



Active Transportation Plan

Standard Corridor Segments

INTRODUCTION

The Standard Corridor type is surrounded by standard auto-oriented suburban land uses. It has lower housing and job densities than along Compact corridors, with uses that are generally not highly mixed or organized to facilitate walking, biking, or transit service. It can contain a wide variety of housing types, though medium- and large-lot single family homes are the majority. It is not typically well served by regional transit service. Local street networks are not as well connected as those in Urban and Compact corridors. There are fewer destinations accessible by walking or bicycling, and most trips are made by automobile.

The following active transportation infrastructure facilities are appropriate for standard corridor segments.

Bicycle Boulevards

Bicycle boulevards are streets with low motorized traffic volumes and speeds which are designated and designed to give travel priority to bikes. Bicycle Boulevards use signs, pavement markings, and speed and volume management measures to discourage through trips by motor vehicles and create safe, convenient bicycle crossings of busy arterial streets. They are most effective in residential districts and near commercial corridors.

Bike Boxes

A bike box is a designated area at the head of a traffic lane at a signalized intersection that provides bicyclists with a safe and visible way to get ahead of queuing traffic during the red signal phase.

Bike Signals

Bike signals are traffic signals designed specifically for bicycle traffic. Bike signals can improve traffic flow and reduce turning conflicts between bicycles and motor vehicles. For example, if a bike lane is to the right of a right-turn motorized vehicle lane, separate signals can instruct bicyclists and motorists to proceed (going straight or turning right) at different points in the signal cycle.



Buffered Bike Lanes

Buffered bike lanes are conventional bike lanes with a designated space separating the bike lane from the adjacent travel lane and/or parking lane.

Bus Bulbs

Bus bulbs are curb extensions or concrete islands that align the bus stop with the parking lane, allowing buses to stop and board passengers without ever leaving the travel lane. Bus bulbs help buses move faster and more reliably by decreasing the amount of time lost when merging in and out of traffic. Bus bulbs help reduce bus-bike conflicts at bus stops when a protected bike lane is provided behind the bus stop rather than a bike lane in the bus stop.

Bus-only Lanes

Bus only lanes are restricted to the use of buses. They are most appropriate in areas with very frequent service.

Bus Stops

Bus stops are designated areas where buses stop for passengers to board or alight from a bus. They should be placed and designed within the policies and procedures of the local transit authority and, where possible, should have appropriate amenities based on the usage of that stop and the surrounding land use.

Conventional Bike Lanes

A bike lane is a portion of roadway that has been designated for preferential or exclusive use by bicyclists by pavement markings and, if used, signs. It is intended for one-way travel, usually in the same direction as the adjacent traffic lane, unless designed as a contra-flow lane.

Crosswalks

According to the Ohio Revised Code (§4511.01) every intersection (even if unmarked) is a legal crosswalk – unless signs specifically prohibit pedestrians from crossing. Safety can be improved at non-signalized crosswalks by striping the crosswalk and adding signs. If at all possible, crosswalks should be marked on the roadway and with signs instructing motorists to yield to pedestrians. On roads where intersections are far apart, mid-block non-signalized crosswalks can be marked on the roadway and with appropriate yield signs.

Curbs

Curbs delineate between the roadway and walkway. The design of curbs can narrow the roadway at crosswalks, making the crossing easier and safer for pedestrians (curb extensions), or regulate the speed of turning vehicles in a crosswalk (curb radius). A small curb radius requires vehicles to slow down in order to make a turn without hitting the curb. A larger curb radius can allow cars to make sweeping turns at higher rates of speed, but also can accommodate large trucks and trailers making wide, slow turns.



Curb Extensions

A curb extension is a narrowing of the roadway at a crosswalk in a way that makes a pedestrian crossing shorter and safer. On each side of the road, the curb line is designed to swoop out into the roadway or parking lane in a bulb-like configuration. What had been, for example, a four-lane road becomes a two-lane pedestrian crossing. The narrowing and the lane reductions induce motorists to slow down. Curb extensions are sometimes referred to as curb bulbs or nubs, sidewalk extensions, or bulb-outs. They are often used at locations with curbside parking and can be used in conjunction with transit stops. Curb extensions maximize the amount of on-street parking around bus stops while minimizing needed curb clearance.

