

General Plan Appendix

City of Alameda Street Classifications

Introduction

In support of General Plan and Mobility Element goals, policies and actions, streets are classified according to their transportation and land use purposes. Every street in Alameda is classified as one of five street classifications: Main Street, Gateway Street, Business Commercial Street, Neighborhood Connector Street, or Neighborhood Local Street. Each street classification is described below and shown on Figure 1 Alameda Street Classifications Map.

In addition to a street classification, streets that provide for citywide circulation may also have a Truck Route or Transit Route designation. The truck route and transit route designations are described below and shown on Figure 2 Transit Route Map and Figure 3 Truck Route Map. Many streets also play an important role in the citywide bikeway network. The designation and design of those streets are described in the Active Transportation Plan. Finally, every street also has a Caltrans State Department of Transportation functional classification, which is important for projects to be eligible for certain types of State infrastructure funding.

Design Standards

In support of each street's transportation and land use purposes, design standards are provided for each street classification. The design standards for each classification include:

Target Maximum Design Speed. Controlling vehicle speed is essential to ensuring that a street fulfills its transportation and land use purpose. Higher speeds result in more severe and fatal collisions. Lower speeds are safer for people walking, bicycling, and driving cars, and improve neighborhood livability.

Travel Lanes. Different street classifications require a different number of travel lanes. The number of travel lanes will affect the vehicle capacity of the street, the speed at which vehicles move on the street, and the width of the street that pedestrians must cross. The narrower the street, the easier it is to create safe pedestrian crossings.

Lane Width. Different street classifications require different lane widths. Truck and transit routes must accommodate larger vehicles and require wider lanes. Narrower travel lanes serve to reduce automobile speed.

Vehicle Volumes. Different street classifications must accommodate different volumes of automobiles. Streets that serve a citywide transportation purpose typically have higher automobile volumes; streets that service local circulation needs typically have lower automobile volumes. Maintaining a high level of bicycle and pedestrian safety on a higher volume street requires more significant improvements than may be needed on a street with lower volumes. Lower automobile volumes result in lower harmful emissions in the vicinity of the street. Volumes are measured as average daily traffic (ADT).

Curb Uses. The use of curb space is different in different street classifications. The management of curb space can be critical to the proper operation of the street in certain land use conditions and locations. Curb uses are prioritized for each classification.



Street Classifications

Neighborhood Connector Street

Neighborhood Connector Streets provide connections between neighborhoods and shopping areas, schools, parks, and other neighborhoods across the entire City for people walking, bicycling, taking the bus, or driving. The design of these streets must support citywide circulation needs for all modes of transportation, safe and efficient travel, and a comfortable neighborhood environment. Given the relatively high traffic volumes on Neighborhood Connector Streets, pedestrian crossings on Neighborhood Connector Streets must be carefully designed to ensure safety for children walking to school, seniors, and persons with disabilities. In some cases, a Neighborhood Connector may also serve as a transit route or a truck route. Prioritized curb uses on Neighborhood Connector Streets are: 1) bus stops on transit routes, 2) bicycle facilities as recommended in the Active Transportation Plan, and 3) on-street parking.

Typical Design Standards and Objectives

Neighborhood Connector Street	
Caltrans Functional Classification	Principal Arterial, Minor Arterial or Collector
Travel Lanes per Direction	1 or 2
Lane Width	10 feet. If the street is a Truck Route or Transit Route, 11' feet with adequate turning radius at intersections.
Target Maximum Design Speed	25 mph
Traffic Volumes	4,000-18,000 ADT ¹

Neighborhood Local Street

Neighborhood Local Streets support access for people walking, bicycling, and driving within residential neighborhoods. Since the design of a Neighborhood Local Street does not need to support citywide circulation, transit routes, or truck routes, the design of a Neighborhood Local Street should encourage and support low traffic volumes and slower vehicle speeds to create safe travel conditions for children on bicycles and pedestrians of all ages. Prioritized curb uses on Neighborhood Local Streets are: 1) bicycle facilities as recommended in the Active Transportation Plan, and 2) on-street parking.

¹ Neighborhood Connectors have a wide range of traffic volumes. The high end is the capacity of a typical street with one lane in each direction, the most common configuration of Alameda's Neighborhood Connectors. The low end is the threshold for traffic volumes that are no longer considered appropriate or comfortable for a Neighborhood Local Street. While some Neighborhood Connectors carry more traffic than others, they share the same safety goals and similar design standards.

Typical Design Standards and Objectives

Neighborhood Local Street	
Caltrans/FHWA Functional Class	Local
Travel Lanes per Direction	1
Lane Width	10' or less. Some have no lane markings
Target Maximum Design Speed	20 mph with traffic calming
Traffic Volumes	< 1000-4000 ADT; <2000 ADT on Neighborhood Greenway ²

Main Street

Main Streets serve Alameda's commercial business districts on Webster Street and Park Street and neighborhood "station" commercial areas such as those on Encinal Avenue and Lincoln Avenue. These streets serve citywide circulation needs, while supporting vibrant mixed-use shopping, dining, entertainment, service, and residential districts. Main Streets must accommodate and balance the need for high automobile volumes, high pedestrian volumes, and transit and truck travel. Sidewalks, crosswalks, and signal timing must support a vibrant and safe pedestrian environment. Transit signal prioritization can support transit service without compromising pedestrian crossing safety. Prioritized curb uses on Main Streets are: 1) bus stops, 2) bicycle facilities as recommended in the Active Transportation Plan, 3) accessible parking, 4) loading zones, and 5) on-street customer parking.

