Pittsburgh Regional Transit Bus Stop and Street Design Guidelines

Version 3.1
November 2025

Pittsburgh Regional Transit

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Port Authority
BUS STOP
P
P1 EAST BUSWAY
1375
3223
PORT AUTHORITY

ACKNOWLEDGEMENTS

Pittsburgh Regional Transit (PRT) provides public transportation throughout the City of Pittsburgh and Allegheny County, Pennsylvania.

PRT's 2,600 employees operate, maintain and support bus, light rail, incline and paratransit services for approximately 200,000 daily riders. PRT is governed by an 11-member board – unpaid volunteers who are appointed by the Allegheny County Executive, leaders from both parties in the Pennsylvania House of Representatives and Senate, and the Governor of Pennsylvania. The Board and its standing Committees hold regularly scheduled public meetings.

PRT's budget is funded by fare and advertising revenue, along with money from county, state, and federal sources. PRT's finances and operations are audited on a regular basis, both internally and by external agencies.

PRT was created under the *Second Class County Port Authority Act* and began serving the community in 1964 as Port Authority of Allegheny County (PAAC); it has been operating under the Pittsburgh Regional Transit brand since 2022.

Participants
PRT would like to thank agency partners for supporting the Bus Stop and Street Design Guidelines, and all those who contributed to their development.

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These Bus Stop and Street Design Guidelines are administratively issued and maintained by PRT's Development Division. These Guidelines are subject at all times to applicable federal, state and local laws, regulations and ordinances and any and all applicable Board-adopted policies. These Guidelines may be amended, modified, or revoked at any time by PRT, at its sole discretion.


East Liberty
STATION

1. INTRODUCTION

INTRODUCTION

PURPOSE

PRT DESIGN PRINCIPLES

HOW TO USE THIS DOCUMENT

Pittsburgh Regional Transit
345 Sixth Ave, 3rd Floor
Pittsburgh, PA 15222

https://www.rideprt.org/

412-566-5500

PURPOSE

Pittsburgh Regional Transit (PRT) serves the 775-square mile area within and immediately adjacent to Allegheny County in southwestern Pennsylvania. PRT provides public transit services via 94 fixed bus routes, three light rail lines, and two inclined planes; in addition to sponsoring demand-response paratransit known as ACCESS. Altogether, these services provide over 33 million rides annually.[01]

The bus stop is the first point of contact between the passenger and the bus service. The spacing, location, design, and operation of bus stops significantly influence transit system performance and customer satisfaction. The purpose of this document is to educate local planners, transportation agency staff, developers, property owners, decision-makers, and other community stakeholders about the needs of transit riders and transit operations and offer clear and uniform guidance to coordinate the design and placement of on-street bus stops and amenities. This document does not include guidance related to fixed guideways like busway stations, which are owned and managed by PRT.

A consistent set of guidelines assists municipalities, developers, and other local partners in PRT's service area in designing ideal transit stops. Many bus stops in Allegheny County do not necessarily meet these guidelines today. PRT recognizes that every location is unique, and that a given stop's jurisdictional and physical context may offer opportunities to meet these guidelines in some ways but not in others. As a result, this should be viewed as a guiding document, offering templates for desirable facilities and amenities wherever it is possible to provide them.

These guidelines will encourage a more consistent, more accessible, and better-connected network of bus stops over time. By assembling the information into a single document, public agencies and developers will more easily be able to incorporate transit needs into the design and operations of streets, highways, and land development.

01 PRT Fiscal Year 2024 Annual Service Report

PRT DESIGN PRINCIPLES

These guidelines are meant to create consistency for PRT and its partners in the placement and design of bus stops. Local partners, especially those that own the roads on which transit operates, are encouraged to follow these guidelines and work closely with PRT to provide safe, comfortable, and reliable transit service.

PRT intends for the design of its bus stops, and the streets and intersections that support them, to be universally accessible and welcoming for all riders. To accomplish this goal, the following bus stop and street design principles were established to guide the development of this document.

PRT'S BUS STOPS, AND THE STREETS AND INTERSECTIONS THAT SUPPORT THEM, AIM TO BE:

SAFE

- Rider feels safe and comfortable getting to and from their stop by walking, rolling, or biking.
- Rider feels personally safe and secure at the stop.

ACCESSIBLE

- Stop is in a convenient and comfortable location.
- Stop is in an easily identifiable place and can be found without difficulty by both riders and operators.
- Stop is accessible, or planned to be made more accessible, for people with mobility issues, with an accessible pedestrian path in at least one direction.
- Intersections, streets, and stops are equipped with detectable features for people with disabilities (i.e., tactile strips, audible cues, etc.).

WELCOMING

- Rider feels comfortable waiting at the stop thanks to some combination of shade, wind and rain protection, or seating.
- Stop has amenities that accommodate a wide range of body sizes and abilities.
- Stop is well-maintained in terms of trash collection, cleared snow and debris, etc.

EASY TO USE

- Rider feels like operations at the stop are intuitive and straightforward.
- Stop has information, such as transit wayfinding signage, to reassure the rider they are at the right stop, going in the right direction.

HOW TO USE THIS DOCUMENT

PRT routes traverse a wide variety of streets, roadways, shopping centers, and other sites across the City of Pittsburgh and Allegheny County. To avoid service disruptions and create an inclusive, multimodal transportation network that is efficient and effective, PRT must work closely with the jurisdictions throughout which it operates. As related to bus stop and street design, this section describes key PRT stakeholders and project partners, and the aspects of their work that require coordination with PRT.

STAKEHOLDERS

This section introduces those who have a stake in transit service (even if they do not directly implement projects) and how each stakeholder can influence transit improvements.

Transit Agency

- PRT operates transit service on public streets typically owned by another agency. Serving stakeholders and destinations like those listed below, PRT plays a critical role in the economic and social lives of tens of thousands of people in Allegheny County every day.
  - » Coordinating with regional stakeholders helps ensure PRT can operate efficiently and reliably to provide the greatest benefit to our region.

Government Agency

- The authority with jurisdiction over the streets and sidewalks in the transit service area is usually a municipality or PennDOT, but other agencies are sometimes involved.
  - » PRT encourages collaboration on local plans and policies regarding transit and other land use and mobility issues. It is especially critical that agencies coordinate in advance with PRT when planning construction near bus stops or proposing design or operational changes on streets that carry transit service.

Developer

- Designing and building new real estate developments with transit in mind provides value to future tenants, residents, and visitors by making it safe and convenient to get to and from the building and neighborhood without a car.
  - » At locations near bus stops, integrating transit-supportive features into building facades and streetscapes can encourage transit ridership and reduce parking demand, in addition to drawing more foot traffic and customers.

Employer

- Transit provides an affordable and convenient commuting option, particularly for jobs in dense employment centers like Downtown Pittsburgh and Oakland. Transit is also critical in providing access to jobs for those who cannot afford a car, including low-wage service and retail workers in suburban, car-oriented environments.
  - » When transit functions well, employers can draw from a larger pool of employees who are confident they can get to work, all while avoiding the stress and cost of driving and parking.
  - » It is important that people have a safe route to access the nearest bus stop and a comfortable waiting environment.

Community Group

- Transit-accessible communities are shown to be more desirable.[02]
  - » Communities benefit from reduced parking demand and potentially lower housing costs when residents can travel affordably and without having to own a car. Neighborhood and community groups can work with their elected officials to create policies that improve bus stops, promote safer streets, and increase transit use among residents.

Institution

- Universities, hospitals, school districts, and other large organizations are major investors in developments that serve populations likely to ride transit.
  - » Collaborating with PRT in the creation of institutional master plans (IMPs), building projects, and other major investments can improve transit access and increase ridership while reducing parking demand. Particularly at hospitals and medical facilities, it is also critical to account for paratransit loading zones.

Key Destination

- When quality transit connections are available, both the employees and the visitors of places that attract large numbers of people (i.e., business districts, shopping centers, sports stadiums, medical facilities, etc.) benefit from reduced traffic and parking demand.
  - » Transit capacity can be especially useful at key destinations that generate significant activity, especially during peak traffic periods. Safe and comfortable bus stops that connect to quality service can encourage more people to use transit.

PROJECT PARTNERS

This section provides an overview of common PRT project partners and the types of projects they typically implement that can impact transit. Coordinating on projects like those listed below early in the planning and design process can add value to projects by providing transit improvements and avoiding disruptions to construction and transit service.

Entities implementing temporary street and bus stop closures should reference the **Construction Mitigation and Coordination** section of Chapter 5: Implementation Process.

Municipalities Performing Work along Bus Routes or at Bus Stops

- Project types can include (but are not limited to):
  - » Street reconstruction
  - » Sidewalk and streetscape improvements
  - » Lane reconfigurations or other roadway operational changes
  - » New signals
- PRT may be able to contribute funding to maximize additional improvements.
- Lack of coordination with PRT can cause service disruptions or costly future changes.
- New or modified infrastructure should meet Bus Stop & Street Design Guidelines.

02 National Association of Realtors, APTA. (2019). The Real Estate Mantra: Locate Near Public Transportation.

Developers of Buildings or Sites Near Bus Stops

- Project types can include:
  - » Streetscape improvements
  - » Sidewalk additions and improvements
  - » Construction of new streets
  - » Developing property at or near bus stops
  - » Integration of transit features into new development
- Lack of coordination with PRT can cause service disruptions or costly future changes.
- New or modified infrastructure should meet Bus Stop & Street Design Guidelines.
- Opportunity to integrate transit amenities (i.e., shelter, seating, real-time travel information) as part of development.

Pennsylvania Department of Transportation (PennDOT) Improvement Projects

- Project types can include:
  - » Curb and curb ramp reconstruction
  - » New signal installation
  - » Mill and overlay pavement upgrades
  - » Potential for lane reconfigurations or other operational changes
- PRT may be able to contribute funding from PennDOT Connects fund to maximize additional improvements.

Institutional Partner Projects

- Project types can include:
  - » Streetscape improvements
  - » Sidewalk additions and improvements
  - » Construction of new streets
  - » Developments at or near bus stops
  - » Integration of transit features into new development
  - » Institutional Master Plans (IMPs) and Transportation Demand Management (TDM) planning
- Lack of coordination with PRT can cause service disruptions or costly future changes.
- New or modified infrastructure should meet PRT's Bus Stop & Street Design Guidelines.
- Opportunity to integrate transit as part of an IMP.

RESOURCES LIST

These resources are cited throughout this document and may be referred to for more detailed guidance and recommendations.

National Association of City Transportation Officials (NACTO) Design Guidance

- Association of 100 major North American cities, including the City of Pittsb and transit agencies formed to exchange transportation ideas, insights, and practices and cooperatively approach national transportation issues.
- Well-known resource for best practices and design guidance related to how streets, intersections, and transit can facilitate a safe, multimodal transportation network.
- Link to NACTO publications page.

Pennsylvania Public Transportation Association (PPTA) Policy & Design Guidance

- Professional trade organization providing leadership, resources, support, and technical assistance as related to public transportation and mobility management in Pennsylvania.
- Link to PPTA website.
- Building Better Bus Stops Guide (BBBS) (PDF)
- BBBS Quick Reference (PDF)
- Appendix C: Guidance on August 2023 PROWAG Final Rule (PDF)

Americans with Disabilities Act (ADA) Accessibility Regulations

- Federal civil rights law that prohibits discrimination against people with disabilities in several areas, including employment, transportation, public accommodations, communications, and access to state and local government programs and services.
- Link to ADA website.

Public Right of Way Accessibility Guidelines (PROWAG)

- Officailly titled "Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way", but better known as PROWAG, these guidelines were developed by the U.S. Access Board for the design, construction, and alteration of pedestrian facilities (i.e., sidewalks, crosswalks, intersections, etc.) located within the public right-of-way (ROW).
- Link to PROWAG website.

Pennsylvania Department of Transportation (PennDOT) Policy & Design Guidance

- Research and guidance published by PennDOT on all statewide transportation and roadways.
- All state and US roads within Pennsylvania owned and maintained by PennDOT.
- Link to PennDOT website.

2. BUS STOP PLACEMENT

BUS STOP PLACEMENT

BUS STOP SPACING

BUS STOP LOCATION

BUS STOP CURBSIDE DESIGN

Pittsburgh Regional Transit
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As the first point of contact between the passenger and the transit service, the bus stop is a critical element in a transit system's overall goal of providing timely, safe, and convenient transportation. This chapter contains guidance related to determining where a bus stop can be placed, with specifications pertaining to:

- **Bus Stop Spacing**
  - » How far apart should bus stops be spaced from one another?
- **Bus Stop Location**
  - » Where is the most appropriate location for placing a bus stop?
- **Bus Stop Curbside Design**
  - » How should bus stops and platforms be categorized and designed in relation to the curb?

