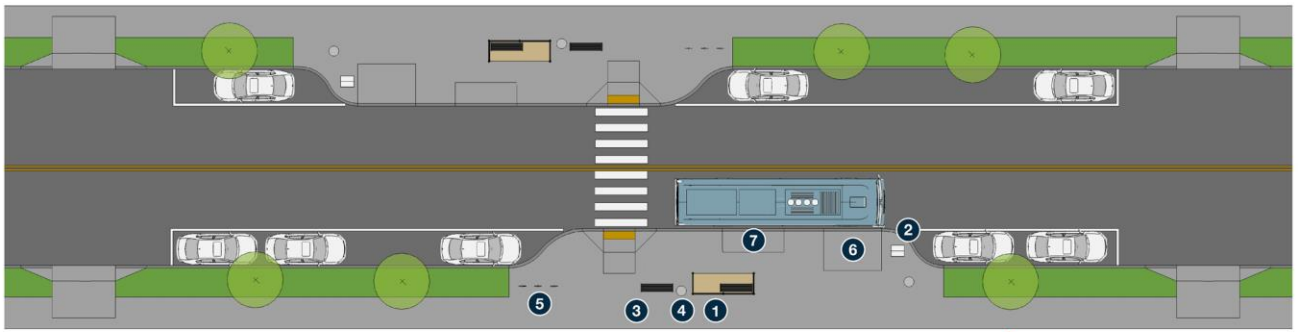
Bus Stop Typologies

1. Bus Stop Curb Extension (Full Width, Far-side of Crosswalk)

- improve/save travel time for buses by stopping in-lane and not having to re-enter traffic
- widen sidewalk to provide more space for passengers at high ridership stops, and to install amenities
- impacts vehicular traffic operations and bicycle flow on single-lane roadways
- extendable to incorporate and bump out the pedestrian crossing, improving pedestrian visibility and reducing crossing distance
- minimal impact on on-street parking
- most likely location is in an urban area, with high pedestrian activity, but narrow sidewalks, and low roadway design speed
- could be shortened and implemented in the middle of on-street parking (bus can overhang vehicles parked behind the curb extension as long as the landing area and clear zone is provided)

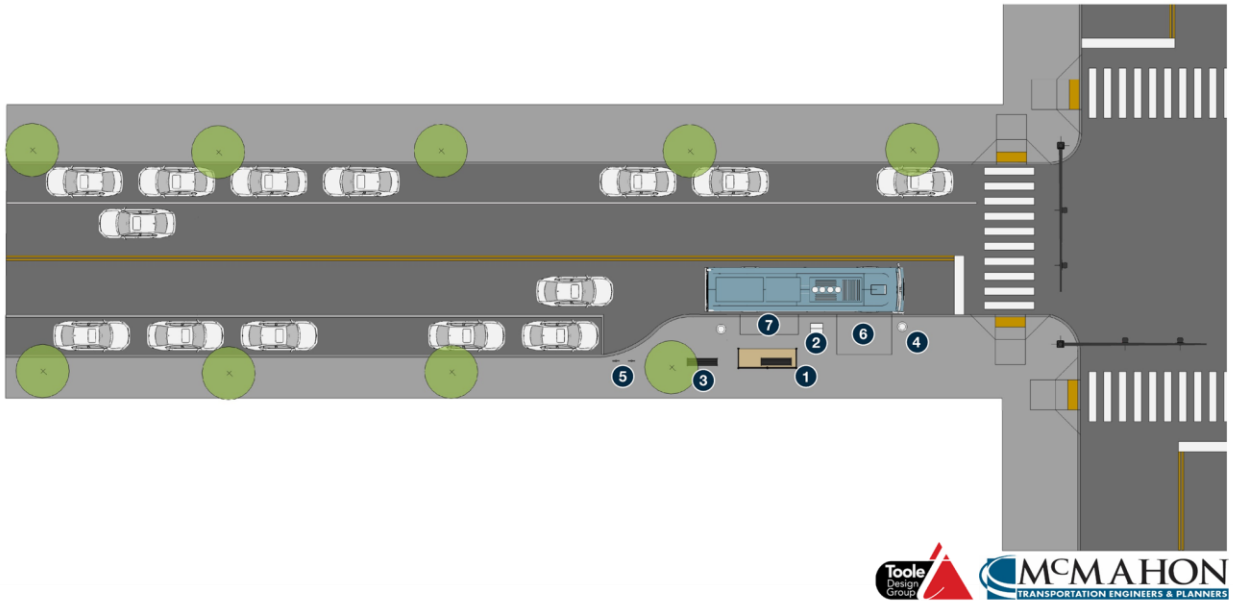
1. Standard shelter
2. Trash
3. Bench
4. Pedestrian-scale lighting
5. Bike parking
6. Accessible landing area
7. Rear door clear zone



