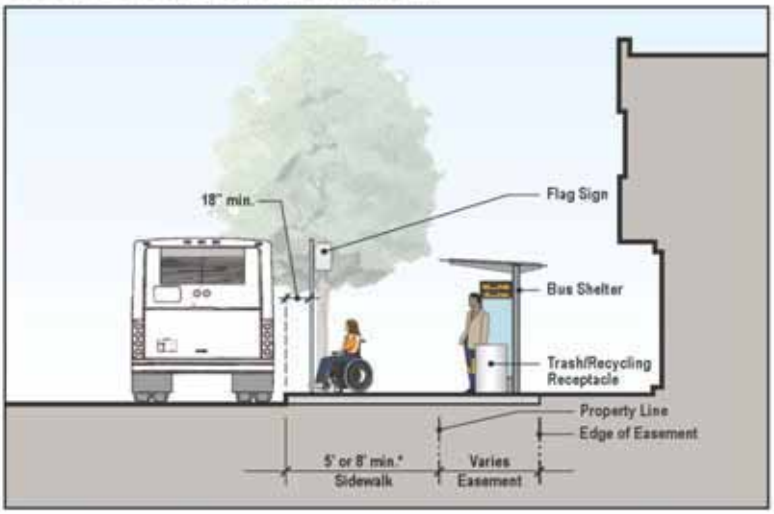
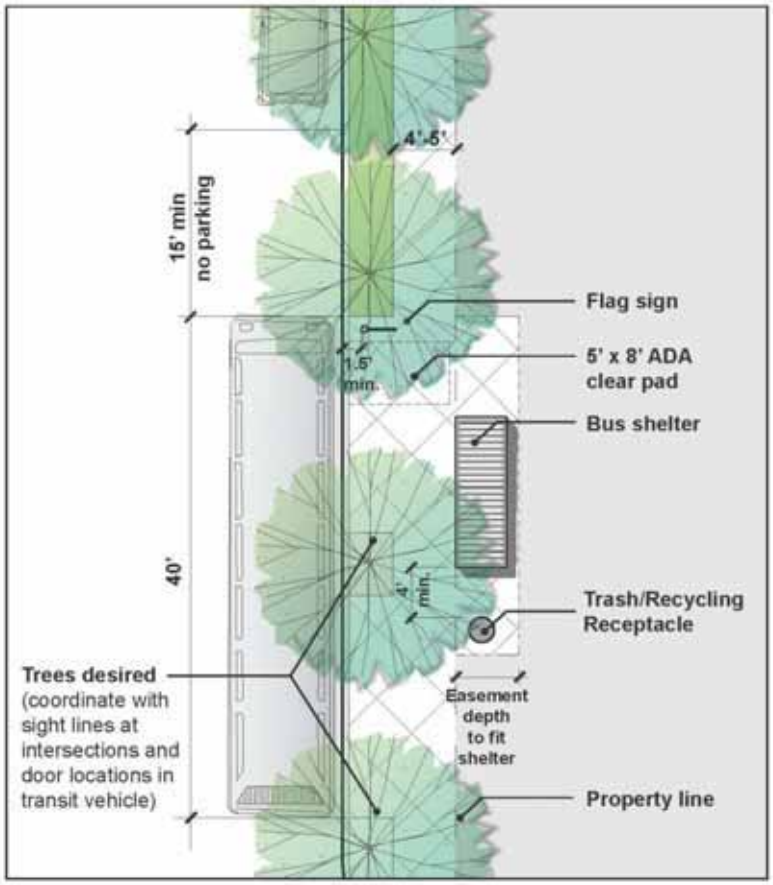


Figure 4-11 Bus Stop Concept: Narrow Sidewalk, No Curb Extension, Easement

Stop without curb extension and with narrow sidewalks
Desirable where pedestrian volumes are low. Easement can be incorporated into landscaped setbacks of adjacent development.

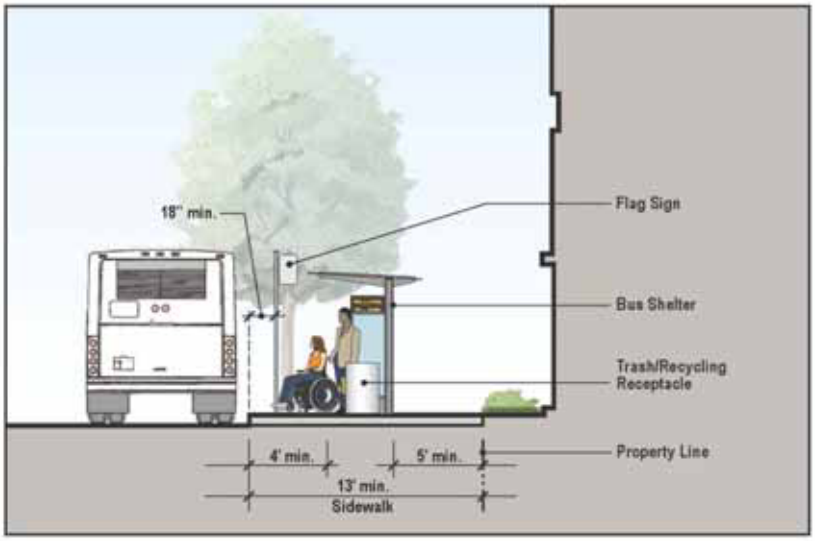




** 5-foot minimum sidewalk width applies in cases where the eight-foot deep ADA clear area at the front door of the bus can be accommodated through a combina-*