Intersection Treatments

Designs for intersections with bicycle facilities should reduce conflict between bicyclists (and other vulnerable road users) and vehicles by heightening the level of visibility, denoting a clear right-of-way, and facilitating eye contact and awareness with different modes. Intersection treatments can resolve both queuing and merging maneuvers for bicyclists, and are often coordinated with timed or specialized signals.

The configuration of a safe intersection for bicyclists may include elements such as color, signage, medians, signal detection, and pavement markings. Intersection design should take into consideration existing and anticipated bicyclist, pedestrian and motorist movements. In all cases, the degree of mixing or separation between bicyclists and other modes is intended to reduce the risk of crashes and increase bicyclist comfort. The level of treatment required for bicyclists at an intersection will depend on the bicycle facility type used, whether bicycle facilities are intersecting, the adjacent street function and land use.

Median Refuge Islands

Median refuge islands are protected spaces placed in the center of the street to facilitate bicycle and pedestrian crossings. Crossings of two-way streets are eased by allowing bicyclists and pedestrians to navigate only one direction of traffic at a time.

Midblock Signalized Crossings

A signalized mid-block crosswalk is a signal that is activated by pedestrians when they want to cross the street. This can include pedestrian hybrid beacons (or HAWK), rectangular rapid flashing beacons (or RRFBs), and other treatments. Both types of beacons involve a push button trigger of flashing lights to warn motorists of pedestrians.

Multi-Use Paths

A multi-use path (MUP) is a path physically separated from motor vehicle traffic by an open space or a barrier – either within the highway right-of-way or within an independent right-of-way. MUPs may be used by cyclists, pedestrians, skaters, wheelchair users, joggers, and other non-motorized users. MUPs are typically designed for two-way travel and are paved. Central Ohio Greenways trails are multi-use paths that generally follow greenways or waterways. MUPs do not have to follow a greenway or waterway, and may be adjacent to a roadway.



Protected Bike Lane

A protected bike lane (or cycle track) is an exclusive bike facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane. A protected bike lane is physically separated from motor traffic and distinct from the sidewalk. In situations where on-street parking is allowed, protected bike lanes are located to the curb-side of the parking (in contrast to conventional bike lanes).

Protected Intersections

A protected intersection is an intersection with corner refuge islands, stop bars for cyclists set ahead of those for motorists, bicycle-friendly signal phasing, and bike lane setbacks that give turning motorists a clear view of crossing cyclists. The combination of these elements creates an intersection where cyclists and pedestrians are more readily seen by motorists and the non-motorized travelers have shorter distances to travel to cross the street.

Shared Lane Markings

A shared lane marking (or sharrow) is a pavement marking symbol that indicates an appropriate bicycle positioning in a roadway used by motor vehicles and bicycles. Sharrows may be placed at the edge of the travel lane or at the center of the travel lane, depending on factors like on-street parking, width of travel lane, or posted speed.

Sidewalk Buffers And Street Trees

Sidewalk buffers are strips of grass or other greenery to provide distance between moving traffic and the sidewalk. Buffers can include street trees, which also add shade for the pedestrians. Sidewalks are safer and more comfortable to use when they have a buffer between them and traffic.

Sidewalks

A sidewalk is a paved pedestrian path that is parallel and adjacent to the roadway. Sidewalk widths may vary, but typically are five feet, which allows two people – including wheelchair users – to pass comfortably or to walk side-by-side. They are measured in terms of “clear width” (the width that can be traveled freely, without obstacles). The clear width of a sidewalk does not include the area in which sign posts, street furniture, and other permanent or semi-permanent items are placed.

Signage

Signs may be used to indicate the presence a bicycle, pedestrian, or transit facility or to designate certain areas for those uses. Signage can include way-finding and route signage, regulatory signage, and warning signage. Some specific signage exists to provide motorized traffic with information and instruction.

Signalized Crosswalks

A signalized crosswalk has the same legal definition as any other crosswalk, except that it has signals to regulate the flow of vehicular and pedestrian traffic. It will have red/green traffic signals at all approaches, and may or may not have walk/don't walk signals or count-downs for pedestrians at crosswalks.