BACKGROUND

- Bus stop placement has a major impact on transit vehicle and system performance, affecting travel time and, therefore, demand for transit. Many systems, including PRT's, formerly operated under a historic system of electric street cars that stopped at most intersections, especially in dense, urban areas. When the bus took over, many former streetcar stops became bus stops.
- Today, PRT's transit system has over 6,500 bus stops.[03] Many of these stops were established by the 33 transit companies which were consolidated to form Port Authority Transit in 1964 and have been maintained at their original location. Since then, stops have been established, moved, or eliminated in response to updated guidelines or requests by PRT personnel, bus ridres, municipal officials, and property owners.
  - » PRT buses only stop at authorized bus stop locations, except in emergencies and reasonable accommodation situations (i.e., snow blocking a bus stop, a vehicular crash, or other unplanned emergency affecting the designated stop area).
- Transit agencies can improve efficiency, travel time, and passenger comfort by increasing the space between bus stops, also known as bus stop consolidation. Research has helped set general guidelines for how far a person is willing to walk to access transit, including in the Pittsburgh region where steep slopes impact pedestrian activity:
  - » According to the Federal Highway Administration (FHWA) Pedestrian Safety Guide for Transit Agencies, most people are willing to walk five to ten minutes, or roughly ¼- to ½-mile, to a transit stop, and would walk farther to access heavy rail.
  - » NACTO guidance related to stops and stations indicates that local bus services with 8+ stops per mile are prime targets for stop consolidation.
- As of 2025, PRT has not yet undertaken a system-wide adjustment of the spacing between its stops, though some have been adjusted on a route-by-route basis. For more information, see PRT's Bus Stop Consolidation webpage.

03 As of October 2025, PRT has 6,514 stops.

BUS STOP SPACING

This section provides standards and considerations for how far apart to space bus stops from one another.

STOP SPACING GUIDELINES

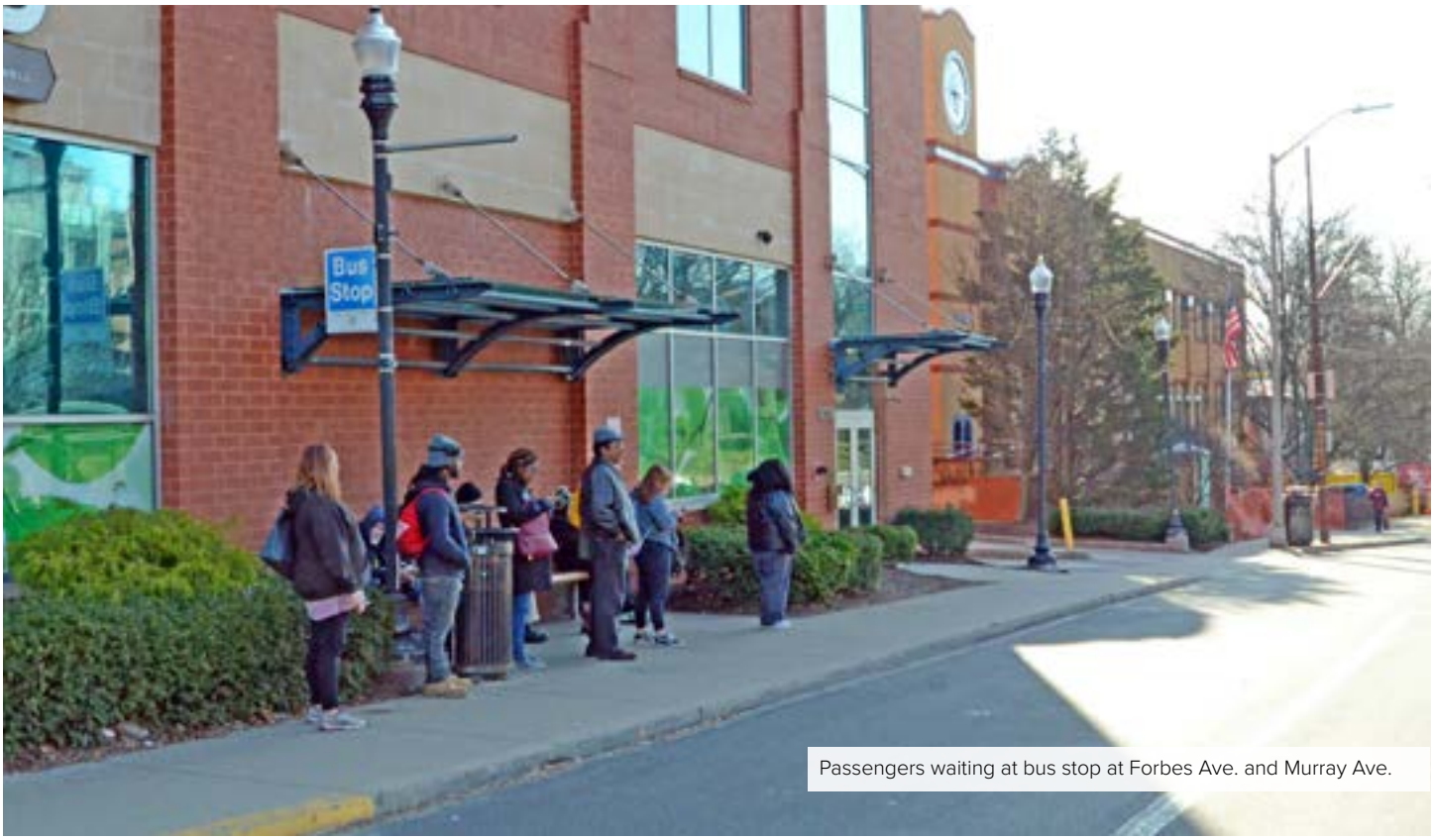
- Bus stop spacing guidelines are typically set based on coverage and service goals for each bus route type. Different classifications of bus routes will have different standard distances between stops. PRT's bus stop spacing standards vary depending on the type of route being served and the population density of that area (see **Figure 1)**:
  - **Rapid routes** intentionally serve fewer stops so buses can maintain higher trip speeds and reduce travel time for riders. Buses on these routes come more frequently, at least three times per hour, but serve a limited number of stops. Bus rapid transit services, such as PRTX, are an example.
  - **Commuter routes** serve stops that are closer together, meaning the bus stops more frequently along its route. Compared to a rapid route, a commuter route is slightly slower and likely less frequent. Routes that provide trips to and from downtown Pittsburgh and Oakland are an example.
  - **Local and coverage routes** are meant to serve the most stops so they can provide people with local access to nearby destinations and key corridors. Buses on these routes make frequent stops and, outside of peak travel times, likely come once every hour.
- Stop spacing may be adjusted based on factors such as:
  - Route type (i.e., rapid, express, or key corridor and local)
  - Service type (i.e., fixed route, on-demand, paratransit, etc.)
  - Service area type (i.e., low or high density of land uses and development)
- Spacing adjustments may be considered on a stop-by-stop basis:
  - Where streetscape work alters the bus stop.
  - If safety issues arise.
  - When signage is replaced.
- Spacing Guidelines show recommended distance between stops, which can vary widely depending on site conditions as noted inthe Considerations section on Page 18.

Figure 1: Bus Stop Spacing Guidelines

STOP SPACING GUIDELINES	High Population Density	Low Population Density	Minimum Spacing
Rapid Routes	2,600' | ½ mile	2,600' | ½ mile	1,000'
Commuter Routes	1,300' | ¼ mile	1,300' | ¼ mile	650'
Local and Coverage Routes	900' | ⅙ mile	1,300' | ¼ mile	650'

STOP SPACING CONSIDERATIONS

- **Stop spacing** impacts both the speed of operation and the convenience of patrons. In general, transit agencies must find balance and a trade-off between:
  - **Close Stops:** Every block or 1/8- to 1/4-mile
    - *Short walking distance + More frequent stops = Longer bus trip*
  - **Farther Apart Stops:** Every 1/2-mile
    - *Longer walking distance + Fewer stops + Higher speeds = Shorter bus trip*
- **Bus stop pairing** allows the transit service to be more intuitive and maximizes convenience for the greatest number of users.
  - Whenever possible, bus stops in each direction should be paired, so that customers board and alight on opposite sides of the street in the same vicinity when making a round trip.
- **Exceptions** to these guidelines should only be made where the following conditions exist:
  - Transit access safety concerns that prevent standard stop spacing, such as lack of sidewalks or safe crossings.
  - Origins or destinations frequented by seniors or people with disabilities.
  - Steep terrain.
  - Restricted rights-of-way.
  - Crowding at bus stops.



Passengers waiting at bus stop at Forbes Ave. and Murray Ave.

BUS STOP LOCATION

This section describes where bus stops are typically located in relation to the road network.

STOP LOCATION TYPES

Bus Stops at Intersections

Bus stops can be placed **Far-Side** (just after an intersection), **Near-Side** (just before an intersection), or **Mid-Block** (between intersections). Stops can either be In-Lane (bus serves the stop while remaining in the travel lane and pulled up against the curb) or Pull-Out (bus enters a pull-out space and is removed from traffic while serving the stop). For more information about in-lane versus pull-out stops, stop platform dimensions, and curbside design, see the next section on **Bus Stop Curbside Design**.

FAR-SIDE STOPS

Far-side stops are located just after an intersection and are usually the preferred stop choice in dedicated transit lanes or transitways.

Figure 2: Diagram of Far-Side Stop Placement (Bus Pulls Out of Traffic - Variant)

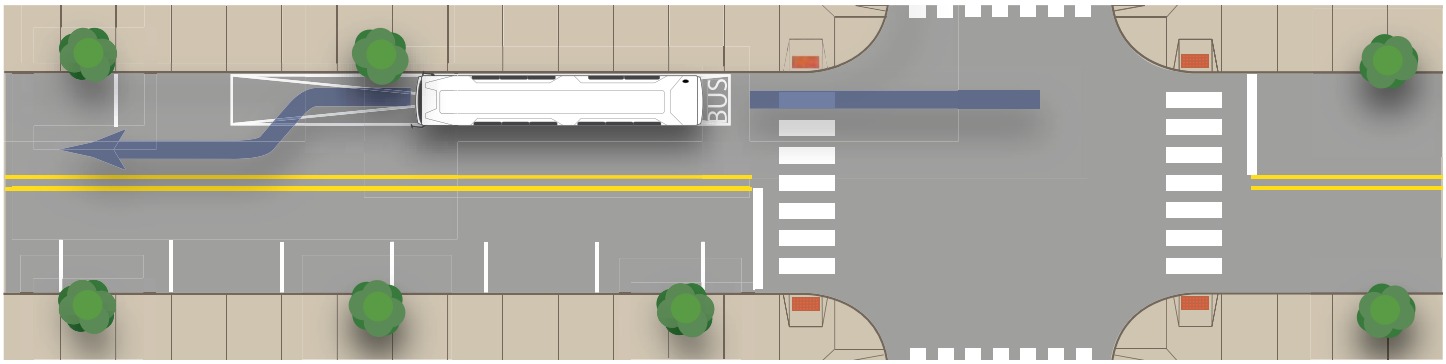


Image: DVRPC

Advantages

- Minimizes conflicts with right-turning vehicles at intersection.
- Minimizes sight line conflicts for drivers and pedestrians.
- Encourages pedestrians to cross more safely behind the bus.
- Creates a shorter deceleration zone for the stop area.
- Gap in traffic flow created by the signal allows the bus to pull back into the travel lane.
- Works well with transit priority queue jumps.

Disadvantages

- Bus may be caught in the intersection, resulting in “blocking the box.”
- Can cause the bus to double stop (once for the signal and once for passenger activity).
- Rear-end incidents may be more frequent if distracted drivers do not realize the bus is stopping beyond the intersection.
- For pull-out stops, buses may have difficulty re-entering traffic until the prior signal cycle is complete.

NEAR-SIDE STOP

Near-side stops are located just prior to an intersection and are often used near popular destinations or at intersections where the bus must turn right.

Figure 3: Diagram of Near-Side Stop Placement Where Bus Pulls Out of Traffic

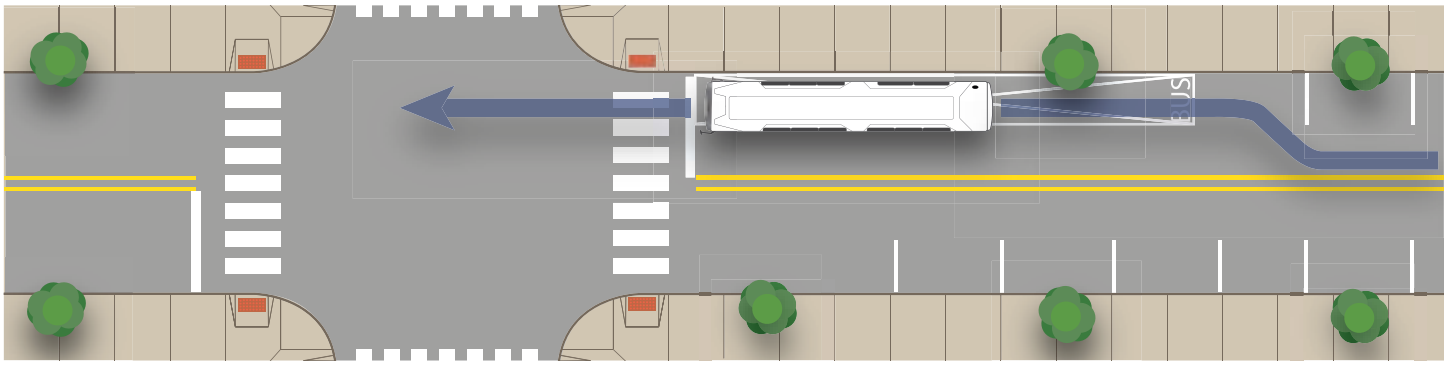


Image: DVRPC

Advantages

- Minimizes traffic interference because buses do not have to stop twice on both sides of an intersection and do not bunch in intersection during high traffic volume time periods.
- Passengers can board the bus closer to the crosswalk.
- Bus can use the intersection for acceleration space after serving the stop.
- Bus driver has the advantage of full view of intersection activity while serving the stop.
- Bus can make a right turn after the stop.