Bus Stop Typologies

2. Bus Stop Curb Extension (Full Width, Near-side of Crosswalk)

1. Standard shelter
2. Trash
3. Bench
4. Pedestrian-scale lighting
5. Bike parking
6. Accessible landing area
7. Rear door clear zone

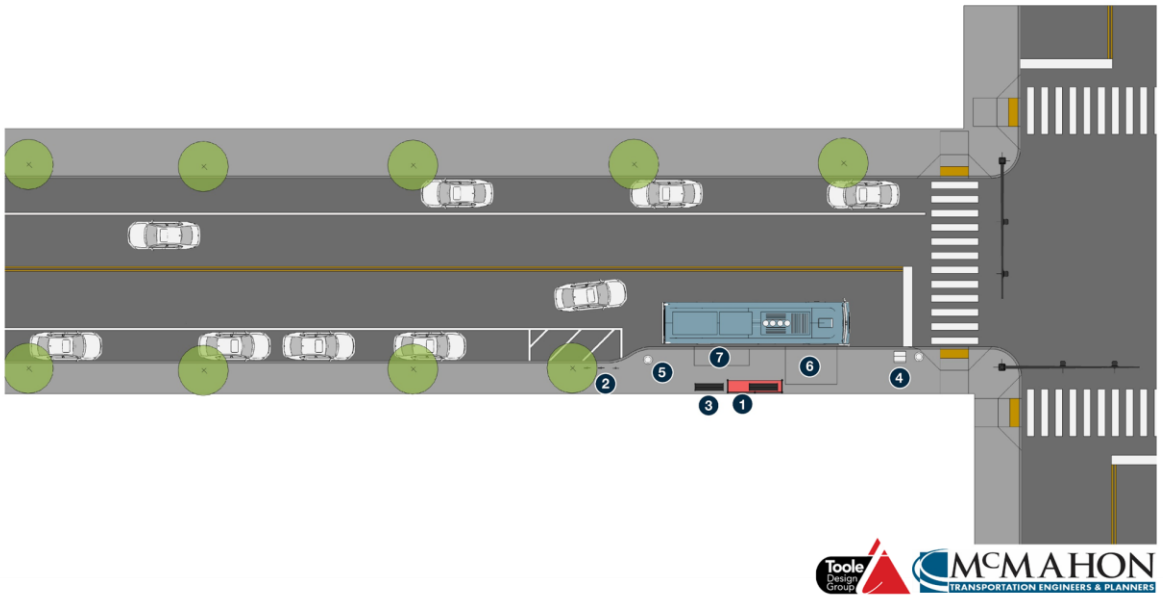


- improve/save travel time for buses by stopping in-lane and not having to re-enter traffic
- widen sidewalk to provide more space for passengers at high ridership stops, and to install amenities
- impacts vehicular traffic operations and bicycle flow on single lane roadways
- extendable to incorporate and bump out the pedestrian crossing, improving pedestrian visibility and reducing crossing distance
- minimal impact on on-street parking
- allows for connectivity to other routes where bus routes may split prior to the intersection
- high transit generator may abut the stop
- most likely location is in an urban area, with high pedestrian activity, but narrow sidewalks, and low roadway design speed

3. Bus Stop Curb Extension (Partial Width, Near-Side of Crosswalk)

- similar to 1 & 2 but:
- where parking demand may be less
- only a small amount of additional sidewalk space is needed to afford a greater benefit
- not as costly to construct as a full width curb extension
- does not necessarily block all vehicular traffic or bicyclists from passing
- can allow slow and careful passing of the bus
- can creates a safety issue for pedestrians crossing in front of the bus if vehicles pass a bus at the stop