Figure 4-12 Bus Stop Concept: Wide Sidewalk

Stop for streets with wider sidewalks



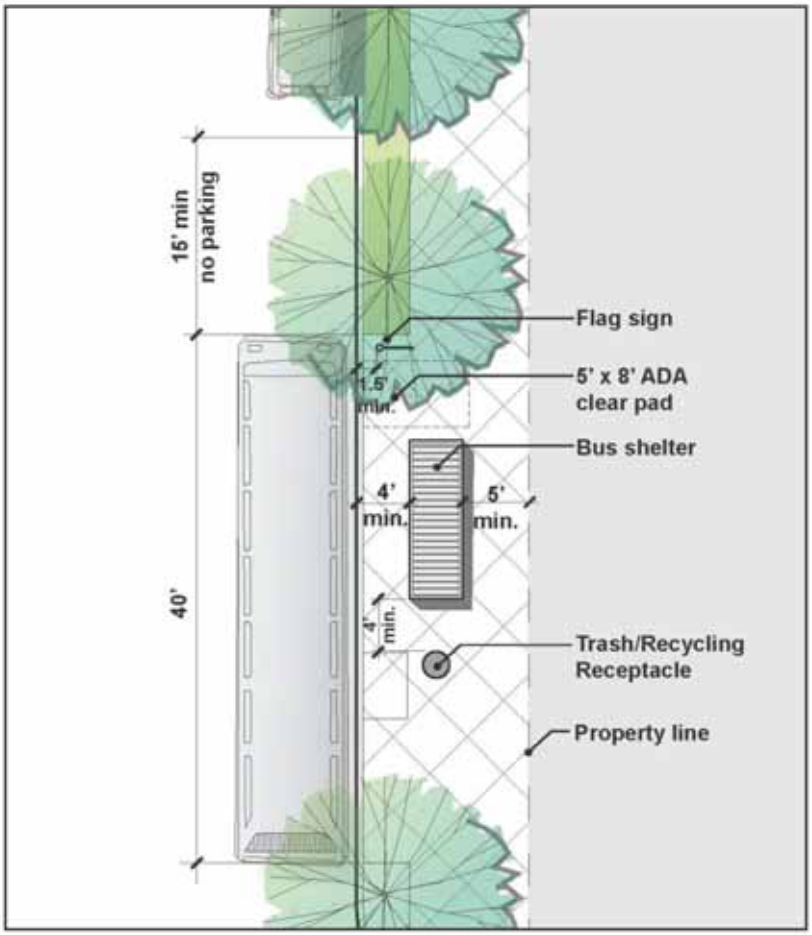
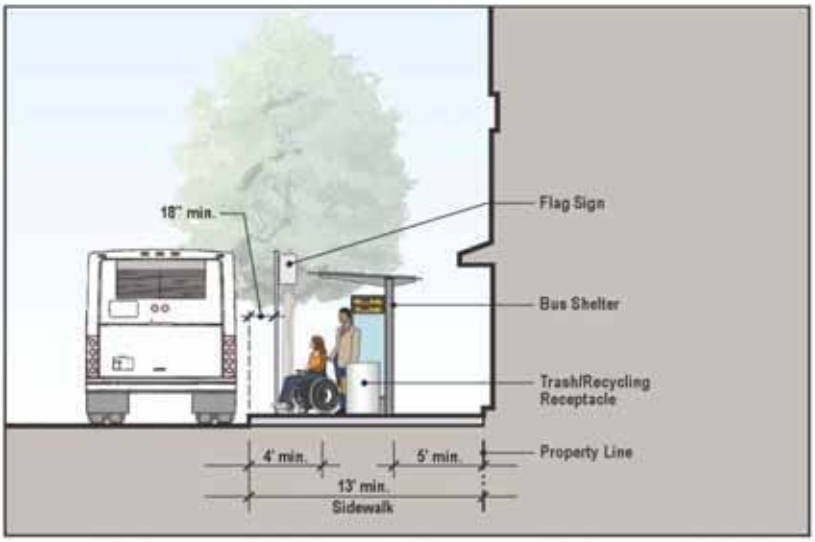


Figure 4-13 Bus Stop Concept: "Main Street" Sidewalk

Stop for "Main Streets" and mixed-use commercial centers or corridor segments



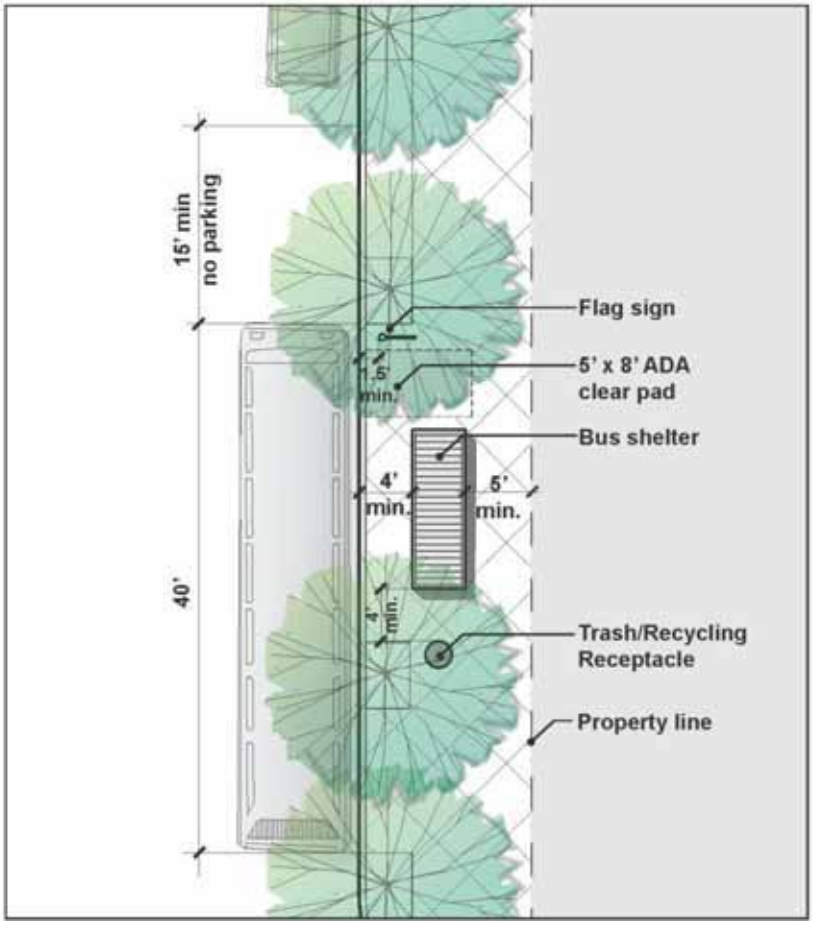
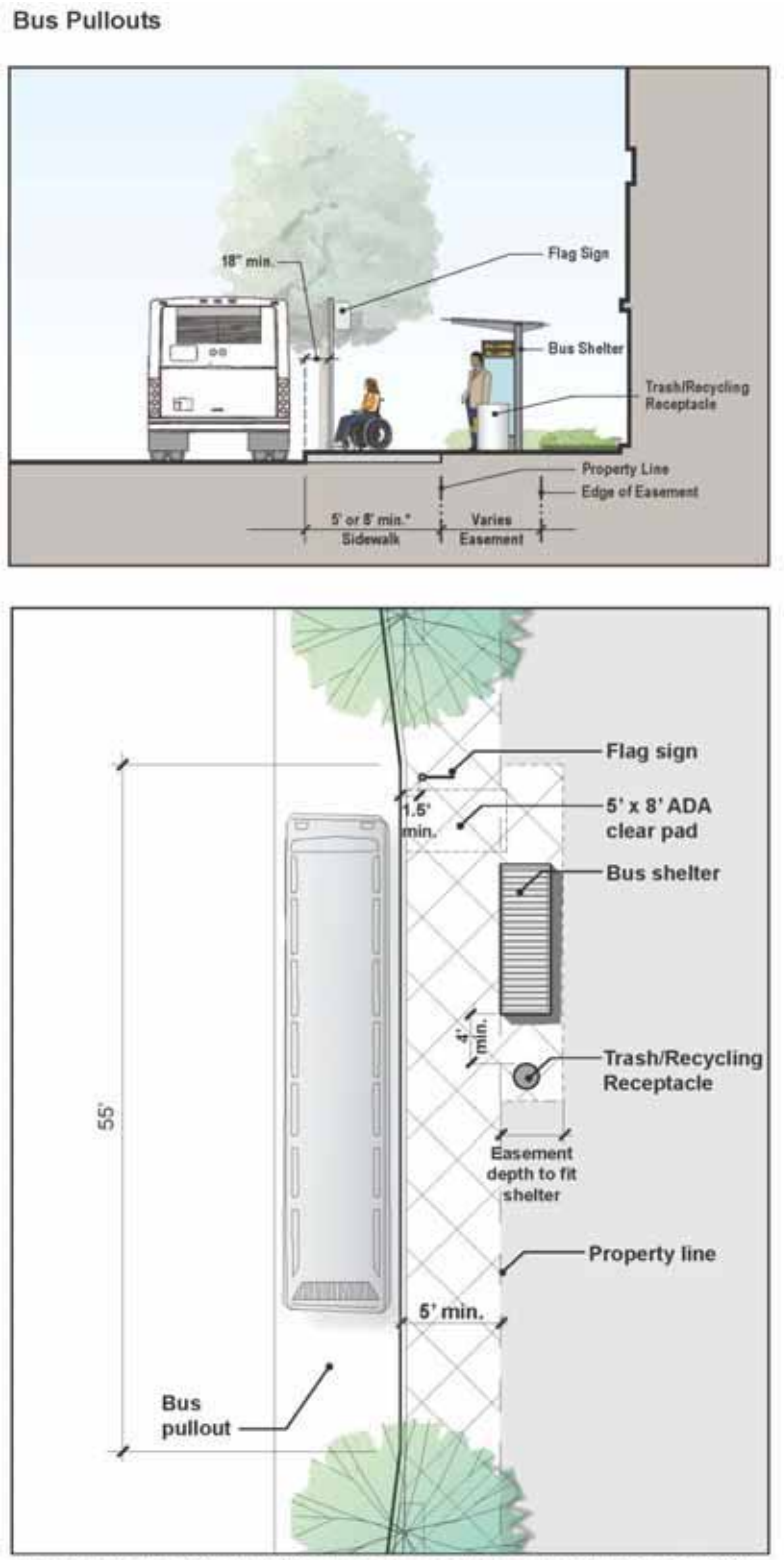