Disadvantages

- Conflicts between the bus and right-turning vehicles may arise.
- Bus can physically obscure general traffic and pedestrian sight lines at intersection.
- Multiple buses queuing during peak hours may obstruct traffic flow.
- Bus may miss multiple traffic signal cycles while passengers board the bus.
- More curb space is needed for the bus to pull into stop.

MID-BLOCK STOP

Mid-block stops are located between two intersections. Generally, far-side and near-side stops are preferred over mid-block stops, but there are instances where mid-block stops are the most feasible and provide the safest boarding and alighting experience for riders.

Figure 4: Diagram of Mid-Block Stop Placement Where Bus Pulls Out of Traffic

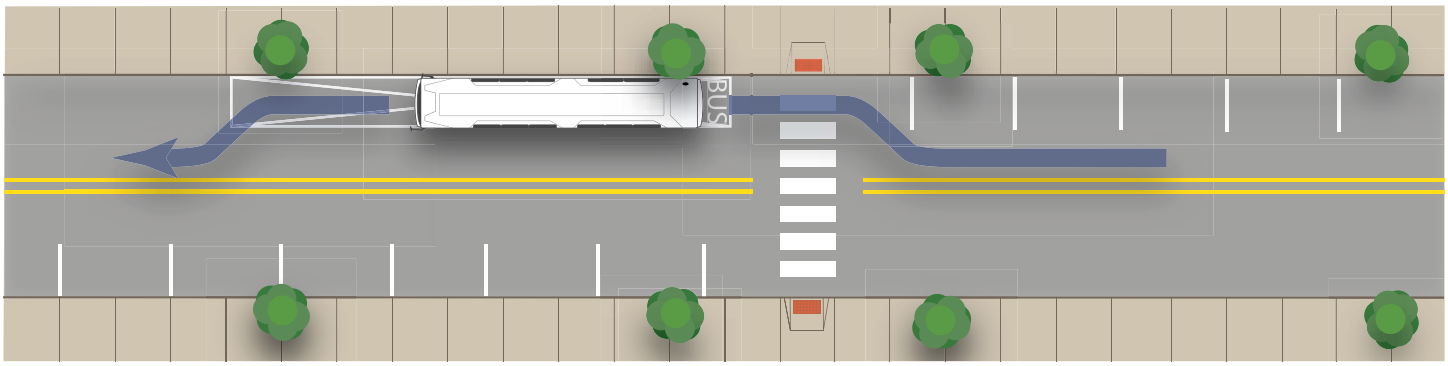


Image: DVRPC

Advantages

- Minimizes sight line obstructions for both driver and passengers.
- Minimizes conflicts with intersections.
- Opportunity for more spacious boarding area because stop is located away from intersection sidewalk congestion.
- For high volume pull-out stops, reduces delays in re-entering traffic when bus has an extended dwell time.
- Provides greater passenger convenience at key mid-block trip destinations.

Disadvantages

- Can present safety concerns if a safe mid-block crossing is not provided; riders may be tempted to access stop without using a crosswalk.
- For pull-out stops, requires more physical space for the bus to accelerate and decelerate.
- Reduces space available for on-street parking because this stop type requires a longer bus zone.
- Per the PPTA Building Better Bus Stops Resource Guide, requires a special engineering analysis to determine feasibility and effectiveness of location.

Bus Stops at Public Driveways

PRT prefers that bus stops are **not** placed near a public or commercial driveway, such as those used to access a parking lot, garage, or drop-off area. Low-volume driveways, such as those for single-family homes, do not present these issues.

If placement near a driveway is unavoidable, the guidelines below should be followed.

- **Ensure that passengers have a safe area within which to wait** when bus boarding must occur in or adjacent to a driveway.
- **Ensure that bus stop infrastructure does not obstruct the view for motorists** entering and exiting the driveway.
- **Place bus stop so driveways are behind the stopped bus.** Locate bus stops to allow adequate visibility for vehicles leaving the property and to minimize vehicle and bus conflicts.
- **Place bus stop so that, while a bus is serving it, at least one driveway is kept open** for vehicles to exit and enter the property if blocking a driveway is unavoidable.
- **Include signage or pavement markings** where appropriate to highlight pedestrian right-of-way.
- **Place bus stop so that the downstream (farthest behind the bus) driveway is blocked** when two exist for the same parcel on a street. This forces vehicles to turn behind the bus to access the driveway (see **Figure 5**).
  - » It is preferable to fully block rather than partially block a driveway to prevent vehicles from attempting to circumvent the bus in a situation with reduced sight distance.

Figure 5: Acceptable Driveway Configurations in Constrained Situations

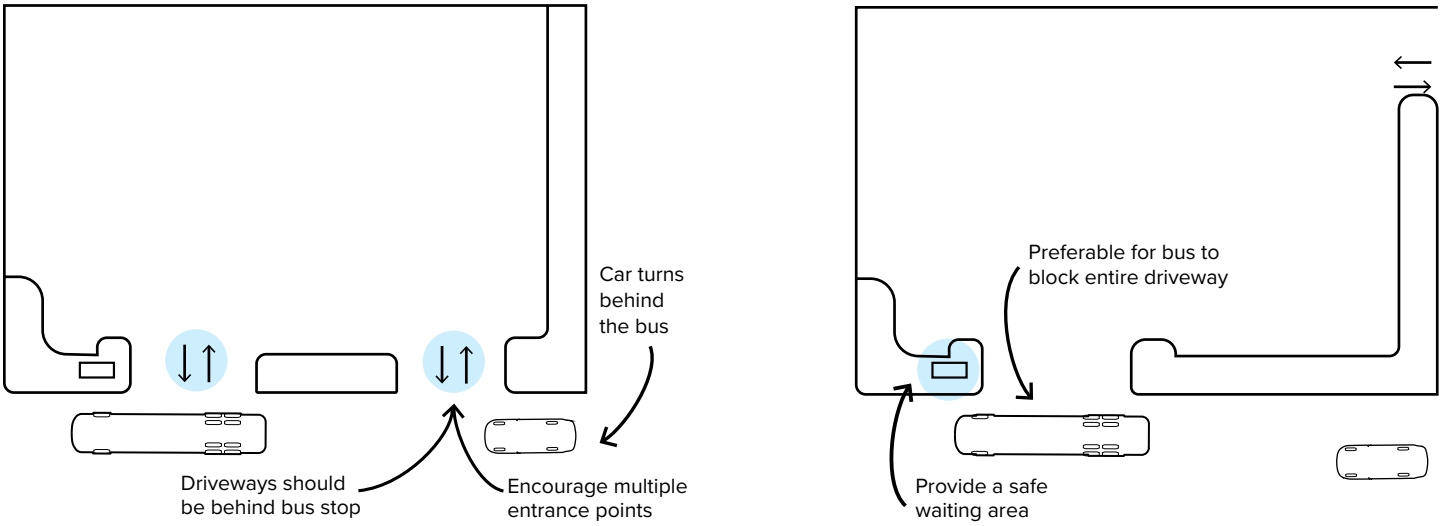


Image: PPTA

Bus Stops Within a Development Site or Plaza

Bus stops help provide safe and direct access to important destinations, such as grocery stores, medical facilities, transit centers, and schools. The following considerations for placing a bus stop within a site should be heeded:

- Within sites, stops can be located directly at the key destination or on the periphery of the destination, as either option has advantages and disadvantages.
- Sites with signalized access are considered safest for bus routes and should be prioritized when routing transit through key destinations.
- Bus routes within a site typically retain the same loop pattern inbound and outbound and loops are often dependent on where signals exist at the site.
  - » Fire lane access and other emergency vehicle access points must not be blocked by transit amenities.
- Constructing safe stop areas for both travel directions at a site may require obtaining and converting excess parking spaces to bus boarding.
  - » Bus stops within sites have layover potential and can be designed as mini “hubs” where passengers have access to more amenities and a comfortable wait.

STOPS AT STOREFRONTS IN DEVELOPMENT SITES OR PLAZAS

Advantages

- Provide convenient pedestrian access to the building entrance for transit riders.
- Potentially minimize impacts to on-site parking.
- Waiting areas, including overhangs or shelters, can be integrated with the building.

Disadvantages

- Creates higher conflict zones for pedestrians and waiting riders, and the potential for higher traffic activity near building entrances
- Longer routing, which can increase bus travel times and delays for riders on board.
- Necessity for agreements with private property owners.

STOPS ON PERIPHERY OF DEVELOPMENT SITES OR PLAZAS

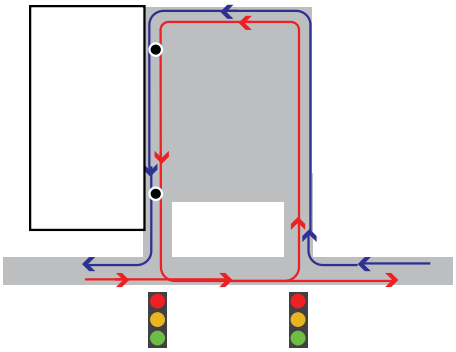
Advantages

- Reduces conflicts between pedestrians and vehicles associated with high activity areas near the building entrance.
- Minimizes impacts to bus travel times and operating expenses.
- Turning radii and travel lane widths may be more optimal for buses because the roads were designed for delivery vehicles.

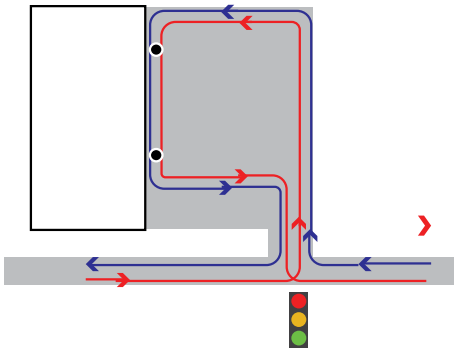
Disadvantages

- Creates potential conflicts with vehicular access, circulation, and parking.
- Can impact or reduce on-site parking spaces.
- Less convenient and attractive for transit riders if bus stop is too far away from the building entrance or in a location that is not visible.

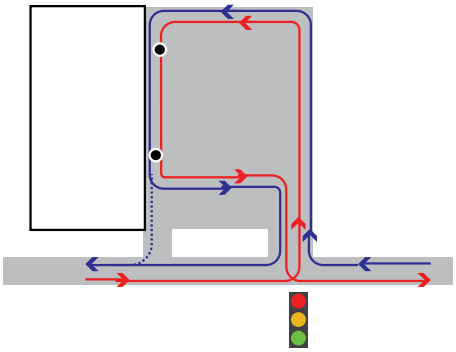
Figure 6: Diagram of Possible Circulation Options Within a Development Site or Plaza



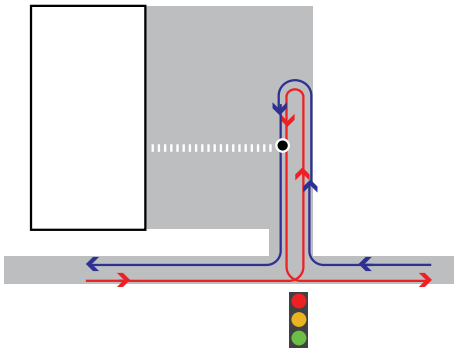
Site with Two Controlled Entrances and One-Way Operation



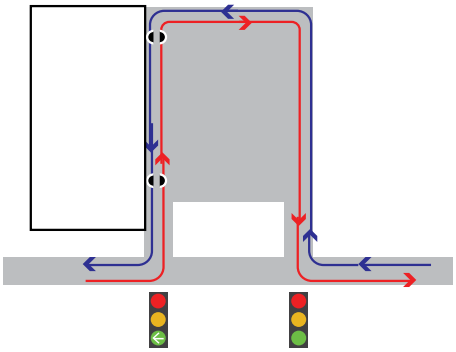
Site with One Controlled Entrance and One-Way Operation



Site with Uncontrolled Right-Out Exit



Site with One Controlled Entrance and One-Way Operation, Stop at Edge



Site with Two Controlled Entrances and Two-Way Operation

STANDARDS

- Regardless of stop location type, buses should stop at least 6' from crosswalks to:
  1. Allow space for riders accessing bike racks at the front of the bus.
  2. Provide a safety buffer for nearby crossing areas.
- See the NACTO Urban Street Design Guide on Bus Stops for more information.
- See the NACTO Transit Street Design Guide Stop Placement & Intersection Configuration section for more information.

CONSIDERATIONS

Stops need to make the best use of available space and avoid sight distance issues. Buses stopped at intersections may block visibility for both pedestrians attempting to cross the street and vehicles attempting to enter the roadway. Placement of the stop should balance the need to be near the intersection for passenger access and the need to maintain safe visibility.

Factors that contribute to bus stop placement include but are not limited to:

- Adequate curb space for multiple buses arriving at once
- Impact of the bus stop on adjacent properties
- On-street vehicular parking and truck delivery zones
- Bus routing patterns, particularly turns
- Directions (i.e., one-ways) and widths of intersecting streets
- Types of traffic signal controls (i.e., signal, stop, or yield)
- Volumes and turning movements of other traffic
- Width of sidewalks; availability of space for amenities
- Proximity to safe crossings
- Pedestrian activity through intersections
- Proximity and traffic volumes of nearby driveways

Are you trying to place a bus stop somewhere in Allegheny County?

See PRT's Flow Chart for Stop Design, Permitting, and Construction Decision-Making
(Page 80)

Two articulated buses at PRT's East Liberty Busway Station

BUS STOP CURBSIDE DESIGN

This section covers guidance related to “front of curb” needs, or how buses service curbside stops. Generally, buses either stop in the travel lane or pull-out of the travel lane to service a stop.