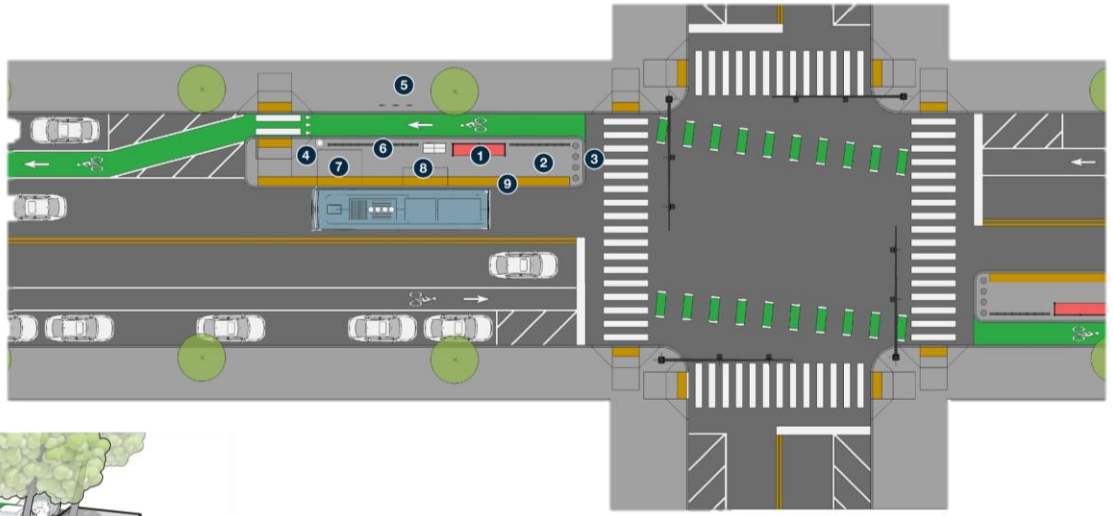
1. Narrow shelter
2. Bike parking
3. Bench
4. Trash
5. Pedestrian-scale lighting
6. Accessible landing area
7. Rear door clear zone

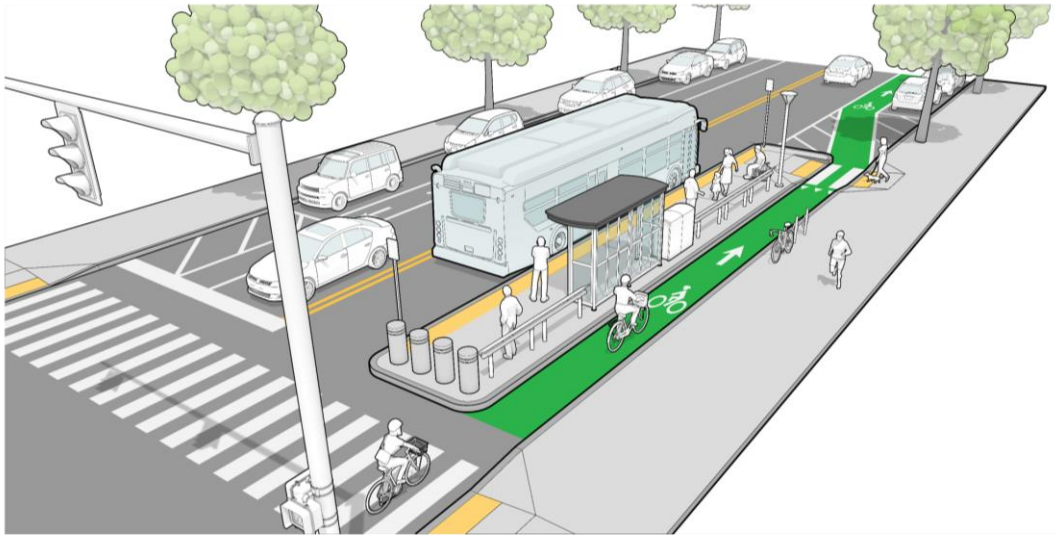


Bus Stop Typologies

4. Floating Bus Island

- use with a separated bike lane (at street or sidewalk level) at high ridership bus stops
- bus island can be lengthened to accommodate 2 buses and pedestrian access at the end of the island can be provided
- bus island can be lengthened and incorporated into an abutting crosswalk
- green paint adds emphasis to the conflict zone
- agreements for maintenance and snow removal on bus island will need to be established
- most likely to be implemented in an urban environment

