## **Appendix B**

# **Design Element Examples**



## **ADA Curb Ramps**

ADA ramps provide road crossing access to users of all ages and abilities. ADA Curbs Ramps are typically found at signalized intersections in conjunction with a marked crosswalk.

### **BENEFITS & CHALLENGES**

#### Auto:

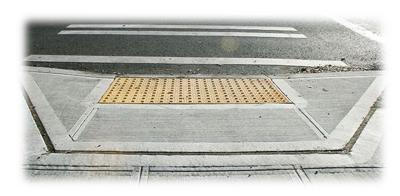
ADA curb ramps are designated for pedestrian and cyclist use.

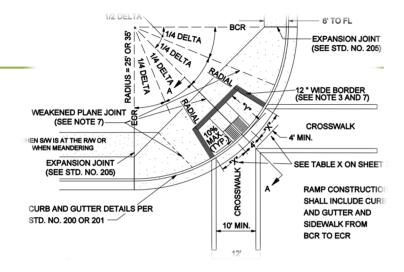
### **Pedestrians & Bicyclists:**

ADA curb ramps are primarily used by pedestrians and sometimes by bicyclists. ADA ramps, in conjunction with crosswalks, provide users a designated location to cross a road. Bicyclists should dismount their bicycle and walk on the curb ramp.

## **Design & Maintenance:**

The design of the ADA ramps should comply with all County of Riverside guidelines and standards. ADA ramps may require ongoing maintenance to minimize fading and damage to markings or to truncated dome surfaces.





Source: County of Riverside Department of Transportation Standard 403: Curb Ramp Case A





## Lighting

Streetlights are typically found along roads and provide nighttime visibility to drivers and pedestrians. Lighting systems within transit shelters provide visibility and improve safety to waiting passengers.

### **BENEFITS & CHALLENGES**

#### Auto:

Streetlighting along roads provides drivers with greater visibility to any potential obstacles ahead.

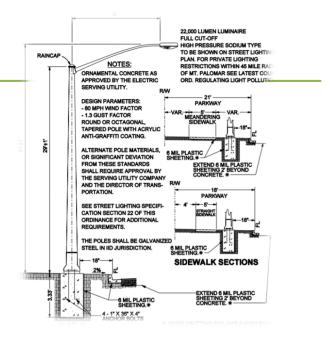
## **Pedestrians & Bicyclists:**

Lighting provides pedestrians and cyclist greater visibility from motorists while traveling along roads in low light conditions. Lighting allows pedestrians and bicyclist to see upcoming potential obstacles. Lighting also provides an additional sense of security for those using the facilities along the road.

## **Design, Operations & Maintenance:**

All lighting systems should adhere with all County of Riverside guidelines and standards. Lighting systems require the ongoing expense of electricity for operation. For smaller lighting installements, solar options may be feasible.





Source: County of Riverside Department of Transportation Standard 1001: Arterial Highway Lighting





## **Benches (at Transit Stops)**

Benches provide transit passengers a location to rest while awaiting the next bus.

## **BENEFITS & CHALLENGES**

### **Autos:**

Transit benches are designed for use by pedestrians and bicyclists.

## **Pedestrians & Bicycles:**

Pedestrians and Bicyclist use the transit bench when waiting for the Bus. Arrival time can vary from minutes to an hour which can leave certain passenger fatigued while waiting.

## **Design & Maintenance:**

The design of the bench should comply with all County of Riverside guidelines and standards. Benches may require ongoing maintenance to minimize paint fading and rusting.









## **Bus Shelter**

Bus shelters provide passengers protection from weather while waiting for the next bus.

## **BENEFITS & CHALLENGES**

### Auto:

Bus shelters are designed for use by pedestrians and bicyclists.

## **Pedestrians & Bicyclists:**

Bus shelters are primarily used by pedestrians and bicyclists. Bus shelters, in conjunction with benches, provide users a designated location to wait for the next bus, protected from the elements.

## **Design & Maintenance:**

The design of bus shelters should comply with all County of Riverside guidelines and standards. Shelters may require ongoing maintenance to minimize paint fading and rusting. Any lighting may also need to be maintained and lighting may require the ongoing expense of electricity for operation.









## **Bike Racks**

Bike racks allow bicyclist to leave their bicycles at transit stops. This allows more people to cycle to stops without having to carry the bicycle on the bus.

## **BENEFITS & CHALLENGES**

#### Auto:

Bike racks are designed for use by bicyclists.

## **Pedestrians & Bicyclists:**

Bike racks are primarily used by bicyclists. Bike racks provide bicyclists a designated location to secure their bicycle while traveling via bus.

## **Design & Maintenance:**

The design of bike racks should comply with all County of Riverside guidelines and standards. Bike racks may require maintenance if damaged.











## **Sidewalk**

A sidewalk is a path with a hard surface by the side of a road. Sidewalks are often constructed of concrete or cement, though occasionally asphalt. Sidewalks must meet the minimum ADA requirements.