IN-LANE VS. PULL-OUT STOPS

Stops can either be **In-Lane** (bus serves the stop while remaining in the travel lane and pulled up against the curb) or **Pull-Out** (bus enters a pull-out space and is removed from traffic while serving the stop).

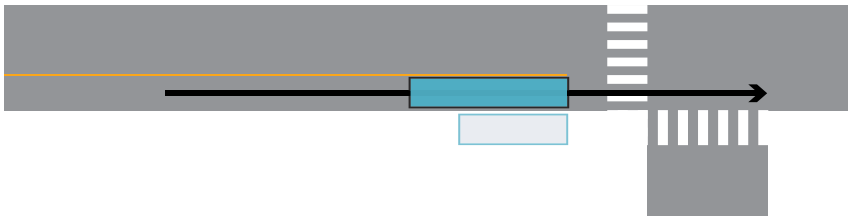
In-Lane Stops

In-lane stop configuration for far-side, near-side, and mid-block stops share similar advantages and disadvantages. In-lane stops provide the most benefit to transit operations.

Advantages

- Help avoid travel time delays for buses because they do not have to wait to re-enter traffic.
- Less curb space needed for stopping.
- Easier to service stops in dense areas.
- Leaves curbside space for multimodal amenities.

Figure 7: Example Near-Side Curbside In-Lane Stop



Disadvantages

- May cause traffic conflicts if vehicular traffic stopped behind bus tries to get around.

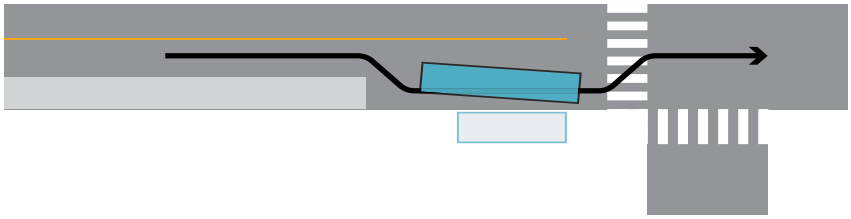
Pull-Out Stops

Pull-out stops provide greater benefits to traffic flow since the bus removes itself from the travel lane when it stops. This design, however, can negatively impact bus operations and on-time performance.

Advantages

- Transit riders may have more time to board and alight buses.
- Flow of traffic maintained for other vehicles.

Figure 8: Example Near-Side Parking Lane Pull-Out Stop



Disadvantages

- Difficult for buses to get back into the travel lane, which impacts on-time performance.
- More conflict points with other vehicles as buses re-enter traffic flow.
- Creates conflicts where a right-turn lane is present approaching the intersection.
- Cannot be used directly before a left turn in the bus' routing.
- Difficult to accommodate multiple buses at each stop.

Platform Typologies

This section describes more detailed configurations of in-lane and pull-out curbside stops, building on the above. For required lengths to design the various platform typologies listed below, see the **Platform Length** section.

CURBSIDE IN-LANE STOP

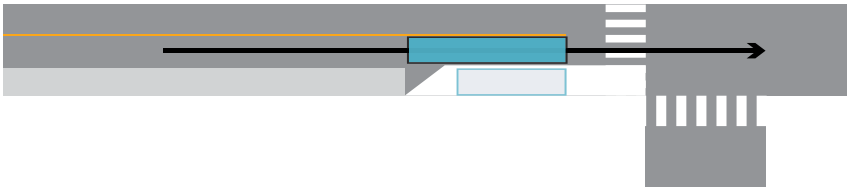
- Bus remains in a travel lane to serve the stop (see **Figure 7**).
- Allows for accessible boarding, when stop has ADA-compliant boarding area and appropriately signed and enforced to be clear of parked vehicles.
- Usually designed on streets without parking, at least for the segment where the stop is located.
- When located in a curbside right-turn lane:
  - » If bus continues straight, provide sufficient space for bus to merge left into the through lane (typically at least 100' before an intersection).
  - » The transition from the right lane to the through lane may take place in or after the intersection where space and lane configuration permits, and traffic volumes safely allow.

Highland Ave and Baum Blvd Curbside In-Lane Stop

BOARDING BULB STOP

- Bus stops at a boarding bulb where a curb extension is used to allow the bus to stop in-lane.
  - » Curb extensions provide:
    - A seamless route from sidewalk to bus
    - Additional space for amenities in constrained conditions
- Allows for accessible boarding, when stop has ADA-compliant boarding area and is clear of parked vehicles.
- Usually designed on streets with parking where the bus cannot pull to the curb.
- For more information, see **Boarding Bulb** section.

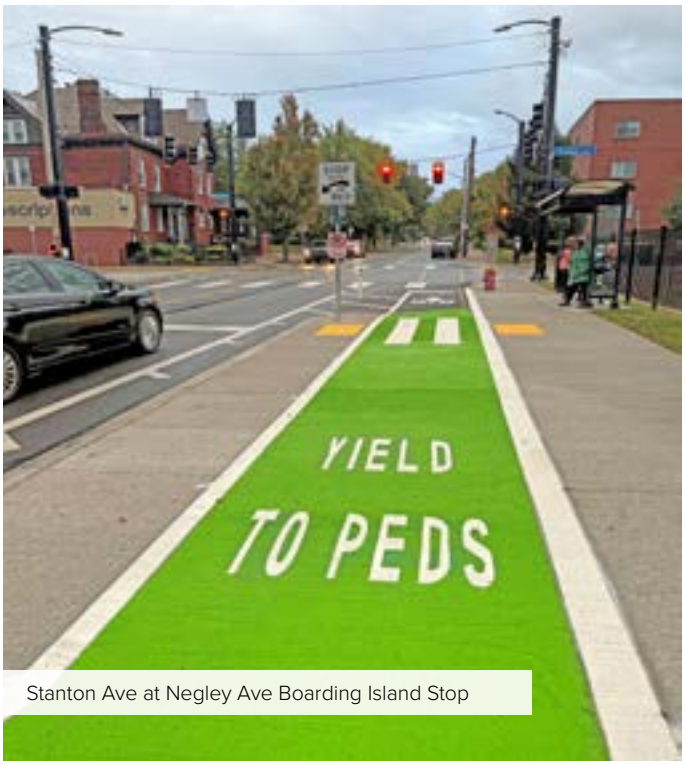
Figure 9: Example Near-Side Boarding Bulb Stop



BOARDING ISLAND STOP

- Bus stops in-lane at a boarding island, typically with vehicular or bicycle traffic routed behind it.
  - » Can be used in lieu of curb extensions where drainage presents challenges.
  - » Boarding island is separated from the sidewalk with a small gap for drainage.
  - » Allows bus to stop in-lane with near-level or level boarding.
- Allows for accessible boarding, when stop has ADA-compliant boarding area and is clear of parked vehicles.

Penn Ave at Highland Ave Boarding Bulb Stop



Stanton Ave at Negley Ave Boarding Island Stop

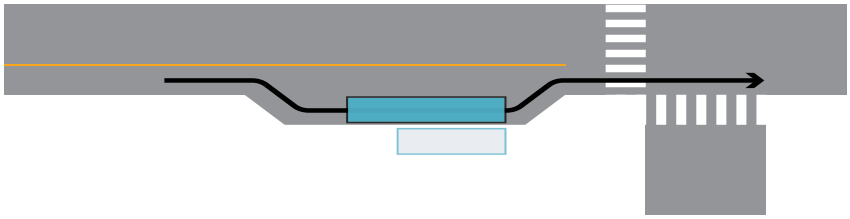
PARKING LANE PULL-OUT STOP

- Bus uses a parking lane to pull to the curb (see **Figure 8**).
- Pull-out area should be signed as a No Parking Zone of sufficient length (see **Figure 11**).
- May require parking enforcement to keep clear of other vehicles.
- Bus may stop in-lane to serve the stop when blocked, requiring riders to maneuver around parked cars when boarding or alighting.
  - » Where frequently blocked by parked cars, stop may not be ADA accessible.
  - » If the wheelchair ramp is needed, though not desirable, it may be deployed onto the street near a curb ramp, where space permits.

BUS BAY PULL-OUT STOP

- Bus pulls out of traffic into a dedicated bus bay to serve the stop (see **Figure 10**).
- Allows for accessible boarding, when stop has ADA-compliant boarding area and is clear of parked vehicles.
- May require parking enforcement to keep clear of other vehicles.

Figure 10: Example Near-Side Bus Bay Pull-Out Bus Stop



Ellsworth at Busway Parking Lane Pull-Out Stop

Ellsworth at Busway Bus Bay Pull-Out Stop

STANDARDS

Desired Platform Length

- **Platform Length** refers to the length of roadway or curb necessary for a bus stop area including the bus stop boarding area, plus any setbacks and transition areas.
- **Figure 11** below indicates minimum desired platform length by vehicle dimension for pull-out and in-lane near-side, far-side, and mid-block stops.
  - » For details and instructions for determining required length for other configurations, see the **Platform Length** section in the Appendix.
  - » See NACTO's Transit Street Design Guide Stop Design Factors for more information.
- Some bus stops may need to accommodate multiple buses stopping at once, depending on hourly bus volumes.
  - » If at least 15 buses arrive per hour (or a bus every four minutes) at peak travel times, then a longer bus stop platform that can serve two buses at once may be required.
  - » Stops with higher dwell times (e.g., where more wheelchair ramp deployments occur) or large boarding loads (i.e., many people getting on the bus at once) should also be considered.

Figure 11: Desired Minimum Platform Length by Stop Type and Bus Dimension (Feet)

Pull-Out Stop Platform Length Applies to Curbside Stops in a Parking Lane and Bus Bays				
	40' Standard Bus	60' Articulated Bus	2 x 40' Standard Bus	2 x 60' Articulated Bus
Near-Side	100'	120'	150'	190'
Far-Side	90'	110'	140'	180'
Mid-Block	120'	150'	180'	220'

In-Lane Stop Platform Length Applies to Curbside Stops in a Travel Lane or at a Bus Bulb or Boarding Island				
	40' Standard Bus	60' Articulated Bus	2 x 40' Standard Bus	2 x 60' Articulated Bus
Near-Side	40'	62'	90'	132'
Far-Side	56'	76'	106'	146'
Mid-Block	40'	62'	90'	132'

Platform Length Notes:

1. *For pull-out stops adjacent to an intersection, entry or exit transitions can take place through the intersection when one end is open (i.e., not enclosed).*
2. *In-Lane Stop Platform Lengths account for serving all bus doors.*
3. *After turns, stops may require extra length (typically around 50') to allow buses to pull parallel to the receiving curb and bus stop. Depending on street configuration, check in field or with AutoTurn software to ensure the stop has sufficient platform length.*
4. *For dimension details and breakdowns, see* **Appendix *Page 92–Page 90.***

Platform Height

- The height of the curb at a bus stop plays an important role in establishing the accessibility of a stop. Best practices call for level boarding between the curb and the bus so a person with mobility restrictions or who is in a wheelchair can easily get onto the bus without needing to step up.
  - » Aim to minimize step height for riders and, if possible, achieve level or “near-level” boarding.
  - » PRT buses can “kneel” to reduce boarding height to 8–12", depending on bus type.
- Curb extensions can be helpful when roadway characteristics require adaptation to establish level boarding. When designing curb extensions, the resulting curb reveal may be very small due to the height of the existing curb and road crown.
  - » Consider tactics to reduce the step height to board a bus and mitigate stormwater concerns such as a raised curb extension and modified or additional drainage.

Boarding Bulb Bus Stop at Penn and Euclid Ave

CONSIDERATIONS

- Bus stops may be located curbside, or along existing curb lines, where conditions allow. Curbs can be modified, as with a boarding bulb or curb extension, to accommodate:
  - » More space (i.e., if a stop's ridership increases)
  - » Different types of buses
  - » Bicycle and pedestrian safety improvements
- Municipalities are responsible for No Parking Zone designations, as well as pavement markings for the bus stop.
- To meet ADA guidelines, it is important to prohibit parking at pull-out bus stops for the lengths noted in **Figure 11** on page 29. More details are available in Appendix under "Platform Length" on page 92.

MODULAR PLATFORMS

- Modular platforms are made up of modules that fit together to allow for a variety of configurations; they are easy to install and remove and act as extensions of the curb or sidewalk (see image to right).
- Modular platforms should be considered where:
  - » Funding is limited.
  - » Extensive utility coordination is required for permanent platforms.
  - » Field-testing can help determine if and how future improvements may improve rider experience and bus operations.
- Modular platforms can improve operational performance of buses and stops by:
  - » Allowing for an in-lane stop.
  - » Meeting required ADA boarding area clear zone requirement.
  - » Providing more room for waiting passengers at a busy stop.
- Modular components can be placed to utilize existing utility access holes, handhole, and storm water inlets, allowing for easy maintenance and repairs as needed.
- Modular platforms should be at least 30' in length.

Modular Platform in Downtown Pittsburgh

3. BUS STOP DESIGN

BUS STOP DESIGN

BUILDING ACCESSIBLE STOPS

CATEGORIZING BUS STOPS

IMPLEMENTING BUS STOP IMPROVEMENTS

Pittsburgh Regional Transit
345 Sixth Ave, 3rd Floor
Pittsburgh, PA 15222

https://www.rideprt.org/

412-566-5500

The bus stop is a rider's first impression of their transit trip; its design, therefore, plays a critical role in ensuring a positive rider experience. It is vital that people know their stop is safe, accessible, and connects them to timely transit service. This chapter contains guidance related to bus stop design, with specifications pertaining to:

- **Building Accessible Stops**
  - » What are the critical elements of an accessible bus stop?
- **Categorizing Bus Stops**
  - » How are different types of stops determined and classified?
- **Implementing Bus Stop Improvements**
  - » How can substandard bus stops be improved?
  - » What other improvements can I implement at a bus stop?