Managing curb space is critical on these streets because curb space is limited and must accommodate bus stops, short term customer parking, accessible parking, and truck loading and unloading.

Typical Design Standards and Objectives

Main Street	
Caltrans Functional Classification	Principal or Minor Arterial
Travel Lanes per Direction	1
Lane Width	11'
Target Maximum Design Speed	25 mph
Traffic Volumes	4,000-20,000 ADT ³

Gateway Street

Gateway Streets are critical to citywide and regional circulation since they serve as the gateways to the City's tubes and bridges and the larger region. Gateway Streets are the entrances to Alameda for

² The upper end is the threshold for traffic volumes that are appropriate for a quiet and comfortable Neighborhood Local Street. Neighborhood Greenways have even lower traffic volumes to encourage priority for people walking and biking. Refer to the Active Transportation Plan for Neighborhood Greenway specifications.

³ Main Streets are typically segments along the same corridor as Neighborhood Connectors and share similar traffic volumes. Park and Webster Streets are near the high end of the range and are generally highest in the multi-lane segments nearest to the Gateway transition.

people driving, walking, bicycling, or riding transit. These streets are typically also truck routes and transit routes. The primary purpose of these streets is the movement of automobiles, buses, trucks, bicycles, and pedestrians. Vehicle volumes are extremely high on Gateway Streets; therefore, the priority for curbside uses is: 1) bus stops, 2) dedicated bus lanes, 3) protected bicycle lanes, and 4) automobile travel lanes. On-street parking and loading may be restricted to low volume periods during the day.

Typical Design Standards and Objectives

Gateway Street	
Caltrans/FHWA Functional Class	Principal or Minor Arterial
Travel Lanes per Direction	1 or 2
Lane Width	11'
Target Maximum Design Speed	25 mph with traffic calming
Traffic Volumes	18,000-27,000 ADT

Business Commercial Street

Business Commercial Streets serve business parks, manufacturing and industrial areas, and shopping centers. The priority for these streets is vehicle travel and goods movement. These streets may also serve as truck routes or transit routes. Prioritized curb uses on Business Commercial Streets are: 1) bus stops, 2) loading zones, and 3) on street parking.

Typical Design Standards and Objectives

Business Commercial Street	
Caltrans Functional Classification	Any
Travel Lanes per Direction	1 or 2
Lane Width	11'
Target Maximum Design Speed	25 mph
Traffic Volumes	1,000-8,000 ADT

Mode-Specific Routes

Transit Routes

Transit routes provide a network of streets to support an effective citywide transit network and meet the mobility needs of residents and employees commuting, children going to school, and senior and lower income residents who do not have the option of driving or would prefer not to drive. Transit routes must also prioritize the safety of vulnerable roadway and transit users - people walking and bicycling, children, and seniors, who all depend on transit routes.

Effective transit service also requires constant evaluation, adjustment, relocation, and expansion to effectively respond to changing community mobility needs and transit agency financial conditions. Transit routes must connect to major destinations like Alameda's bridges and tubes, ferry terminals,

business and commercial locations, residential neighborhoods, schools, and senior centers. Therefore, transit routes are appropriate on Gateway, Main, Business Commercial, and Neighborhood Connector Streets. Transit is allowed to use local neighborhood streets if necessary to close a gap in transit service or turn around at the end of a line.

Transit routes should provide 11-foot travel lanes to accommodate full size buses. Bus stop facilities and the necessary sidewalk improvements are a higher priority than on street parking on transit routes with active, regular transit service provided by AC Transit. Figure 2 Transit Route Map shows the City's transit route network that supports existing service and potential future expansion or re-routing.

Truck Routes

Truck routes provide a network of streets for truck access to serve the delivery and material transportation needs of residents and businesses. The goal of the truck route network is to limit the number of streets on which truck traffic is allowed. Streets on truck routes facilitate truck movement by providing adequate lane widths and turning space. Truck traffic is allowed to use streets outside of the truck route when it is necessary to reach the destination.

Truck routes often overlap with transit routes and Neighborhood Collectors and therefore must prioritize the safety of vulnerable roadway users, such as people walking and bicycling. Street design on truck routes must balance all these needs based on the frequency of the truck use and the overall goals and purpose of the street segment. Truck routes are shown on Figure 3 Truck Route Map.

Bikeways

Bikeways provide a network of streets to support the needs of residents, employees, and visitors bicycling to and from work, school, parks, weekend activities, daily errands, and for recreation. Like the transit route network, an effective and complete bikeway network relieves traffic pressure and adds capacity to the rest of the streets if people feel safe and comfortable bicycling instead of driving. An effective bicycle network must be safe and low-stress and it must also provide convenient connections to the places that people need to go including schools, parks, commercial districts, the waterfront, the ferry terminals, the bridges and tubes, and the on-island business and employment centers. The bikeway network is shown in Figure 4 Bikeway Network Map (to be added pending release of Active Transportation Plan).