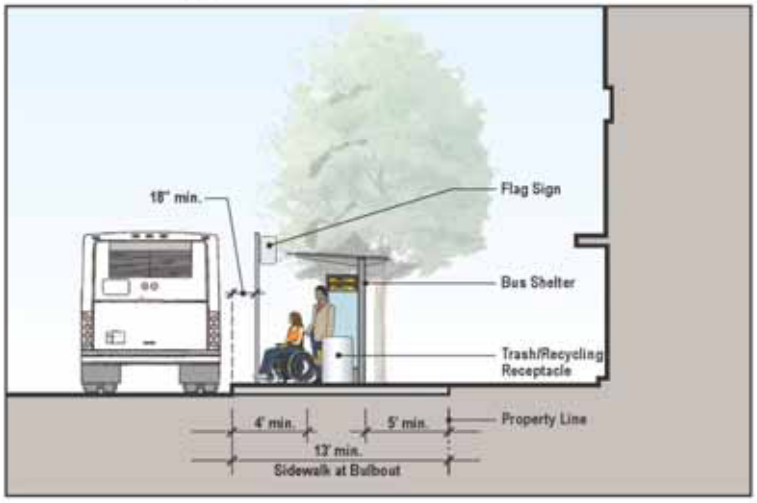
Figure 4-14 Bus Stop Concept: Bus Pullouts

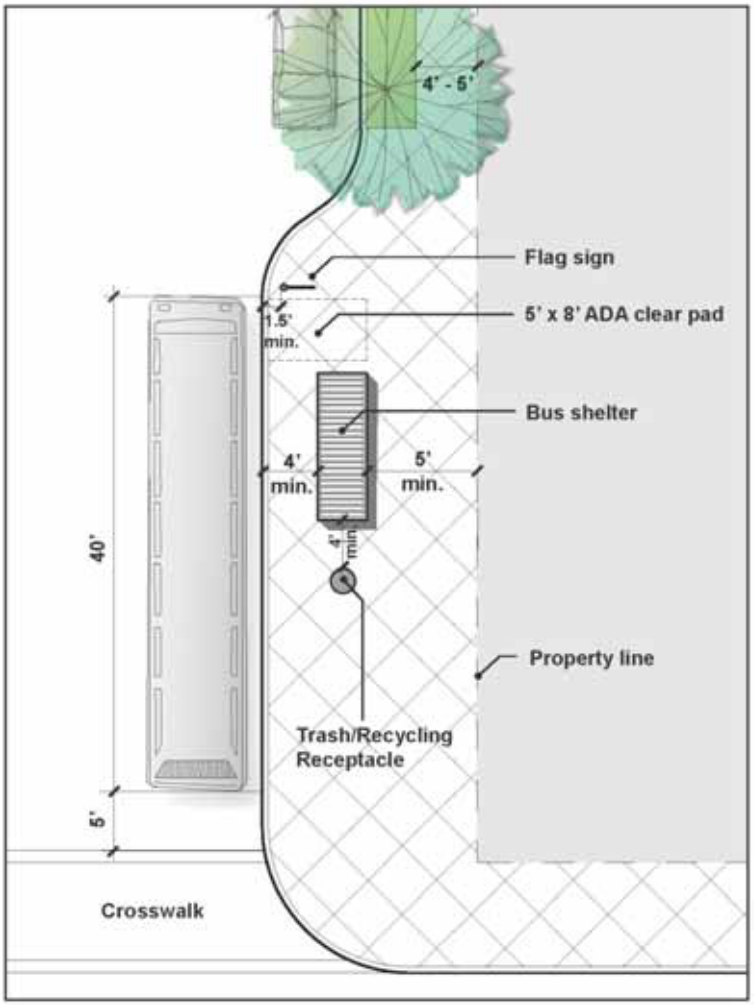


** 5-foot minimum sidewalk width applies in cases where the eight-foot deep ADA clear area at the front door of the bus can be accommodated through a combina-*

Figure 4-15 Bus Stop Concept: Far-side with Curb Extension

Far-side stop at curb extension
Same dimensions apply to near-side stop





Bus Passenger Shelter Dimensions

Below are layouts for typical bus passenger shelters. These are derived from schematics provided by manufacturers of bus shelters used in Hollister and show typical dimensions.

