



Active Transportation Facility Glossary

This document defines different active transportation facilities and suggests appropriate corridor types. Click on a facility type to jump to its definition.

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BIKE 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.

Corridor segment types: Urban, Compact, Standard

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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.

Corridor segment types: Urban, Compact, Standard

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Source: City of Columbus

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.

Corridor segment types: Urban, Compact, Standard

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Source: Flickr user Bikeportland



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.

Corridor segment types: Urban, Compact, Standard

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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.

Corridor segment types: Urban, Compact, Standard

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Source: City of Columbus

BUSES ON SHOULDERS



Bus on Shoulder is a program that allows authorized transit buses with trained drivers to operate on the shoulders of selected freeways at low speeds during periods of congestion in order to bypass congested traffic and maintain transit schedules. Bus on Shoulder is a low-cost treatment that can provide immediate benefits to transit whenever travel is experiencing moderate to heavy degrees of congestion.

Corridor segment types: Limited Access

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Source: COTA



BUS-ONLY LANES



Source: COTA

Bus only lanes are traffic lanes on a surface street that are restricted to buses either at all times or during certain hours of the day. Bus only lanes have signs posted along the route with specific regulations. Bus only lanes keep buses from getting stuck in traffic, improving the speed and reliability for bus riders and improving the overall traffic flow of a corridor. They are most appropriate in areas with very frequent service.

Corridor segment types: Urban, Compact, Standard, Limited Access

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BUS STOPS



Source: COTA

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.

Corridor segment types: Urban, Compact, Standard, Rural

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CONTRA-FLOW BIKE LANES



Source: Flickr user Philly Bike Coalition

Contra-flow bicycle lanes are bicycle lanes designed to allow bicyclists to ride in the opposite direction of motor vehicle traffic. They convert a one-way traffic street into a two-way street: one direction for motor vehicles and bikes, and the other for bikes only. Contra-flow lanes are separated with yellow center lane striping.

Corridor segment types: Urban, Compact

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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.

Corridor segment types: Urban, Compact, Standard, Rural

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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.

Corridor segment types: Urban, Compact, Standard, Rural

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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.

Corridor segment types: Urban, Compact, Standard

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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.

Corridor segment types: Urban, Compact, Standard

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FLOATING BIKE LANES



A floating bike lane is designated for exclusive bike use only at certain times of day (usually during rush hour). At other times, the lane is used for parallel parking; when parking is permitted, bicyclists can use the other lanes and should be encouraged to ride outside the door zone of the parked cars.

Corridor segment types: Urban, Compact

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Source: Elle Bustamante

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.

Source: Alta Planning

Corridor segment types: Urban, Compact, Standard, Rural, Limited Access

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LEFT-SIDE BIKE LANES



Left-side bike lanes are conventional bike lanes placed on the left side of one-way streets or two-way median divided streets. Left-side bike lanes offer advantages along streets with heavy delivery or transit use, frequent parking turnover on the right side, or other potential conflicts that could be associated with right-side bicycle lanes. The reduced frequency of right-side door openings lowers the risk of bicyclists hitting open car doors.

Corridor segment types: Urban, Compact

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MEDIAN REFUGE ISLANDS



Source: City of Gahanna

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.

Corridor segment types: Urban, Compact, Standard

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MIDBLOCK SIGNALIZED CROSSINGS



Source: City of Gahanna

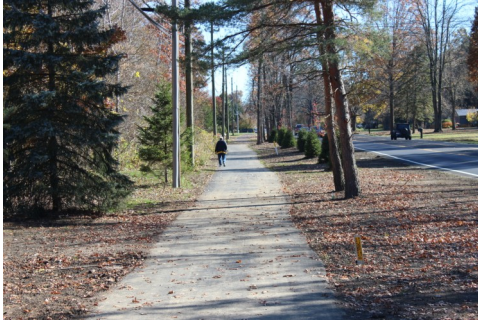
A signalized mid-block crosswalk is a signal that is activated by pedestrians when they want to cross the street. This can include pedestrian hybrid beacons (or HAWK), rectangular rapid flashing beacons (or RRFBs), and other treatments. Both types of beacons involve a push button trigger of flashing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

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MULTI-USE PATHS



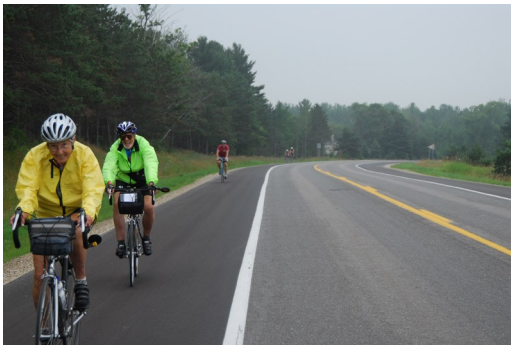
Source: Genoa Township

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.

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PAVED SHOULDERS



Source: Flickr user bbodjack

A paved shoulder is the part of the roadway that is adjacent and contiguous to the regular travel lanes. This portion of the roadway can be used by bicyclists. It can also accommodate stopped vehicles, emergency use, and pedestrians. Paved shoulders can be an appropriate bicycle facility along roadways that do not have curb and gutter but have open drainage. During roadway reconstruction activities or whenever land use or other changes occur, communities should consider upgrading paved shoulders to other bicycle and/or pedestrian facilities.

Corridor segment types: Rural

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PROTECTED BIKE LANE (CYCLE TRACK)



Source: City of Columbus

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).

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PROTECTED INTERSECTIONS



Source: NACTO

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.

Corridor segment types: Urban, Compact, Standard

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SHARED LANE MARKINGS (SHARROWS)



Source: City of Columbus

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.

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SIDEWALK BUFFERS/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.

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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.

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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.

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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 countdowns for pedestrians at crosswalks.

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TWO-WAY BIKE LANES



Source: City of Columbus

Two-way bike lanes are adjacent lanes accommodating opposite directions of bicycle traffic, striped onto the roadway next to the other travel lanes. They are sometimes installed in the middle of the street between travel lanes, but are more often at one side of the roadway. Two-way bike lanes must be designed properly to prevent safety hazards.

Corridor segment types: Urban, Compact

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SOURCES

[Central Ohio Transit Authority Bus Stop Design Guide](#)

[MORPC Complete Streets Toolkit](#)

[MORPC Definition of Bicycle Facilities](#)

[NACTO Urban Bikeway Design Guide](#)

[Protected Intersections for Bicyclists](#)

[San Francisco Better Streets, Transit Stops](#)

[Washington Metropolitan Area Transit Authority Bus Stop Guidelines](#)