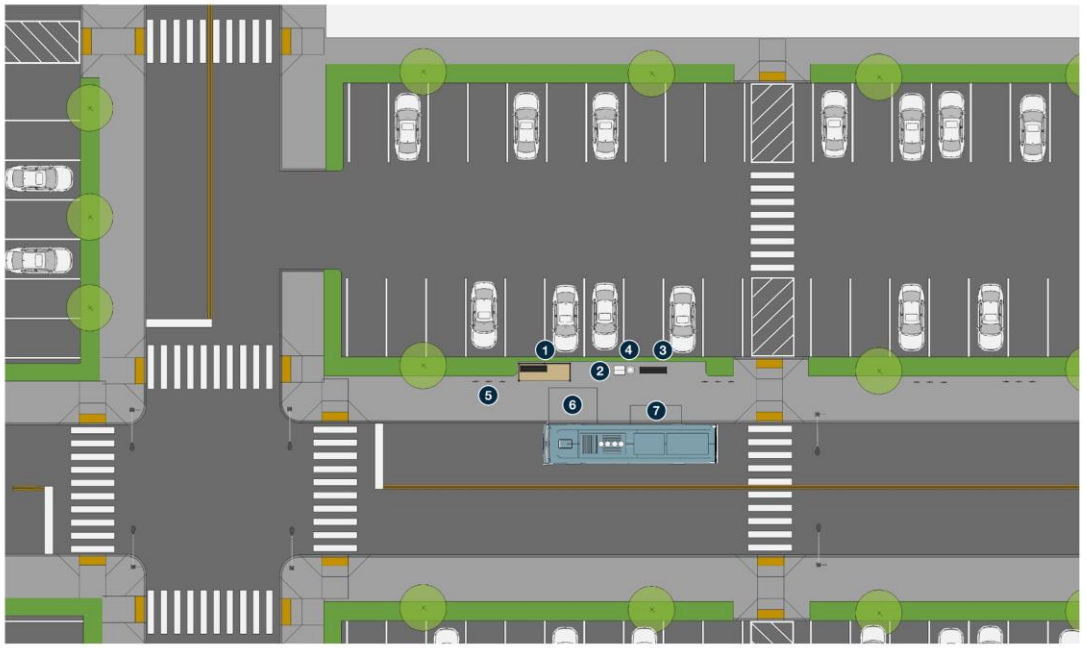




Bus Stop Typologies

5. Off-Street Bus Stop

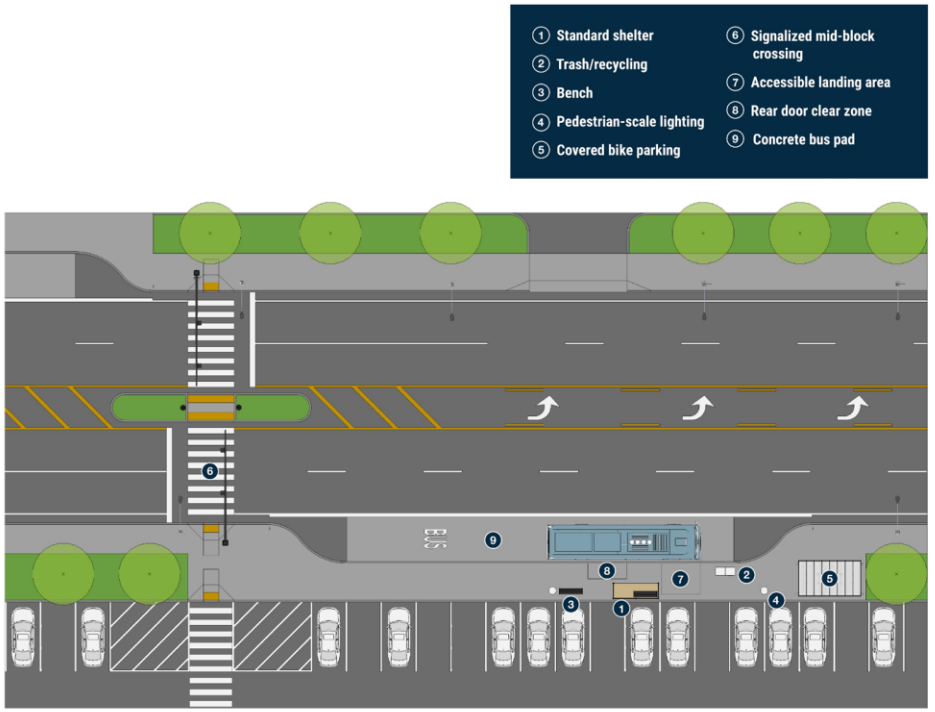
- use where bus stops may be located on a private roadway in the middle of large parking areas
- maintains full access to the fire lane abutting the private development
- avoids narrow parking aisles
- good pedestrian connections to the entrance should be provided
- locate cart corrals close to bus stop
- could be applicable in urban, suburban, or rural environments at various types of retail or commercial developments