Figure 4-16 Bus Stop Shelter With Advertising Space

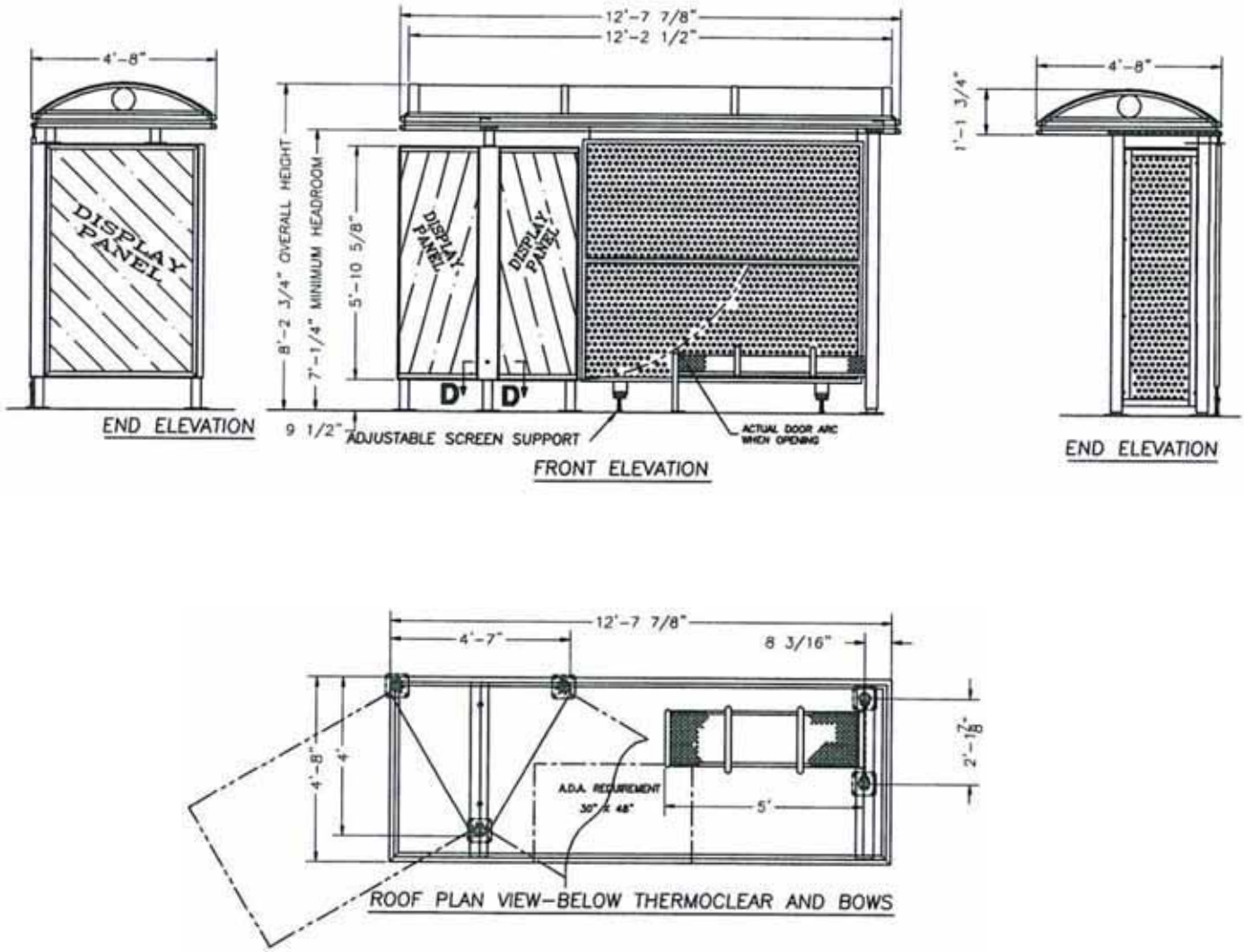
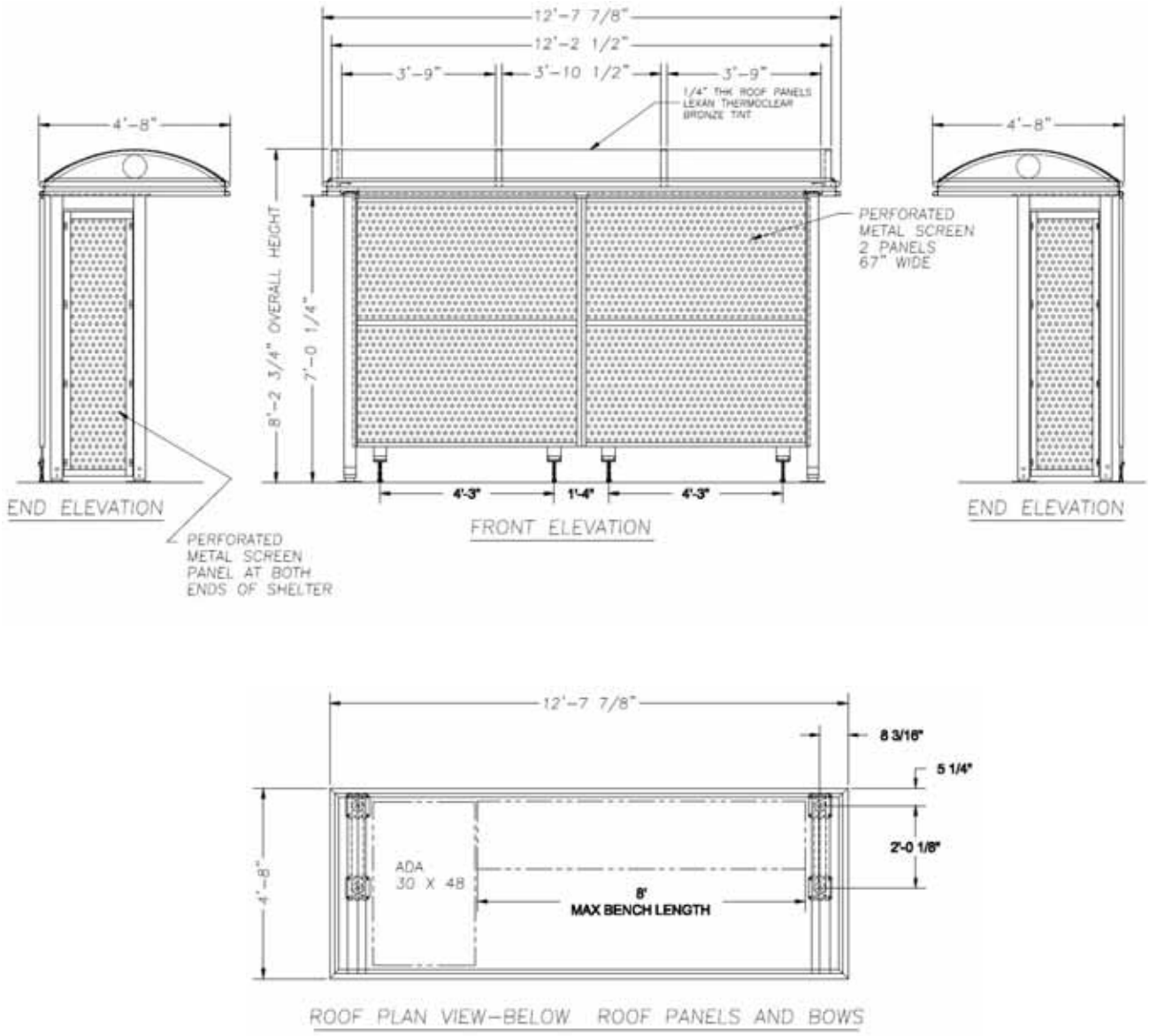


Figure 4-17 Bus Stop Shelter Without Advertising Space



Bus Turning Radii

When new developments are considered, they should be evaluated to determine if the streets to and within the developments can accommodate 40' buses, as deemed necessary by the LTA.