BACKGROUND

- It is important for public agencies, like PRT, to heed federal and industry-accepted guidelines for how to make design choices that are universally accessible to all people.
- PRT has ensured that these Bus Stop & Street Design Guidelines comply with or exceed the minimum standards detailed in the Americans with Disabilities Act (ADA) accessibility regulations and the Public Right-of-Way Accessibility Guidelines (PROWAG), created by the U.S. Access Board.
  - » All new, newly renovated, or temporary facilities must be designed to remain accessible in accordance with PROWAG guidelines.
- These guidelines are also consistent with the 2023 PRT Transit Service Guidelines as well as the 2020 PPTA Building Better Bus Stops Resource Guide.
- Available roadway right-of-way affects the type of improvements that are possible. For example, some roads, especially older ones that predate vehicles, may be too narrow to have enough right-of-way to include a sidewalk on both sides of the street.
- Keep in mind that PRT does not own any publicly accessible roads, so changes within the right-of-way must be coordinated with and approved by the roadway owner, such as the City of Pittsburgh, Allegheny County, or PennDOT.

CONSIDERATIONS

The following key issues must be considered when designing a bus stop:

Comfort and Safety

- Well-being at a bus stop (i.e., lighting, visibility, etc.)
- Available space for waiting passengers
- Stop access (i.e., safe crossings, sidewalk network connection)
- Accessible design
- Weather protection
- Adjacent traffic flow (i.e., speed, volume, noise, pollution)

Service

- Routing patterns
- Route types (i.e., rapid, commuter, local, coverage)
- Service types (i.e., fixed route, on-demand, paratransit, etc.)
- Service area types (i.e., downtown, urban mixed use, urban neighborhood, transit neighborhood, suburban neighborhood, suburban employment)
- Frequency of buses servicing stop
- Ridership

Policy

- Stop amenity guidelines, based on stop-level ridership (see **Stop Amenities and Ridership** section)
- Parking enforcement at highly urban stops
- Interactions with adjacent properties (i.e., conflicts with businesses or homes near stops, needing

An articulated bus serving a stop at at Fifth Ave. and Bigelow Blvd.

BUILDING ACCESSIBLE STOPS

This section provides guidance on what universal design is and how it applies to building stops that are accessible for all.

UNIVERSAL DESIGN

- Universal design is the concept that anything people design, build, and use, especially within public places and spaces, should be easy to use and accessible for all.
- All transportation-related facilities, including bus stops, should be designed so that they can be easily accessed and used by those with disabilities as well as those who may be temporarily encumbered, such as someone carrying a large load of groceries, a parent with a stroller, or someone temporarily using crutches.
  - » Applies to signage at bus stops, which should:
    - Be simple and intuitive
    - Maximize legibility
    - Be compatible with devices used by people with sensory limitation
    - Accommodate people with ranging levels of literacy and language ability
    - Provide clear lines of site to any sitting or standing user
- Special considerations should be given to ensure accessible design at stops that serve groups of people who stand to benefit most from the improvement, such as people with disabilities, seniors, and/or riders with groceries or children.
- All bus stops should meet the minimum features of accessible stops (see the following section).
  - » Where right of way or terrain is constrained, upgrading a stop to be an accessible stop may require relocating the stop.

A bus passing a shelter at Fifth Ave. and Tennyson St.

MINIMUM FEATURES OF ACCESSIBLE STOPS

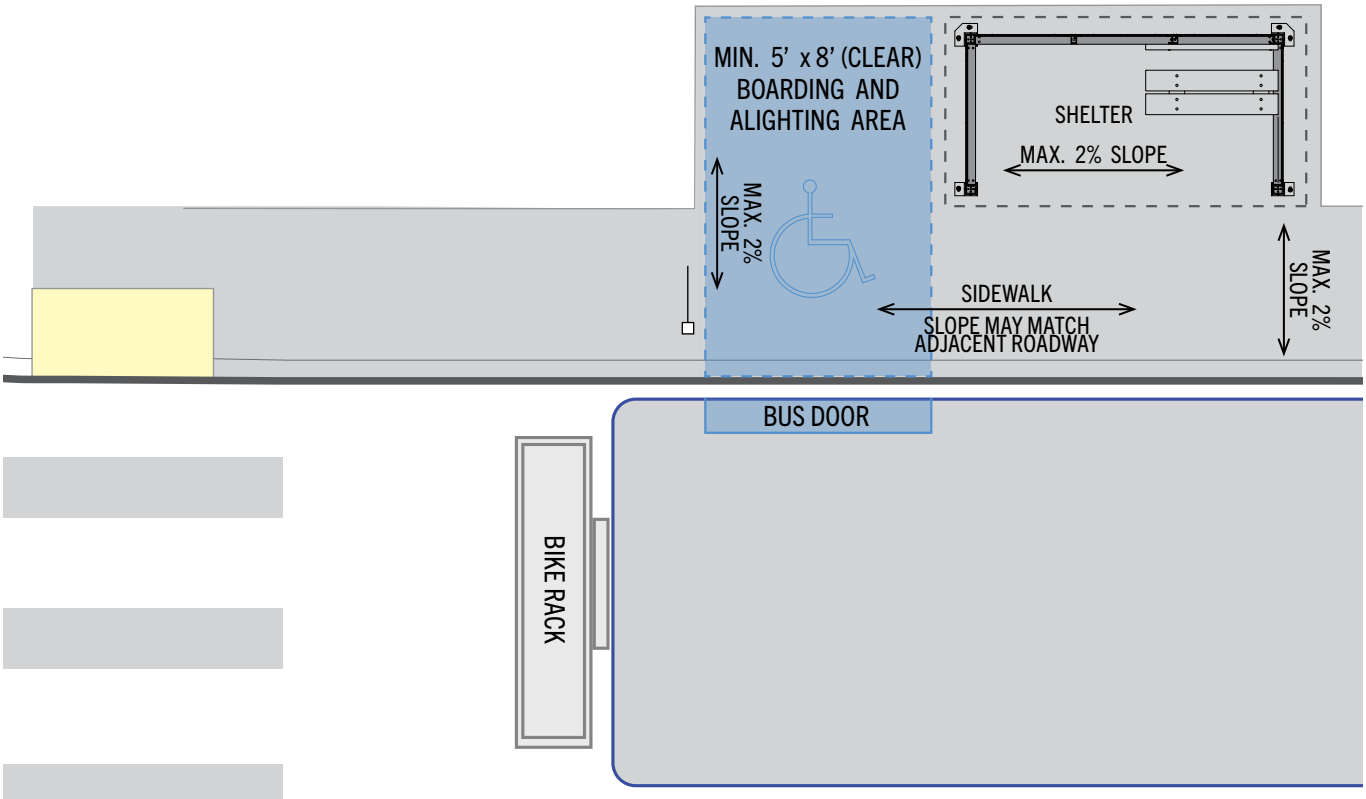
The minimum features required for an ADA-accessible bus stop include:

1. **Boarding Area 5' wide by 8' deep that is firm, stable, and slip-resistant.**
   - Located at or before a stop bar, or at least 6' before a crosswalk, where present.
   - Has a 2% (maximum) cross slope perpendicular to the bus (see **Figure 12**).
   - For more information, see **Boarding Area** section.

2. **Bus Stop Signage that is easy to understand and offers clear lines of sight for sitting or standing users.**
   - For more information, see **Bus Stop Sign** section.

3. **Clear Path connected to pedestrian network (i.e., sidewalk, curb ramps, crosswalks, etc.)**
   - Sidewalk connection with a minimum sidewalk width and clear space of 36".
   - For more information, see **Pedestrian Path** section.

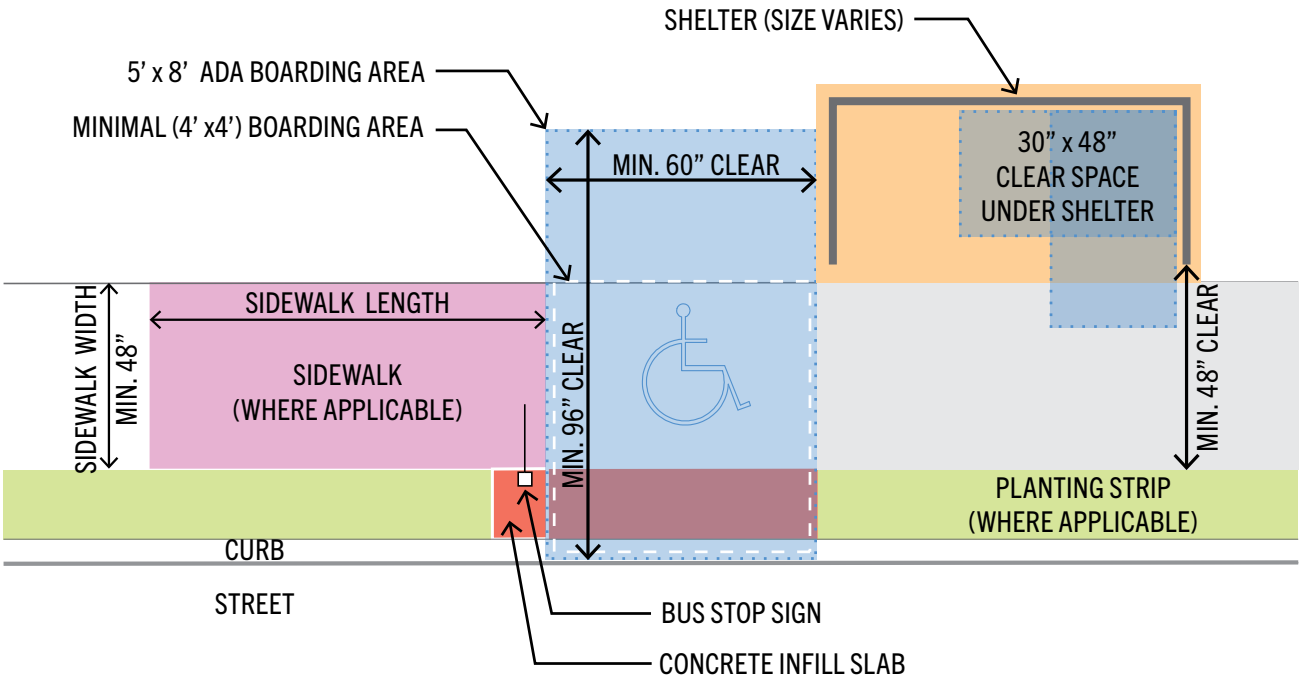
Figure 12: Example of an Accessible Stop



CRITICAL BUS STOP ELEMENTS

This section provides more detailed information on critical elements of bus stops, including the bus stop sign, boarding area, pedestrian path, and curbside stop frontage.

Figure 13: Critical Bus Stop Elements Diagram



Bus Stop Sign

- Bus stop signs are sometimes referred to as bus stop "flags."
- Bus stop signs should include the unique bus stop ID number and a QR code to access real-time arrival information by smartphone. Additional signage with information showing the routes served at the stop, bus schedule, rider information, and identification numbers (referred to as "At Stop Panels") are often attached to the signpost.
  - » PRT adopted a new branding style in 2022 with updated sign guidelines. Many older-style bus stop signs still exist and are in the process of being replaced (see images).
  - » Some older signs lack Stop ID numbers.
- Bus stop signs should be:
  1. Approximately 7' above the ground from the bottom of the bus stop sign.
     - ▶ Braille Stop ID plaques, when present, should be 48" above the ground.
  2. Placed at least 2' clear from the edge of the curb. Channel may be at back of sidewalk to maintain a clear path if needed.
  3. Adjacent to the front boarding area to clearly indicate stop.

Old PAAC Bus Stop Sign

Current PRT Bus Stop Flag

Boarding Area

- Bus stops should include a 5' by 8' boarding area on a firm and stable surface adjacent to the bus stop sign (§810).
  - » Where existing sidewalk space is limited, sidewalk should be widened, or a bulb-out used, to expand sidewalk depth to at least 8' to provide space for an ADA boarding area.
  - » **Note:** Where right-of-way or topographic constraints restrict available sidewalk depth, a minimum 48" wide by 48" deep area may be acceptable—**coordinate with PRT directly.**
- Boarding areas at bus stops should typically be located at or before a stop bar, or at least 6' before a crosswalk, where present.
- High ridership stops may want to exceed the minimum recommended boarding area dimensions to provide ample waiting area.
- For more information on boarding areas, see **Boarding Bulb** section.

Pedestrian Path

- Bus stops should connect to a pedestrian network of sidewalks via a continuous path with ADA-compliant curb ramps and safe crossings at intersections.
- Pedestrian paths should be:
  1. A firm, stable, and slip resistant surface connected to the boarding area.
  2. A minimum width of 48" (4 feet), or more as called for by local sidewalk standards.
     - ▶ A path may be reduced to 32" wide for short distances no more than 24" long.
     - ▶ A wider path is desirable to provide space for passing.
  3. Free of all obstructions up to 80" (6'-8") high.
- Medians and pedestrian refuge islands shall have a minimum width of 60" (5 feet).
- Protrusions into the pedestrian path that are greater than 27" but less than 80" should not protrude more than 48" into the pedestrian path. Exception is handrails (§R307).
- Must have a passing space at least 60" wide, every 200' (§R403.5).