Bus Stop Typologies

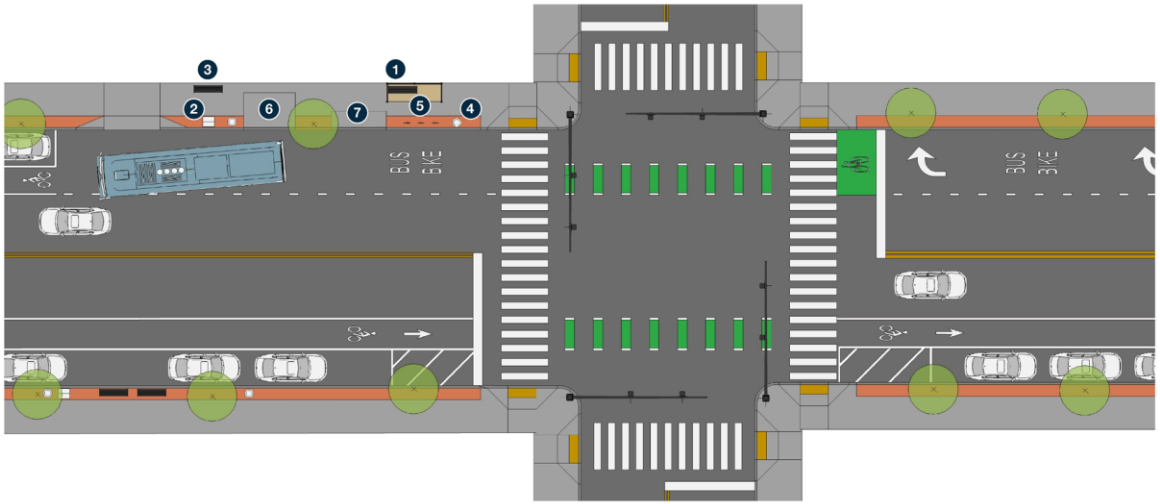
6. Bus Bay

- use at stops with high boardings and or where ridership may be slower to board e.g. close to mall/grocery store when passengers are carrying shopping bags
- use at layover points where buses dwell for longer
- safer in high speed environments
- locate after crosswalks and traffic signals to minimize delay re-entering traffic flow
- most likely to be implemented in suburban or rural environments



7. Bus Stop with Bus Queue Jump Lane

1. Standard shelter
2. Trash/recycling
3. Bench
4. Pedestrian-scale lighting
5. Bike parking
6. Accessible landing area
7. Rear door clear zone

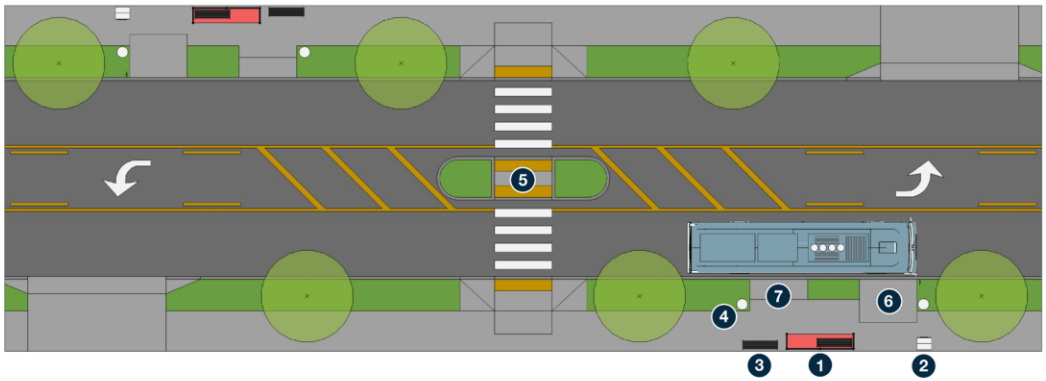


- bus stop curbside next to on-street parking is the most common existing stop configuration
- use bus queue jump at a signalized intersection in conjunction with a far-side stop
- bus queue jumps can be combined with bikes, and right turns
- bus queue jumps can be used exclusively by buses, but if curbside there must be signal control to prevent right turns in front of the bus, or right turns should be banned
- exclusive bus queue jumps can be set up between an exclusive right turn lane curbside, and travel lane(s) for other movements
- bus queue jump ideally used in conjunction with transit signal priority
- bike box to be determined on site specific basis; added benefit when buses are not present on the approach