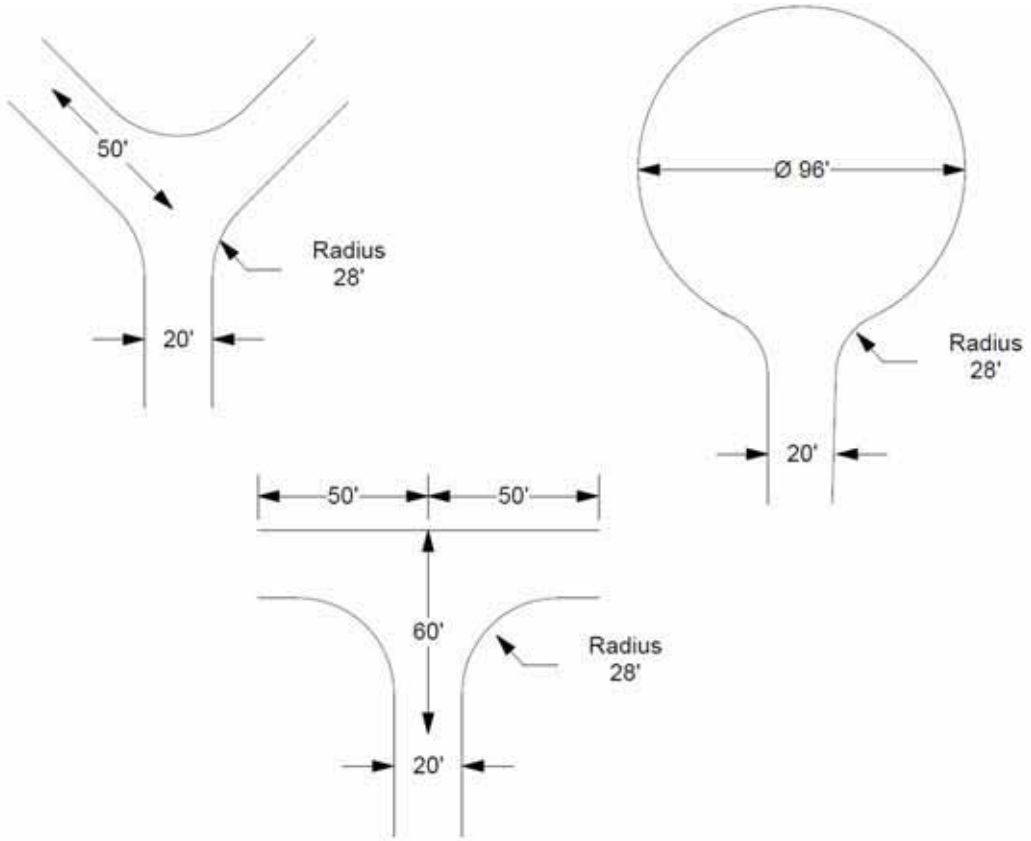
The LTA uses "cutaway" buses to provide most service, with a few 35' vehicles providing fixed-route and commuter service. Eventually 40' buses may be put into service as well. All communities are eligible for dial-a-ride service, and should be designed so that the dial-a-ride van will have a place to stop to pick up and drop off passengers safely, and a place to turn around, if necessary (that is, if the vehicle cannot pull through and loop out).

Current building codes require that developments accommodate the required turning radius of an emergency vehicle, such as a fire engine. Because the size of this vehicle exceeds that of any of the buses described above, meeting this requirement will automatically accommodate any LTA vehicle. In addition, Caltrans has developed standards for turning radii at intersections to accommodate different vehicles travelling at various speeds; these should also be consulted.

The following figures provide guidance on the radius required for buses of various sizes to turn at various angles or to turn around.

Below is a diagram created with input from the Hollister City Fire Department showing the minimum acceptable turnarounds to be maintained and unobstructed at all times.

Figure 4-18 Minimum Turnaround Radii



Chapter 5. Implementation Tools and Techniques

This chapter briefly reviews a few tools and techniques for accommodating transit in the development process, focusing on those that are especially promising and most relevant and useful to San Benito County.

One common source for information on this subject is Transit Cooperative Research Program (TCRP) *Synthesis 67: Bus Transit Service in Land Development Planning*, which can be found online at *http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_syn_67.pdf*. In Chapter 6, "Strategies That Support Integration of Bus Transit Service and Land Development Planning," *TCRP 67* summarizes a review of best practices by concluding that "(t)he most successful regions incorporate a mix of strategies to ensure adequate coordination between transit service and land development." It then defines three broad categories of strategies, and identifies a number of specific strategies.

Institutional Policies and Practices

- Written policies in adopted plans
- Develop communication networks
- Transit advocates: "champions" and coalitions
- Transit agency development guidelines
- Education
- Transit agency TOD programs
- Relationships with developers and building owners
- Building partnerships

Funding Strategies

- Developer support
- Municipal support
- Planning funds
- Tax increment financing
- Land incentives

Regulatory Tools

- Zoning
- Form-based zoning
- Controlled growth
- Adequate public facilities ordinance
- State-mandated planning process

Many of these strategies may not be applicable to the primarily rural context of San Benito County. Following, however, are three strategies that have been identified as potentially pertinent.

Public-Private Partnerships

Partnerships between the county, cities, or LTA and developers have the potential to provide mutual benefits—to not just "pencil out," but offer a "win-win." However, the circumstances of each possible partnership are unique, may be influenced by a variety of factors, and careful cost-benefit analysis should be undertaken by all parties before entering into any such arrangement.

In this context, three basic categories of public-private partnerships (PPPs) might be said to exist:

- Voluntary arrangements that involve no significant cost for the private party
- Voluntary arrangements in which costs to the private party are largely offset by incentives or other benefits
- Involuntary arrangements in which fees or mitigations for impacts are required

The latter category might be thought of not as a PPP, but as a simple regulatory requirement. However, transit-related mitigations are most effective when the public agency plays an active role in identifying and designing the mitigation strategy or strategies. (California Environmental Quality Act mitigations are further discussed in the final section of this chapter.)

Opportunities that fall into the first category, meanwhile, may be somewhat rare but do exist. In Yuba City, CA, a park-&-ride lot located adjacent to a convenience store benefitted the transit agency by ensuring parking lot security through informal but regular human surveillance of the parking lot, while the store benefitted from increased patronage.[11]

More typically, a developer might provide either infrastructure (e.g., shelters) or limited funding for transit operations. These costs might be offset by zoning incentives: for example, required parking minimums might be reduced in exchange for provision of a shelter (in this case, careful consultation would be required to determine whether a shelter would be a cost-effective investment). Or, developers might simply pay an impact fee, or pay into a fund of some sort, such as an infrastructure development fund. Finally, developers may be asked to provide adequate right-of-way in appropriate locations for future transit infrastructure.

Development Review Checklist

Given the relatively limited extent of existing transit services in San Benito County, requiring or seeking significant investment on the part of developers might not be a realistic strategy in the short term. However, successful provision for transit service in the development process does not necessarily require funding. Rather, it is often a matter of simply *avoiding mistakes.*

A sample Development Review Checklist developed for LTA can be found in the appendix of this document. This document limits itself to issues related to location and design of bus stops and access routes in the immediate area. However, a more extensive checklist for use by agency staff and developers might also address broader issues of transit operations and site design.