Curbside Stop Frontage

- Curbside stop frontage should:
  1. Maintain a desired length of 30' along the curb that is kept free from obstructions to provide free access to the bus's front and rear doors at the stop.
     - ▶ In constrained conditions, a shorter curb length of 14' is acceptable to serve the front door only (10' for front door clearance and 4' for front of bus bike rack clearance).
  2. Maintain a clear zone along the length of a stop that is 11' high and 24" (2 feet) from the curb's edge, so bus mirrors do not hit any objects when pulling to the curb.

CATEGORIZING BUS STOPS

Bus stops are classified not only by the type of route serving them but also according to the number of riders they serve and the amenities available to those riders. Stop-level ridership, or the number of people who get on and off the bus, plays a significant role in whether a stop has certain amenities.

STOP TYPES

Stops are categorized from most to least basic in terms of the amenities they support and the number of daily riders they serve (see **Figure 15**). Basic stop types serve fewer riders and have fewer amenities, while stops serving hundreds of riders tend to have the most amenities. See the following section on **Stop Amenities and Ridership** for more details.

Basic Stop

- May only have a Bus Stop sign attached to a pre-existing pole without other amenities.
- Older basic stops may be non-compliant with ADA standards (i.e., no ADA-compliant boarding area, no sidewalk or crosswalk nearby, no or outdated curb ramps, etc.)
- Generally utilized in areas with lower population density and lower ridership.

Seating Stop

- Basic transit stops with the addition of seating and often a trash receptacle for waiting passengers.
- In some cases, additional amenities such as lighting or bicycle racks may be warranted.
- Best suited for areas with low to medium density and ridership.
- Where warranted, such as at stops with high senior citizen ridership, include more seating for riders.

SEATING CONSIDERATIONS

- Seating at bus stops must maintain ADA requirements for clear space.
- Seating can be next to or behind the clear space with 18" provided from the front edge of the seat and 18" from the front edge of the seat to the clear space (R309.2.2).
- Seating should be made of a durable material, with or without a back, and placed in such a way to:
  - » Avoid obstruction of the primary pedestrian path.
  - » Maintain required clear paths and clearance around seating.

PRT Seating Stop

Shelter Stop

- Shelter stops are generally located in areas with higher ridership and medium to high density.
- Should include an ADA-compliant concrete boarding area, bench, and trash receptacle.
- Additional amenities like lighting and bicycle racks are highly encouraged.

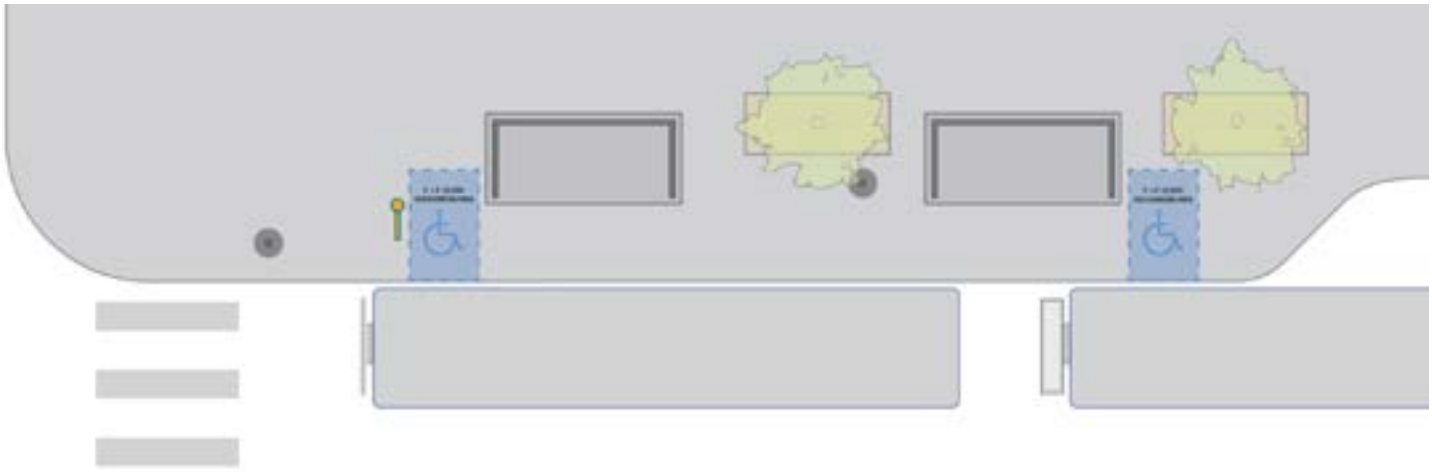
PRT Shelter Stop

Super Stop

- Super stops are appropriate for denser areas with a high number of boardings, where additional or more robust amenities are installed to accommodate a higher number of waiting passengers.
- Will include larger or multiple shelters as well as ample seating to accommodate high numbers of waiting passengers.
- Provides space for a second "stacked" bus to load and unload behind another bus.
- Additional amenities like real-time arrival information, fare vending, lighting, and bicycle racks are highly encouraged.

PRT Super Stop at Smithfield St and Sixth Ave

Figure 14: Diagram of a Super Stop



STOP AMENITIES AND RIDERSHIP

Figure 15 below ties bus stop classification to required and recommended amenities as well as daily ridership, which is a critical factor for determining whether a stop merits certain amenities. In some cases, different types of stops and amenities may be warranted depending on additional factors related to land use, zoning, potential ridership, and/or access to transit service for certain groups of people, including but not limited to:

- **Density:** Population and/or employment per square mile
- **Land Use and Development:** Employment center, mixed use development, or other major activity center within 1/4-mile distance of stop
- **Population Considerations:** Percent seniors, people with disabilities, youths, and/or low-income population within 1/4- to 1/8-mile of stop
- **Transit Connections:** Whether transfers to other PRT routes, rail, paratransit, regional transit provider or feeder service available at stop
- **Zoning:** Within Specially Planned Districts (SPD)

Figure 15: Stop Types by Required and Recommended Amenities and Daily Ridership

AMENITIES	BASIC STOP	SEATING STOP	SHELTER STOP	SUPER STOP
DAILY RIDERS	3-10	11-30	31-499	500+
Bus Stop Sign	■	■	■	■
Boarding Pad	■	■	■	■
Pedestrian Path	■	■	■	■
Seating	▲	■	■	■
Trash Can		■	■	■
Shelter		▲	■	■
Lighting		▲	■	■
Bike Rack			▲	■
Wayfinding Signage			▲	■
Real-Time Rider Info				▲
Fare Vending				▲
Landscaping				▲

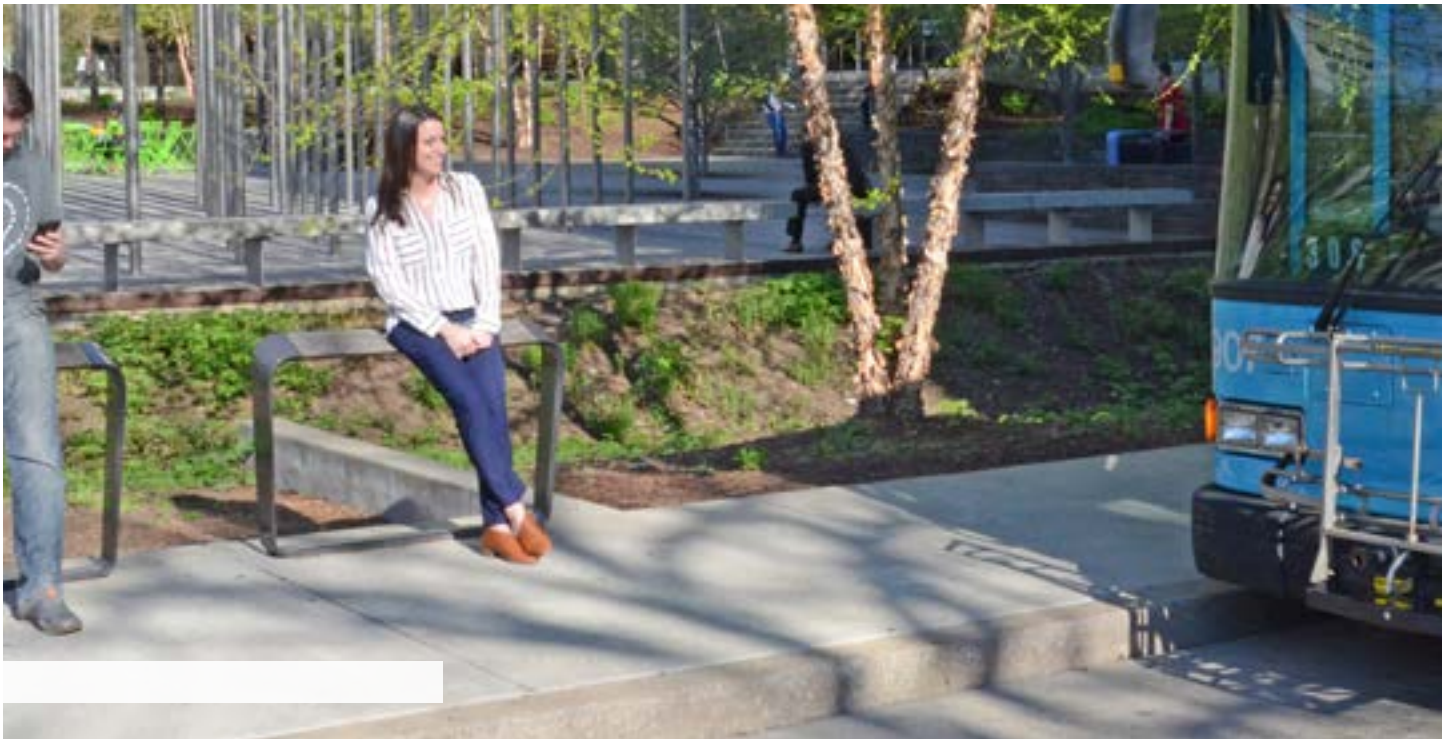
■ Required ▲ Recommended

Note that amenities at bus stops must be placed in such a way that they do not block any clear zone or other amenities, in accordance with ADA and PROWAG guidelines. Key amenities are expanded upon below, alongside a visual depiction and any important design characteristics.

Seating

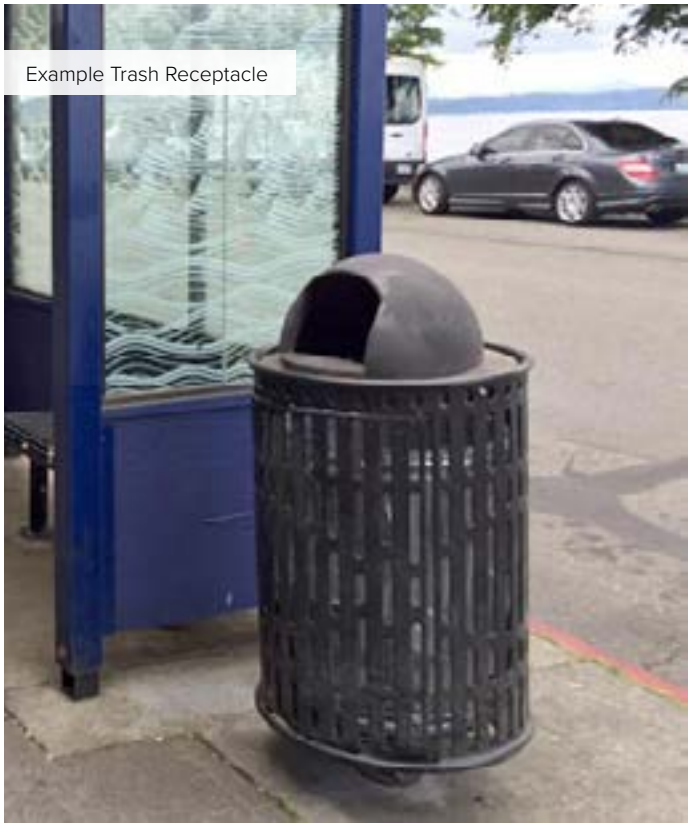
- Whether to place seating at stops, and what kind, depends on availability of space, ridership, and cost.
- There are three main seating variations PRT uses:
  - » **Standalone Bench:** A bench that has two or three seats with handrails for seniors and those with disabilities.
  - » **Compact Seat:** A single or double seat freestanding or attached to the pole holding the bus stop sign, generally used at lower ridership stops. Recommended minimum for stops frequently used by elderly or disabled people.
  - » **Lean Bar or Rail:** Provides a place for riders to lean while they wait at stops with little to no seating and where stop width is limited.

Compact Seat at Lincoln Ave and Jackson in Bellevue



Trash Can

- Trash cans are recommended at high-ridership stops, transfer locations, and other places of high activity where trash may accumulate.
- PRT coordinates with local communities and jurisdictions to place and maintain trash cans. PRT does not install or maintain trash cans except on PRT property.
- Maintenance and trash pickup are critical considerations whenever trash receptacles are provided. A local maintenance partner should be identified prior to installation.
- Trash receptacles should be secured to the pavement to prevent accidental tripping or unauthorized movement.



Example Trash Receptacle

Shelter

- A bus shelter is a covered passenger waiting area often semi-enclosed with a bench that provides protection from the sun, wind, and rain.
- The size and design of shelters will vary depending on space, availability, and the number of passengers to be accommodated.
- Shelters typically include integrated seating.
- See **Standard Shelter Types** in the Appendix for shelter details.