8. In-Lane Bus Stop

- use on roadways with no on-street parking
- locate after crosswalks to minimize opportunity for unsafe overtakin_
- on two-way center turn lane roadways exercise caution in design to minimize unsafe overtaking
- provide concrete sidewalk at the landing area and clear zone, and ideally in between, to maximize rider waiting area and wider passage for other pedestrians

1. Narrow shelter
2. Trash
3. Bench
4. Pedestrian-scale lighting
5. Midblock crossing with pedestrian refuge
6. Accessible landing area
7. Rear door clear zone

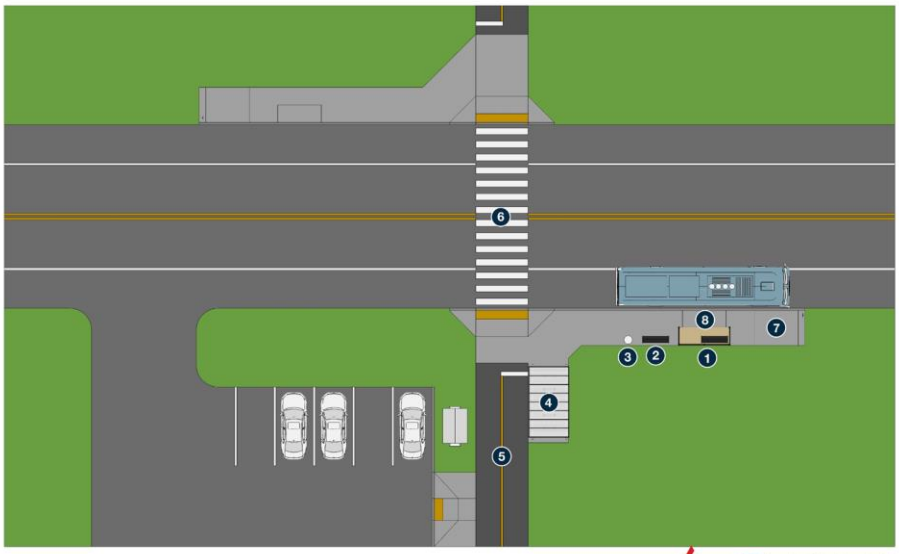


Bus Stop Typologies

9. Curbside Bus Stop in Wide Shoulder

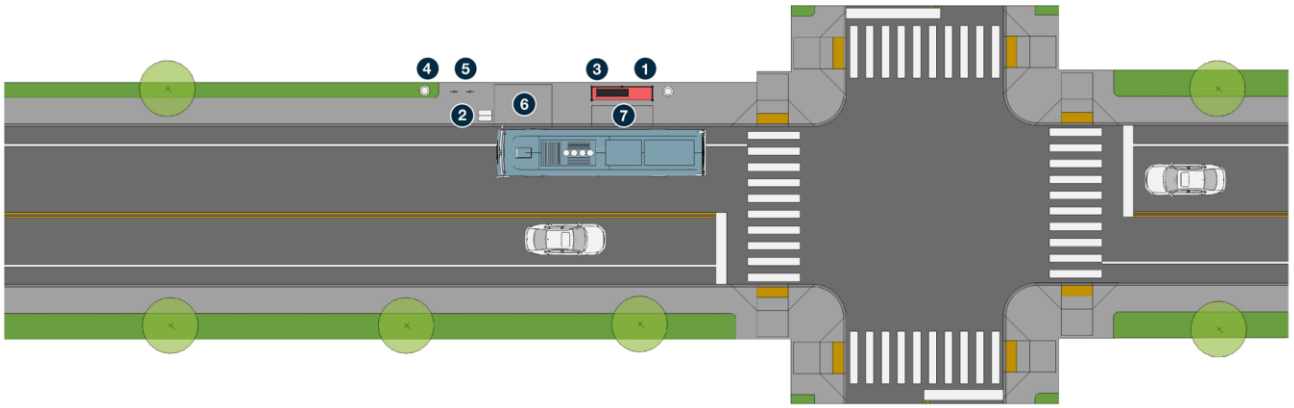
- locate away from driveways for drivers gathering speed to enter the travel lane
- most likely to be applied in rural or less developed areas, in higher speed roadway environments
- bus should be able to stop within the shoulder and not encroach on the adjacent travel lane
- locate after crosswalks to maximize pedestrian visibility on higher speed roadways
- connect bus stop to existing sidewalk if within 100-200' of the stop to maximize connectivity
- if a pair of stops show that one stop has very high boardings and few alightings; and the other stop few boardings and very high alightings; amenities and sidewalk provision should be reflective of these unique conditions