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[11] Amador Regional Transit System *Transit Design Guidelines Manual*

Other issues addressed elsewhere in this document, could be tailored to the specific context and needs of San Benito County. Whatever elements San Benito County chose to include, a checklist could prove a useful tool for ensuring that staff and developers remain aware of the myriad of details involved in successfully accommodating transit service.

CEQA Mitigations

One of the most common tools in California for addressing issues related to transportation through the development process is the California Environmental Quality Act, or CEQA. CEQA analysis of transportation impacts is generally limited to the areas of parking and traffic. While maintaining the flow of traffic can be a benefit to bus operations, cumulatively, CEQA mitigations tend to have a negative impact on transit service, as increasing capacity for auto trips serves to induce demand, and can ultimately lead to increased congestion.

Some municipalities adopt local CEQA standards; however, these locally adopted CEQA standards related to roadway and intersection level of service (LOS) also tend to discourage development in transit-oriented infill locations where levels of service may already be close to the point where mitigations would be required. Recently enacted Senate Bill 375 acknowledges this conundrum by providing for CEQA exemptions based on proximity to frequent transit service, these provisions are of limited utility to rural areas and smaller cities that are unlikely to experience either demand for frequent transit service or high-density development in the near term.

Under CEQA, provisions for transit service in developments such as wider sidewalks or bus bulb-outs can sometimes result in significant impacts on traffic, which must then be mitigated using capacity-related improvements such as adjusted signal timing or additional turn lanes. However, it has been established by recent legal precedent (involving cases in both Ventura and San Francisco) that deficits of parking are not necessarily a negative environmental impact; rather, they may be viewed as a self-correcting “social” impact. It is acceptable under CEQA, then, to remove parking in order to add a bus stop.

Appendix A. Glossary

Some definitions were adapted from sources including peer review guidelines (the ARTS Transit Design Guidelines Manual, PACE Development Guidelines,and RTA Design Guidelines), the American Public Transportation Association Glossary of Transit Terminology, and Duany Plater-Zyberk's Lexicon of the New Urbanism.

Amenities – Items such as seating, lighting, informational signage, trash receptacles and other elements provided in the public realm for convenience, comfort and security of pedestrians and transit patrons.

Americans with Disabilities Act (ADA) – Federal law prohibiting discrimination against people with disabilities. Requires public entities and facilities to provide accessible accommodations for people with disabilities.

Audible signals – Pedestrian crossing signals that emit sounds to inform visually-impaired pedestrians when they can cross safely.

Block pattern – The general geometric character of a street network. In older towns and cities, patterns are typically gridded or otherwise highly interconnected, with relatively small blocks and many relatively direct paths available; in newer, more suburban environments, streets are often circuitous and not well-connected, blocks can be much larger, and fewer and less direct paths are available. See Chapter 3, "Network Guidance".

Bulbouts – See curb extensions.

Community audit – A survey in which volunteers walk or bicycle to a transit stop from all directions, noting strengths, weaknesses, gaps, and opportunities in each of the transportation networks, as well as the behavior of motorists and other external challenges to safe arrival at the transit stop.

Complete streets – Also known as "multimodal streets." Using a range of design strategies, complete streets safely and comfortably accommodate all users of the right-of-way, including motorists, transit and transit users, cyclists and pedestrians.

Curb extensions – Extensions of a sidewalk into the roadway at key locations such as corners, transit stops, and mid-block crosswalks, thus shortening the distance one has to cross. See Chapter 3, "Street Design Guidance".

Curb ramps – Ramps cut into sidewalks, at or near crosswalks, to enable those in wheelchairs access to the sidewalks. They are also helpful for those pushing strollers, using shopping carts, or with wheeled luggage. Newer ramps typically feature high-contrast (generally yellow) "truncated domes," a tactile feature helping to alert the sight-impaired to the transition between sidewalk and street. See Chapter 3, "Street Design Guidance".

Dial-A-Ride – Also known as "demand response" transportation. Non-fixed-route service, generally utilizing vans or smaller buses with passengers boarding and alighting at pre-arranged times at any location within a system's service area. May be provided to the general public (generally in low-density areas) or to seniors and persons with disabilities. See "Paratransit".

Fixed-route transit – Service provided on a repetitive, fixed-schedule basis along a specific route with vehicles stopping to load and unload passengers at specific locations (stops).

Flag sign – A sign denoting a transit stop, typically affixed to a pole at a safe height (above heads), possibly indicating which routes stop at that location. Flag signs may also include information on destinations, hours of service, and/or fares.

Specialized Transportation Service – Public transportation offering services above and beyond the legal requirements of ADA Paratransit services. Currently, the LTA provides specialized transportation services in partnership with Jovenes de Antaño, a Hollister-based nonprofit organization.

Institute of Transportation Engineers – ITE is an international association of transportation professionals (with most of its membership in the United States) that, among other roles, develops standards for the design of transportation facilities.

Local Transportation Authority – The San Benito County Local Transportation Authority (LTA) operates and administers all of the public transportation services in the County, including local fixed-route service in the City of Hollister, Intercounty service, Dial-A-Ride, and Paratransit service for seniors and persons with disabilities, under the name of County Express. The LTA also operates and administers the Specialized Transportation Services, under the name of Jovenes de Antaño.

LTA – See Local Transportation Authority.

Mixed-use – A building or development accommodating a mixture of land uses or major zoning categories, such as residential, commercial, office, and civic.

Paratransit –Transportation service required by the Americans with Disabilities Act (ADA) for mobility-challenged individuals to match (or complement) regular fixed route service. See also "Dial-A-Ride."

Park-and-Rides Lots – Designated areas for motorists to park their vehicles and then board transit vehicles to continue their trips.

Pedestrian-scale lighting – Street light fixtures optimized to cast light on sidewalks rather than roadways, with heads that are much lower than street-oriented lighting, oriented toward the sidewalk.

Pedestrian realm – The portions of a public right-of-way designed primarily for use by pedestrians. On most streets, this consists of sidewalks (while pedestrians use crosswalks, the roadway is designed primarily for vehicles). The pedestrian realm may also accommodate landscaping and other amenities.

Primary façade – The entire exposed exterior surface fronting a public right-of-way, extending from the exterior grade to the roofline.

Public realm – Common, shared public spaces such as streets, sidewalks, parks and civic buildings. Publicly accessible but privately owned buildings are generally not considered part of the public realm.

Pullouts – A bus stop located in a recessed curb area, separated from moving lanes of traffic. Also known as a bay.

San Benito County Express – see Local Transportation Authority.

Screening – Semi-opaque landscaping and design elements including trellises, arbors, and semi-open structures.

Setback – The mandatory minimum or maximum distance between a frontage line and a facade, or the distance between a lot line and an elevation. Open porches, balconies, overhangs, and ramps are usually exempt from setback requirements.

Shared parking – Sharing the amount of parking between land uses with offset peak parking demands.

Street frontage – The portion of a lot line bordering a public right-of-way.

Traffic calming – A range of design tools for public rights-of-way intended to discourage speeding and reckless driving, and to increase driver awareness. Often these use visual cues (such as street trees with canopies extending beyond the curb) and geometric changes (such as raised crosswalks or "street tables").