Example PRT Shelter

Lighting

- Pedestrian-oriented lighting should be provided at bus stops to increase security and allow a transit vehicle operator to clearly see a bus stop and waiting passengers.
  - » Light fixtures should be at such a height to allow visibility of riders' faces but not in a way that causes obstruction.
  - » Natural lighting should be utilized to the best extent possible for enclosed areas and supplemented if inadequate.
- Where possible, bus stops and streetlights should be co-located.
  - » PRT does not install or maintain lighting except on PRT property.

Example of Pedestrian Lighting

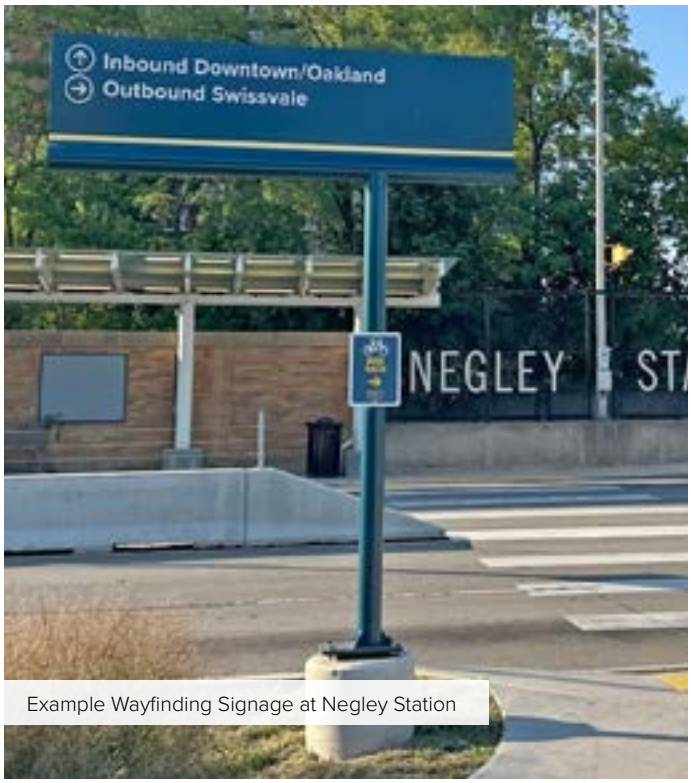
Bike Rack

- Bike racks can be provided near bus stops to encourage bicycle connections to and from transit. To discourage people from locking bikes to bus stop sign poles, bike racks are recommended on neighborhood main streets and other popular destinations.
- Bike racks should be located outside of bus boarding areas and door zones, with sufficient clearance from nearby objects to allow maneuvering of the bike. See **Appendix A** for door clear zones and dimensions.
- Weather protection and security from theft and vandalism should be considered when selecting the type of rack and proposed location.
  - » Bike racks should be in well-lit areas with high visibility.
- PRT recommends inverted-U style bike racks.
  - » Refer to APBP's Essentials of Bike Parking or the Pittsburgh Bicycle Parking Guidelines for more details about bike rack design and installation, including dimensions and clearances.
- Consider coordinating with Bike Share Pittsburgh, Inc. to co-locate POGOH bikeshare stations and busy bus stops.

Example Bike Rack

Wayfinding Signage

- Wayfinding signage is encouraged at busy locations like transfer stops to direct riders to other PRT services and nearby destinations.
  - » Wayfinding should be designed on the human scale and can include icons as well as multimodal travel times (i.e., five-minute walk or two-minute bike ride to the stadium).



Example Wayfinding Signage at Negley Station

Real-Time Rider Information

- At high usage transit stops, PRT can implement Intelligent Transportation Systems (ITS) like real-time "next vehicle" displays.
  - » Allows for better trip planning and connections since passengers can track the bus's actual arrival time while waiting at the stop.
- PRT's open data resources make real-time bus arrival information publicly available, meaning that partners like adjacent property owners can display real-time arrival information on any screen connected to the internet.
  - » To access data to display arrival times in a customizable manner, visit PRT's Web Developer Resources webpage.
  - » A simple real-time arrival platform is available on PRT's TrueTime Stop Times webpage.

Example Real-Time Rider Info at East Liberty Station

Landscaping

- Landscaping is encouraged near passenger boarding areas to improve the bus stop environment and maximize passenger comfort.
- Planted areas should be manageable and far enough back from the curb face as not to interfere with visibility, bus operations, or pedestrian safety.
- Ensure tree pits and other landscaping are placed away from door locations at bus stops.

Example Landscaping at East Liberty Station

Maintenance

- It is critical to implement a maintenance plan to ensure bus stop infrastructure and amenities are kept in a safe and accessible condition.
- Maintenance concerns typically include tasks like:
  - » Snow and ice removal
  - » Trash collection
  - » Clearing of leaves and debris
  - » Landscaping and watering of plantings
  - » Cleaning of graffiti or vandalism
  - » Repair of lighting fixtures
  - » Repair and updating of signage
  - » Removal of abandoned bicycles
- Property owners are generally responsible for upkeep of the adjacent sidewalk, including any areas used for bus stops.
- Nearby business or community organizations are commonly enlisted to provide or coordinate ongoing maintenance needs such as trash collection and snow removal.

IMPLEMENTING BUS STOP IMPROVEMENTS

This section covers how to improve substandard bus stops as well as how to add shelters, accessible curb, and/or accessible boarding areas to stops.

IMPROVING SUBSTANDARD BUS STOPS

This section provides guidance on how to improve accessibility for existing substandard bus stops. Where improvements cannot be made to attain minimum safety standards, PRT may consider stop consolidation or relocation. To determine the appropriate categorization of and amenities for an improved bus stop, collaborate directly with PRT.

MINIMUM STANDARDS

- See **Minimum Features of Accessible Stops**.

HOW TO MEET MINIMUM STANDARDS

NO SIDEWALK CONNECTION

- Add sidewalk connection to the bus stop from the curb cut/existing sidewalk network.
- Improve substandard, non-ADA compliant sidewalk surfaces.
- Clear vegetation that may be blocking sidewalk access to the stop.

NON-COMPLIANT BOARDING AREA

- Determine if the boarding area can be widened into an adjacent property.
  - » Coordinate with the property and roadway owners.
  - » If topography and/or property owner will not allow for sidewalk expansion, consider a **Boarding Bulb**.
- Determine if the current road can accommodate a boarding bulb for ADA boarding area.
  - » Coordinate with the municipality, PennDOT, or other roadway owner.
- If neither option is possible, ensure the sidewalk connects to the curbside boarding area, is at least 48" wide, and provides a firm, stable and impervious surface.

TOO CLOSE TO CROSSWALK

- If the bus boarding area is within 6’ of a crosswalk, consider relocation of the bus stop so that it is at least 6’ away from the crosswalk.

SIGNAGE DIFFICULT TO SEE

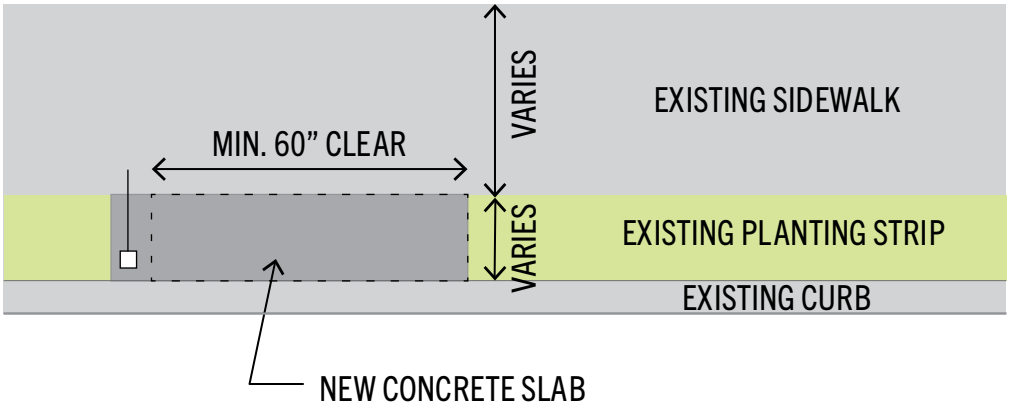
- Clear any debris or vegetation that may make signage hard to identify from a distance.

ADDING ACCESSIBLE CURB TO STOPS

Planting Strip In-Fill Slab

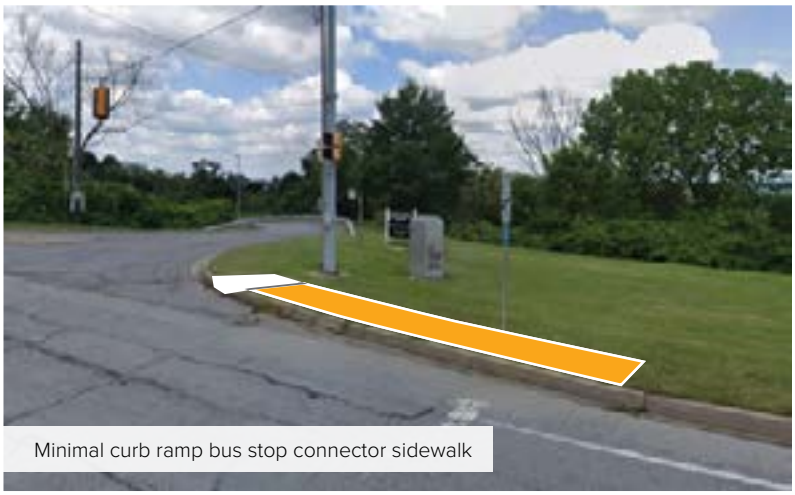
- Areas with planting strips between the sidewalk and curb should be filled with concrete for a minimum length of 5' (60") to provide a continuous connection between the curb and ADA boarding area (see diagram).
- A planting strip in-fill slab provides a new slab to allow for a continuous firm and stable connection from sidewalk to curb.
- Minimum 5' clear width parallel to curb to accommodate ADA boarding area.
- In-fill slab may be wider to accommodate a bus flag or other items in this area.
- Existing sidewalk width plus planting strip in-fill must be 8' to provide an adequate ADA accessible boarding area.

Planting strip infill between curb and sidewalk

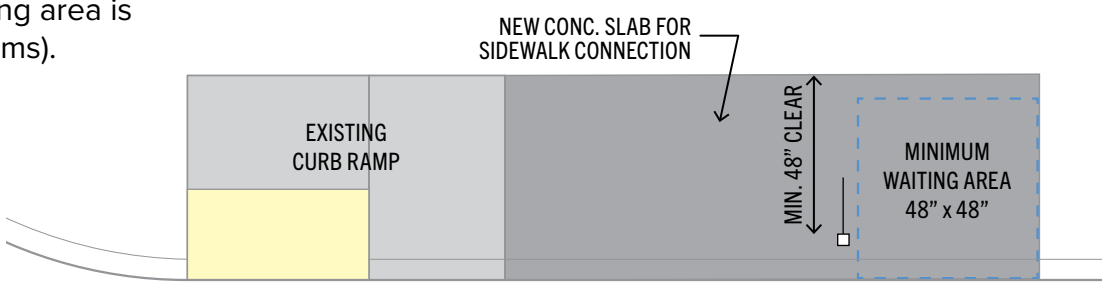


Sidewalk Connections for Existing Curb Ramps

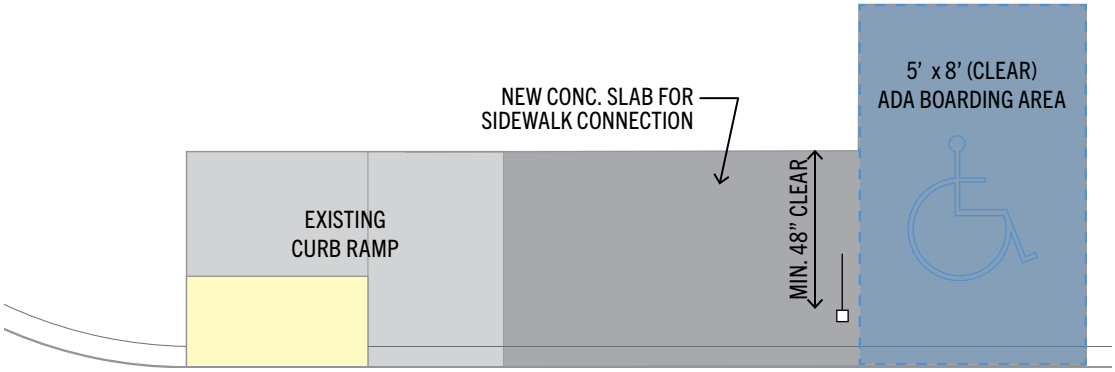
- Used in locations where curb ramps have been constructed, but no sidewalk has been provided to connect to the bus stop.
- Sidewalks should extend at least 5' past the stop bar or bus flag.
- Sidewalks should provide a minimum of 48" continuous clear space (§R302.2).
- Where a constricted right-of-way does not permit the addition of a 5' by 8' ADA-compliant boarding area, a minimum 4' x 4' waiting area is acceptable (see diagrams).