1. Standard shelter
2. Bench
3. Pedestrian-scale lighting
4. Covered bike parking
5. Regional shared-use path
6. Shared-use path crossing
7. Accessible landing area
8. Rear door clear zone



10. Curbside Bus Stop in Narrow Shoulder

1. Narrow shelter
2. Trash
3. Bench
4. Pedestrian-scale lighting
5. Bike parking
6. Accessible landing area
7. Rear door clear zone

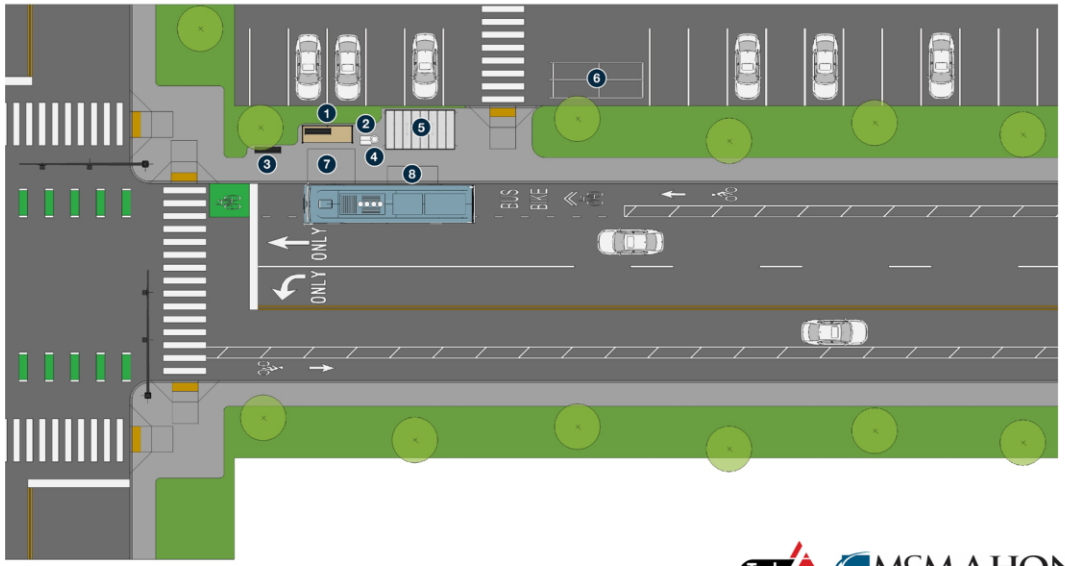


- most likely to be applied in rural or less developed areas, but ideally lower speed roadway environments as buses will most likely block passing traffic
- locate after crosswalks to maximize pedestrian visibility
- connect bus stop to existing sidewalk if within 100-200' of the stop to maximize connectivity
- if a pair of stops show that one stop has very high boardings and few alightings; and the other stop few boardings and very high alightings; amenities and sidewalk provision should be reflective of these unique conditions
- if existing sidewalk is too narrow and right of way is too constrained or inappropriate for a curb extension, consider encroachment and or easement on abutting property for minimum 8' wide sidewalk

11. Curbside Bus Stop in On-street Curbside Buffered Bike Lane

- use when bus stop is shared with bike lane
- stopped buses block through access for bicyclists
- buffered separated bike lane provides more protection for bicyclists than conventional on-street bike lanes