Transit – Also known as "public transportation." Transportation by bus, rail, or other conveyance, either publicly or privately owned, that is provided to the public on a regular and continuing basis.

Transit-oriented development (TOD) – Development in the area of a transit station or stop designed to foster access to and from the station through a mixture of uses and strong pedestrian orientation. May develop organically over time, but often is part of a municipality's master planning process.

Turn radii – The turning radius necessary to accommodate vehicle turning movements, established by the outer front overhang and the inner rear wheel.

United States Department of Transportation – US DOT is the federal agency that provides oversight and funding for transportation projects.

Wayfinding – Design measures intended to help travelers orient themselves and "find their way." The term is most often used in the context of signage placed at key locations indicating locations or directing travelers along paths toward key destinations, although it can also be used to refer to architectural features which clarify paths through a building or outdoor space.

Appendix B. References & Resources

Many communities have created guidelines and processes to encourage multimodal communities and support transit-friendly development.

As part of this project, the team researched transit design guidelines from agencies across the country; these manuals contributed to the form and content of these guidelines. The guidelines listed below are available (usually online) from the sourcing agency. A review of these guidelines is available from the San Benito LTA (San Benito County Transit Design Guidelines – Best Practices).

Document	Agency	Date
Designing for Transit: A Manual for Integrating Public Transit and Land use in Monterey County	Monterey-Salinas Transit	2006
Marin Transportation and Land Use Solutions Program (TPLUS) TOD/PeD Toolkit	Transportation Authority of Marin	2007
Amador County Transit Design Guidelines Manual	Amador Regional Transit System and LSC Transportation Consultants, Inc.	2008
TransIT: Transit-Friendly Design Guidelines	TransIT Services of Frederick County	2009
RTA: Design Guidelines For Bus Transit: How to Make Bus Transit Effective in Your Community	Riverside Transit Agency	2004
TriMet: Planning and Design for Transit Handbook	Tri-Met (Tri-County Metropolitan Transportation District of Oregon)	1993
Planning for Transit-Friendly Land Use: A Handbook for New Jersey Communities	New Jersey Transit	1994

Other References

In addition to the documents reviewed for the Best Practices report, the following are also valuable resources for designing accessible transit.

Document	Agency	Date
Toolkit for the Assessment of Bus Stop Accessibility and Safety	Easter Seals	2006
A Manual of Best Practices for Integrating Transportation and Land Use	Valley Transportation Authority (VTA)	2002
Planning for Transit	Regional Transportation Commission of Washoe County (NV)	1992

ADA Guidelines

The US Department of Justice administers the Americans with Disabilities Act (ADA). Some sections of the ADA relevant to this project are:

ADA Accessibility Guidelines for Transportation Vehicles	http://www.access-board.gov/transit/html/vguide.htm
ADA standards for Accessible Design	http://www.ada.gov/stdspdf.htm

The California Department of Transportation (Caltrans) Directive on "Complete Streets – Integrating the Transportation System", 2008

This directive to Caltrans staff acknowledges the need to accommodate all users on streets, and directs Caltrans staff to update manuals, guidance and training to "facilitate multimodal travel, which includes connectivity to public transit for bicycles and pedestrians".

http://www.dot.ca.gov/hq/tpp/offices/bike/sites_files/DD-64-R1_Signed.pdf

Appendix C. LTA Checklist for Bus Stop Inventory and Improvement

This checklist is provided as a starting point for LTA and Developers to develop a tool for assessing bus stop accessibility and adherence to standards.

LTA Bus Stop Inventory and Improvement Checklist

Information
LTA Reviewer: _____ Date Received: _____
Referring Agency_____
Stop Location: _____
Routes/Service Servicing Stop: _____
Check Applicable: ☐☐Commercial ☐ Residential ☐ New ☐ Reconstruction ☐ Other

Issue	Detail		More Information
Location	(Detail TDG page/section)		
Is the bus stop located at the corner?	☐ Yes ☐ No		
Is the bus stop located near entrances to the most active use(s) on the block?	☐ Yes ☐ No		
Is the bus stop easily visible from all directions?	☐ Yes ☐ No		
Access			
Is the stop directly served by sidewalk from both directions?	☐ Yes ☐ No	Width:_____ _	
Is the sidewalk in good condition?	☐ Yes ☐ No		
Are there crosswalks in both directions at adjacent intersections?	☐ Yes ☐ No		
Are there curb ramps at adjacent intersection crosswalks?	☐ Yes ☐ No		
Are there obstacles that would prevent a wheelchair from reaching the stop?	☐ Yes ☐ No		
If the adjacent intersection has a signal, is there a pedestrian crossing signal?	☐ Yes ☐ No		
Are adjacent sidewalks and the waiting area lighted?	☐ Yes ☐ No		

Issue	Detail		More Information
Layout			
Does the stop provide a 5' x 8' landing area adjacent to the curb?	☐ Yes ☐ No		
Is the landing area flat, well-paved, slip-resistant and clear of obstruction?	☐ Yes ☐ No		
Is there sufficient space for passenger waiting?	☐ Yes ☐ No		
Is the shelter (if present) well located for ease of boarding?	☐ Yes ☐ No		
Is seating a safe and comfortable distance from passing vehicles?	☐ Yes ☐ No		
Do the shelter, seating, or other amenities block adjacent sidewalk?	☐ Yes ☐ No		
Are waiting passengers visible to transit drivers?	☐ Yes ☐ No		
Amenities			
Are signs easily visible and readable?	☐ Yes ☐ No		
Is there a shelter?	☐ Yes ☐ No		
If no shelter, is there seating?	☐ Yes ☐ No		
If a bench or shelter is provided, is it in good condition?	☐ Yes ☐ No		
Is seating shaded?	☐ Yes ☐ No		
Is seating protected from wind or rain?	☐ Yes ☐ No		
Are amenities provided consistent with TDG recommendations?	☐ Yes ☐ No		

Appendix D. Public Outreach Process

San Benito Transit Design Guidelines

Summary of Public Outreach

The San Benito Transit Design Guidelines were developed with input from a wide range of interested stakeholders including the general public including transit riders and potential riders., transit agency staff, developers, local advisory committees, and the LTA Board of Directors. In addition to public meetings, the Transit Design Guidelines were also available to the general public on the LTA web site from June through mid-September. People were able to submit comments directly to the LTA through the website. Comments from all of these contributors have been incorporated into the Guidelines as appropriate.

Following is a table showing the meetings at which the Guidelines were presented, followed by a brief summary of the activities at each meeting.

Date	Group	Attendees
April 13, 2010	TDG Working Group	5 Planning staff, 3 Developers
June 25, 2010	Social Services Transit Advisory Council	10 attendees
June 30, 2010	Public Focus Groups (2) transit providers, community workforce and dev't, Planning commission/transit user.	15 attendees
July 1, 2010	San Benito County TAC Meeting	Five committee members from the SBCOG, Hollister and County Planning, the CHP, and Caltrans
July 15, 2010	Local Transportation Authority Meeting	10 Directors and Staff
July 9, 2010	San Benito County Bicycle and Pedestrian Advisory Committee	

April 13, 2010 Transit Design Guidelines Working Group

The purpose of this meeting was to gather input from stakeholders to guide the form and content of the Transit Design Guidelines for San Benito County. Those present included transportation planners, a city planner, and developers.