## **BENEFITS & CHALLENGES**

#### Auto:

Sidewalks are specifically designated for pedestrians, not vehicles or bicycles. Along a roadway, sidewalks provide a dedicated ADA accessible space for users of all ages and abilities.

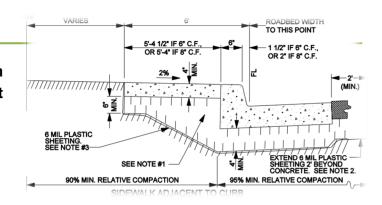
## **Pedestrians & Bicyclists:**

Sidewalks are primarily used by pedestrians but sometimes used by bicyclists, specifically younger and unexperienced riders. Sidewalks provide pedestrians and bicyclists a connection to public transit, retail shops, parks, and other attractions.

## Design:

The design of sidewalk should comply with all County of Riverside guidelines and standards.





Source: County of Riverside Department of Transportation Standard 401: Sidewalk and Curb





## **Multi-Use Trails**

Multi-Use trails are paths with a semi-hard surface alongside roads. Multi-use trails are typically constructed of compacted dirt and decomposed granite but may be paved.

### **BENEFITS & CHALLENGES**

#### Auto:

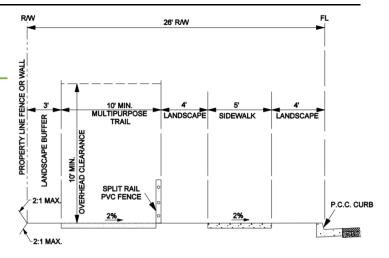
Multi-use trails are primarily designed for pedestrians, bicyclist, and other modes of non-motorized travel.

## **Pedestrians & Bicyclists:**

Multi-use trails are primarily used by pedestrians, bicyclist, and other similar users. Multi-use trails can provide local cohesiveness to areas typically served by limited access roadways. Trails may also provide the community a recreational opportunity and alternative transportation option to residents. Multi-use trails generally accommodate two-way travel.

## **Design & Maintenance:**

The design of multi-use trails should comply with all County of Riverside guidelines and standards. Trails may require occasional maintenance to the travel surface following strong storm events. Fences and barriers installed along trail may also require maintenance to minimize paint fading.



Source: County of Riverside Department of Transportation Standard 405: Multipurpose Trail





## **Bike Lanes (Class II)**

Bike lanes (Class II) are defined by pavement striping and signage and effectively dedicate a portion of the roadway right-of-way for exclusive bicycle travel. Bike lanes are one-way facilities typically located on the far-right side of the road adjacent to the curb.

### **BENEFITS & CHALLENGES**

#### Auto:

Class II bike lanes provide a designated lane alongside moving traffic. This design does not include any physical barriers or buffers so drivers will need to watch for bicyclists when turning right at cross-streets or driveways.

### **Pedestrians:**

Bicycle lanes are not intended for pedestrian use. To deter pedestrians from using the bike lane, a sidewalk or trail should be provided adjacent to the bicycle lane. Pedestrians in the bike lane pose a obstacle to bicyclists and should be discouraged.

### **Bicycles:**

Class II bike lanes provide a more comfortable riding environment for bicycle riders adjacent to traffic. Conflict areas between vehicles and bicyclists may be marked by green dashed stripes near intersections and driveways.

## **Design, Operations & Maintenance:**

Construction of Class II bikeways should comply with all County of Riverside guidelines and standards and CA MUTCD standards.







## **Wayfinding Signage**

Wayfinding signage guide and inform pedestrian and bicyclist regarding destinations and travel.

### **BENEFITS & CHALLENGES**

#### Auto:

Wayfinding signs are primarily designed to inform for pedestrians and cyclists.

## **Pedestrians & Bicyclists:**

Wayfinding signs primarily inform and guide pedestrians, bicyclist, and other similar users. Wayfinding signage can lead to increased awareness and use of existing or new trails. Signage can mirror local design to promote a sense of community.

## **Design & Maintenance:**

The design and installation of signage should comply with all County of Riverside guidelines and standards and CA MUTCD standards. Signs may require occasional maintenance to preserve legibility.









## Ridesharing

Ridesharing aims to connect people with limited access to vehicles to riders in order to reach similar destinations. Ridesharing can be organized via internet app or local community organizations.

## **BENEFITS & CHALLENGES**

#### Auto:

Ridesharing is aim at people with limited access to vehicles.

## **Pedestrians & Bicyclists:**

Ridesharing is designed for those with limited access to vehicles. Ridesharing may drop off residents at local transit hub for more long-distance journeys. Ridesharing apps typically pick up riders at their residence, minimizing travel that may be difficult for older commuters.

## **Challenges:**

While multiple riders may be served, ridesharing still introduces more vehicles into the network increasing congestion and greenhouse gas emissions. Ridesharing apps may be financially out of reach for residents depending on destination.