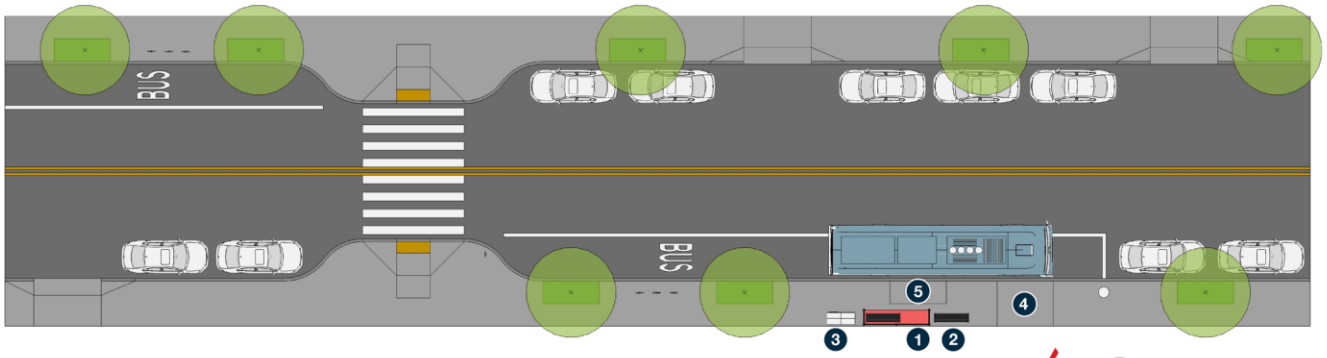
1. Standard shelter
2. Trash/recycling
3. Bench
4. Pedestrian-scale lighting
5. Covered bike parking
6. Cart corral
7. Accessible landing area
8. Rear door clear zone



12. Curbside Bus Stop after Pedestrian Curb Extension

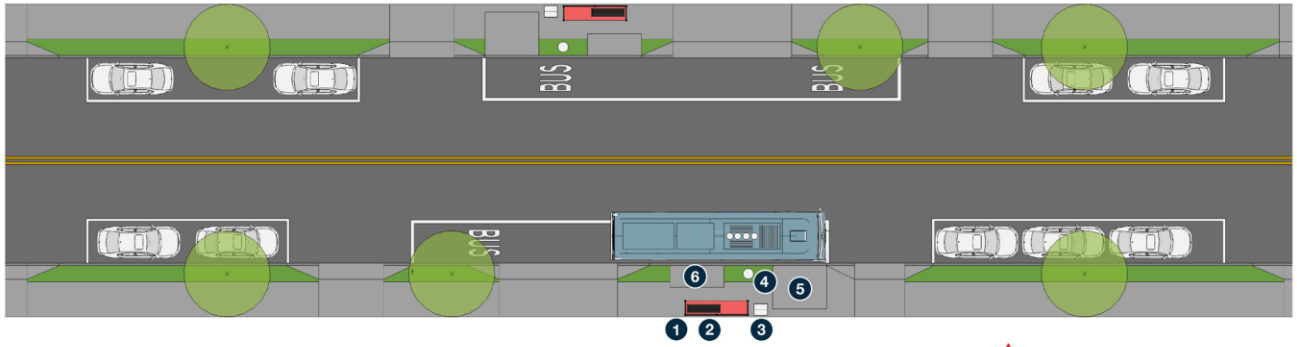
- typical curbside stop next to on-street parking, but pedestrian curb extension creates an obstruction to access the stop; essentially requiring the same curbside space as a mid-block curbside stop
- improves pedestrian visibility

1. Narrow shelter
2. Bench
3. Trash/recycling
4. Accessible landing area
5. Rear door clear zone



13. Curbside Bus Stop amongst Multiple Curb-cuts

1. Narrow shelter
2. Bench
3. Trash
4. Pedestrian-scale lighting
5. Accessible landing area
6. Rear door clear zone



- most likely to be applied on a neighborhood street with lots of residential driveways, or along a commercial strip of roadway
- continuous dedicated space for pedestrians is minimal
- bus stop may need to straddle driveway(s)
- no parking area beyond the driveway may also be required
- allows for minimal operator error connecting to a level landing area
- grass strip between landing area and clear zone is ideally removed to maximize the waiting environment

14. Curbside Bus Stop adjacent to Raised Separated Bike Lane

- use when a bike lane provided is curbside and at sidewalk level
- a bike lane positioned midway between sidewalk level and street level can not be provided at bus stops; due to insufficient right of way for transition areas (i.e. curb ramps would need to be provided between the bike lane and sidewalk)
- a sidewalk level separated bike lane may be the only alternative for a separate bike facility due to constrained right of way or other factors
- green paint adds emphasis to the conflict zone where the bike lane intersects the landing area and clear zone

1. Narrow shelter
2. Bench
3. Trash/recycling
4. Mixing zone
5. Transition to/from sidewalk-level
6. Accessible landing area with marked crossing
7. Rear door clear zone with marked crossing