The meeting began with a presentation on the purpose of the guidelines, showing examples of how guidelines can be applied to make transit attractive and more accessible to pedestrians, bicyclists, and people with disabilities. Existing guidance, including ADA requirements, county plans, and city zoning, were reviewed. The group then discussed what they would want to see in the Guidelines. Foremost for the developers was very clear direction on both the design review process and the particulars of bus stop placement and bus stop access.

In response to the input from the group, the guidelines will include:

- A flow chart of the design review process

- A "decision tree" for the necessity of a bus stop
- Specifications for transit accommodations in commercial, residential, rural areas
- Drawings showing space required for vans and buses to turn around
- Bus stop placement information: near-side, mid-block, and far-side of intersections, bus cut-outs or bulb-outs, placement of shelters in relations to the curb

June 25, 2010 Social Services Technical Advisory Committee

On June 25, 2010, the Social Services Transit Advisory Council received a presentation on the Draft Transit Design Guidelines. The Council expressed interested in attending the two workshops scheduled on the Transit Design Guidelines. Some Council members expressed interest in reducing the building set back recommendations.

June 30, 2010 Public Focus Groups (2)

Once the Draft Guidelines were complete, two public meetings were held on June 30, 2010 at the Hollister Veteran's Memorial (10 AM to noon, and 4 PM to 6 PM). The goal of the meetings was to elicit input from the general public as well as county agencies, on their priorities for making bus stops accessible, including which amenities were most important, and which stops should be improved.

The workshop began with a discussion of bus stops in the Hollister and San Juan Bautista area. Attendees reported that at some stops, unruly youth gather and harass people waiting for the bus. Some stops were also being used as shelters by homeless people. Because of this, some riders wait inside nearby shops rather than at the stop, or are discouraged from using the bus at all. Participants indicated that shelters had been removed because of people sleeping in them. It was suggested that using environmental design principles to design the shelters would minimize loitering, and benches could be designed such that they can be used for sitting but not lying down.

More bus schedule information is needed at the stops so people can know when the next bus is coming, particularly at the hospital.

It was suggested that amenities at stops might be paid for through advertising. In addition, people owing community service hours or juvenile work service could clean up bus stops and shelters (but not repair them as this takes skilled labor). This would help the youth feel responsible and a part of the community. It was also noted that shelters are needed, but they are not a good option if funds are not available for maintenance.

Stops need to be visible, safe, and comfortable. The group agreed that if stops are made more attractive and secure, more people would ride transit. Also, those currently using paratransit might use regular fixed route instead, which would be less costly to the LTA.

In general, the group agreed that stops most important to improve are those at medical facilities and those which receive the most use. Specifically cited in the discussion were the hospital (no bench or schedule), Safeway (no bench), and the Social Services / Welfare building (no bench).In general, benches were the most desired amenity.

Attendees participated in an exercise where they placed up to three dots, representing a finite sum of money, on a map showing which stops should be improved, with indications of the relative cost of a variety of bus stop amenities. With funding as a factor, the top three amenities at stops, in order, were trash cans, bike parking, benches, and shelters. The stops most in need of amenities (of five presented) were San Felipe at Santa Ana, and San Felipe at Gateway.

July 1, 2010 Council Of San Benito County Governments, Technical Advisory Committee

LTA Staff provided a PowerPoint presentation on the Draft Transit Design Guidelines and an update on the Public Workshops held on June 30, 2010, where there was positive participation from the public. Participants at both workshops explained which bus stops needed improvements, with the most notable location being at 1111 San Felipe Road, where the One-Stop Center is located. One participant who is disabled expressed concern over the waiting period of approximately 30 minutes at times, and the lack of benches to sit and wait.

Both City and County representatives stated that they would use the guidelines for project specific plans. Mr. Avera inquired if staff is providing a specific threshold to determine which projects fall into the guidelines. Ms. Lezama stated that the guidelines do provide a chart with population density thresholds. Ms. Rheinheimer noted that comments on the Transit Design Guidelines are due July 19th.

July 9, 2010 San Benito County Bicycle and Pedestrian Advisory Committee

On July 9, 2010, the San Benito County Bicycle and Pedestrian Advisory Committee received a presentation on the Draft Transit Design Guidelines. The Committee expressed concerns that transit is not well known or easy to identify where there are bus stop locations. Local Transportation Authority staff informed the Bicycle and Pedestrian Advisory Committee that the Transit Design Guidelines will help by incorporating transit in some developments therefore increasing the visibility of public transit in San Benito County.

July 15, 2010 Local Transportation Authority Meeting

At the regular July meeting of the San Benito County STA, LTA staff presented the Guidelines to the Board through a PowerPoint presentation describing the project, and described the public input process. A public hearing was scheduled for this same date to allow input on LTA's intent to request a CEQA exemption for the Guidelines project, and to notify the public that the document was ready for public review. After consulting with County Counsel, Ms. Rheinheimer requested that the Board continue the Public Hearing to the August 19th meeting. Director Botelho stated that the document will be very useful for the County. The CEQA exemption for this document was approved at the August 19 meeting

Appendix E. CEQA Notice of Exemption

Notice of Exemption

Form D

To: Office of Planning and Research
P.O. Box 3044, Room 212
Sacramento, CA 95812-3044

County Clerk
County of San Benito County
440 Fifth Street (2nd Floor) Room 206
Hollister, CA 95023

From: (Public Agency) San Benito County Local Transportation Authority
330 Tres Pinos Road, C-7, Hollister, CA 95023
(Address)

Project Title: Transit Design Manual

Project Location - Specific:
County wide guidelines

Project Location – City: Hollister Project Location – County: San Benito County

Description of Nature, Purpose and Beneficiaries of Project:
The goal of the San Benito County Transit Design Guidelines is to encourage the use of transit design elements, such as bus stop shelters and bicycle racks) to make commercial and residential developments more transit-friendly.

Name of Public Agency Approving Project: San Benito County Local Transportation Authority

Name of Person or Agency Carrying Out Project: Veronica Lezama, Transportation Planner

Exempt Status: **(check one)**

- ☐ Ministerial (Sec. 21080(b)(1); 15268);
- ☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));
- ☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- ☐ Categorical Exemption. State type and section number:
- ☒ Statutory Exemptions. State code number: 21080 b(10) and b(11)

Reasons why project is exempt:
The Transit Design Manual falls under the CEQA (CA Public Resourse Code) 21080 b(10 and 11) because the Guidelines would increase passenger or commuter services on vehicle lanes already in use.

Lead Agency Contact Person: Veronica Lezama Area Code/Telephone/Extension: 831-37-7665

If filed by applicant:
1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? ☒ Yes ☐ No

Signature: _____ Date: _____ Title: _____

☒ Signed by Lead Agency
☒ Signed by Applicant

Date received for filing at OPR: _____

Revised 2005

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