Minimal curb ramp bus stop connector sidewalk



Curb ramp connector sidewalk with ADA boarding area



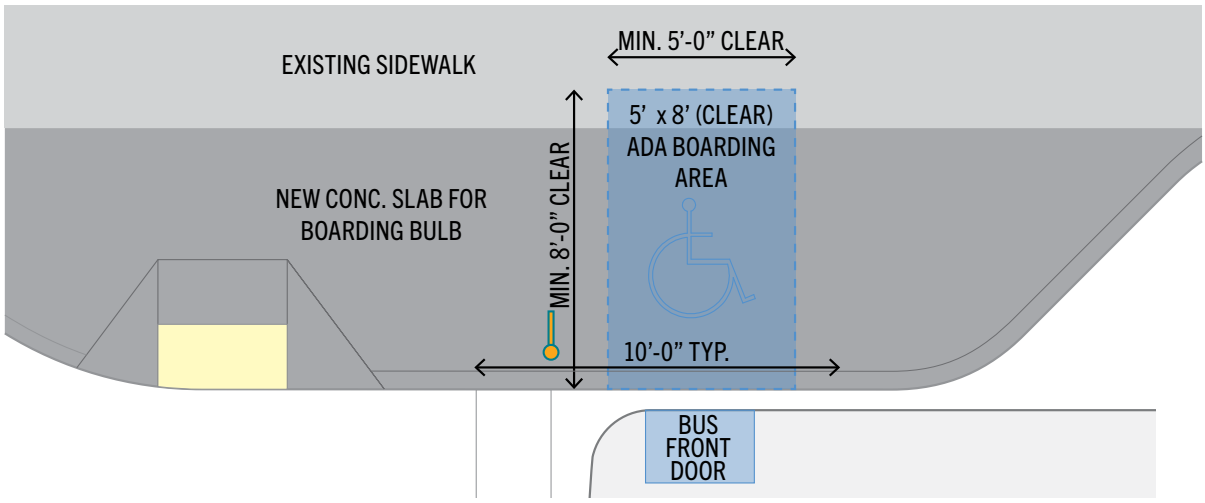
ADDING ACCESSIBLE BOARDING TO STOPS

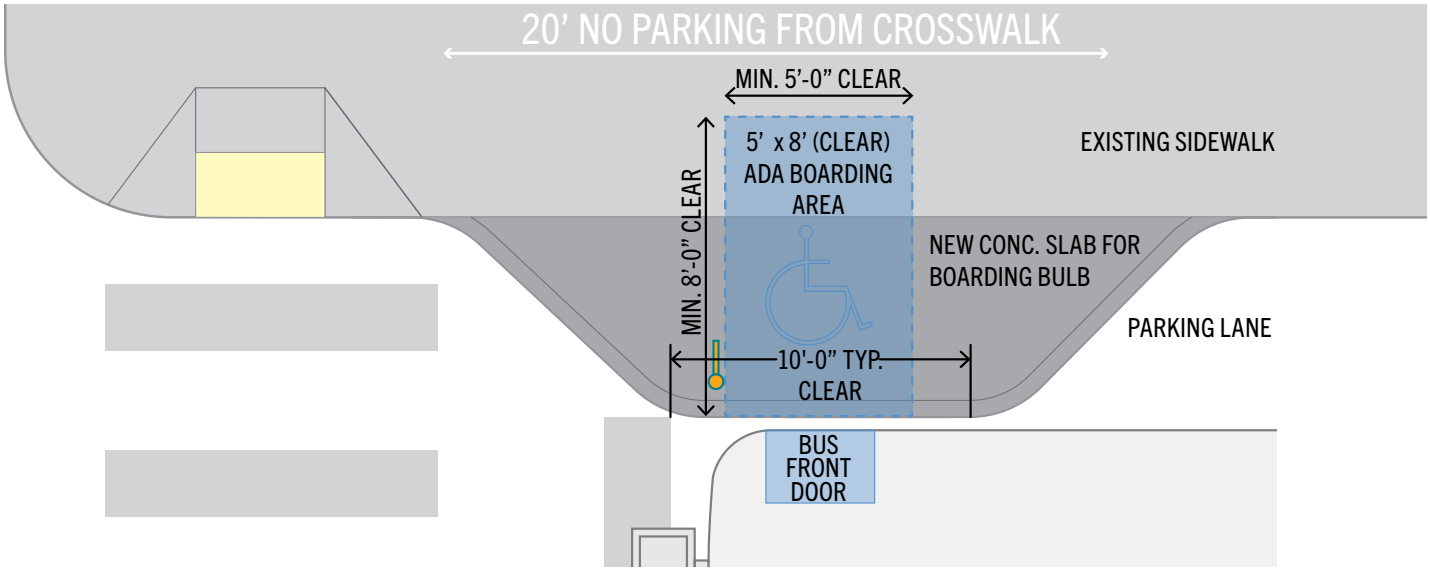
Boarding Bulb

- Boarding bulbs are curb extensions that allow buses to serve a stop and board passengers in-lane (see diagrams below and on next page).
- A boarding bulb will improve accessibility at stops where:
  - » A sidewalk is not wide enough for a 5' by 8' ADA-compliant boarding area.
    - For more information, see **Boarding Area** section.
  - » More space is desired for waiting passengers and amenities.
  - » Vehicles frequently block bus stops.
  - » There is insufficient length of No Parking Zone pavement markings for bus to pull to curbside stop.

Boarding Bulb on Stanwix St.

- Dimensions account for door locations across the PRT bus fleet and include buffers to account for variance in stopping location (see **Bus Dimensions on page 88**).
  - » Where a boarding bulb is located in a parking lane, width of the boarding bulb should be approximately 12" less than the parking lane, typically 6' to 7'.
  - » Any boarding bulb should increase the width of sidewalk at a bus stop to at least 8' to provide sufficient space for an ADA boarding area.
  - » Boarding bulb should be long enough to serve front door of bus by providing a minimum of 9' of straight curb length.
- See **Boarding Bulb Dimensions on page 90** in the Appendix for more information on recommended dimensions.





ADDING SHELTERS TO STOPS

- PRT has a limited stock of shelters available in different sizes, which are installed at PRT’s discretion.
  - » Customers can put in a service request to PRT for a shelter.
  - » Project partners wanting a shelter should contact PRT (see **PRT Contact Information**).
- The City of Pittsburgh, other municipalities, and private property owners may also maintain separate contracts for the installation of shelters and other amenities, often through advertising agencies. In these instances, shelter requests are referred directly to these parties for consideration prior to a specific site being evaluated by PRT.

Shelter Placement Criteria

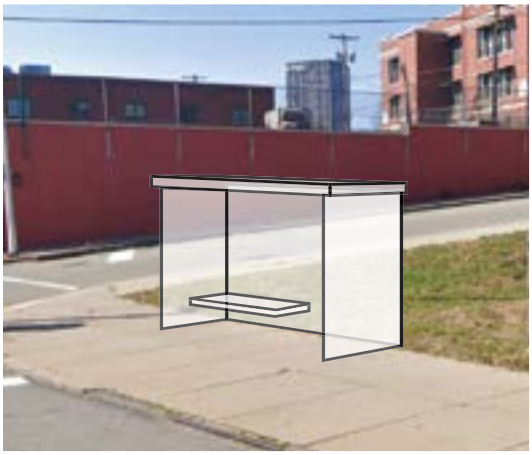
- Ridership is the major factor in determining where shelters are installed (see **Figure 16**). At stops that meet ridership criteria (over 30 boardings per day), shelters are highly recommended, particularly at inbound transit stops in the outer system, and at outbound transit stops in central business districts.
- At lower ridership bus stops, other factors may indicate the need for a shelter, such as:
  - » **Transfer Points:** Locations where patrons must stand to transfer from one transit vehicle to another.
  - » **Older Adults and People with Disabilities:** Locations where there are heavy concentrations of senior citizens or people with disabilities.
  - » **Adjacent Traffic:** Stops in constrained spaces and/or close to the road which can subject riders to flying dirt, debris, and water from passing traffic.
  - » **Weather:** Stops in exposed locations where riders are subject to high winds and inclement weather.

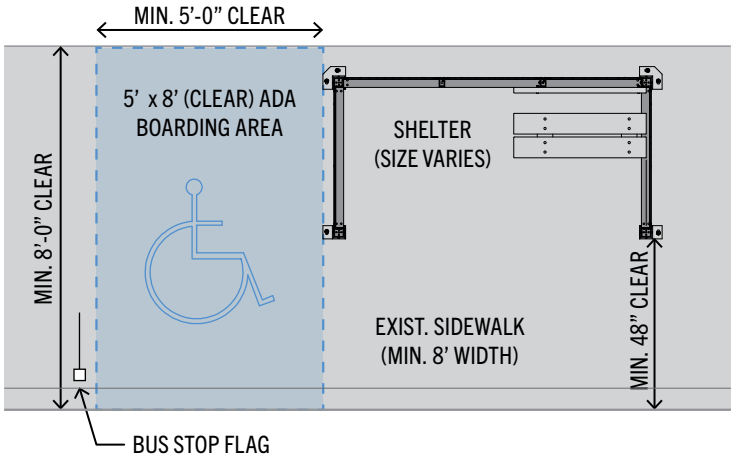
Shelter Slab and Placement Specifications

- Shelters require a minimum slab area to accommodate the shelter structure, in addition to clear areas for travel paths. This area may include existing sidewalk where sidewalk clearance allows or may be on an entirely separate slab.
  - » Where existing sidewalk is not wide enough for a shelter, additional width can be provided with a new concrete slab. Dimensions of the required slab will vary based on width of existing sidewalk and size of the shelter.
- A larger setback from the curb is desirable where possible, especially next to fast-moving traffic.
- Shelter slabs should:
  1. Accommodate the shelter structure with a minimum 30" by 48" clear area, in addition to a 5' by 8' clear zone for an ADA compliant boarding area (§R404.3).
  2. Have dimensions that account for shelter anchor holes, which must be a minimum of 3" from control joints and slab edges.
  3. Be 6" thick reinforced concrete.
  4. Have a slope perpendicular to the roadway of 2.1% maximum (§R302.5).
- See **Standard Shelter Types** in the Appendix for details on shelter dimensions.

SHELTERS ON SIDEWALKS

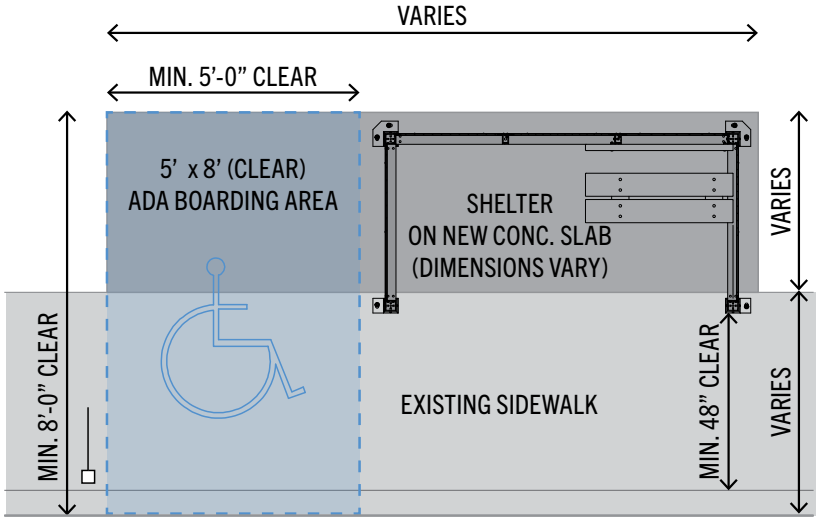
- On sidewalks with sufficient width, shelters may be placed without additional work required (see diagram).
  - » Sidewalks must be at least 8' wide to provide ADA-compliant boarding area.
- On narrower sidewalks, a new slab may be required to provide space for a shelter and required clear space (see diagram).
  - » Slab dimensions will vary based on width of existing sidewalk and size of shelter.
- Shelter size should be selected based on sidewalk width to meet required clear width zones.
  - » Sidewalks should provide a minimum of 48" continuous clear space for pedestrian access routes (§R302).

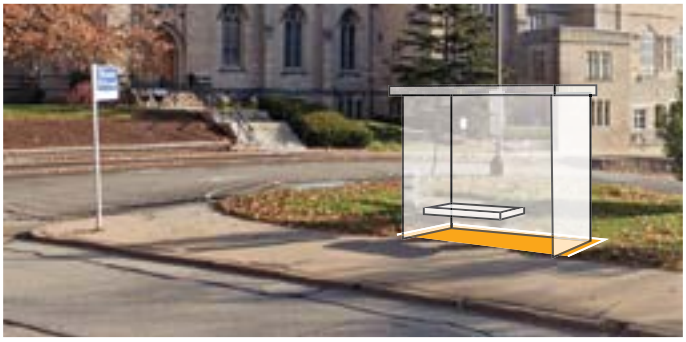




CONSIDERATIONS

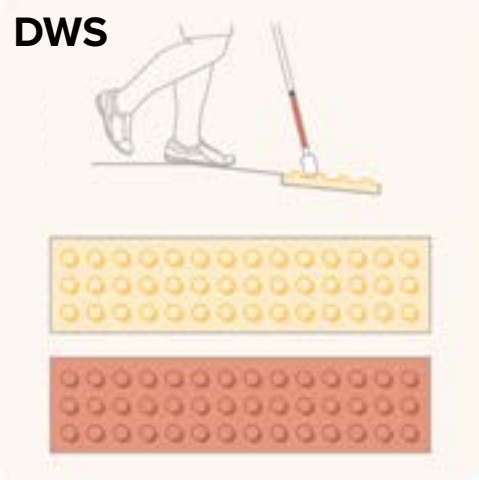
- Due to a variety of reasons including coordination, funding, and historical decision-making, many existing bus stops are substandard.
- PRT is required by law to ensure that bus stops on PRT property are accessible according to ADA and PROWAG standards.
  - » PRT cannot improve a bus stop that is not on PRT property without coordination with the property owner and the establishment of maintenance and other agreements.
- Newly-constructed stops must meet or exceed the minimum requirements for ADA compliance in their design.



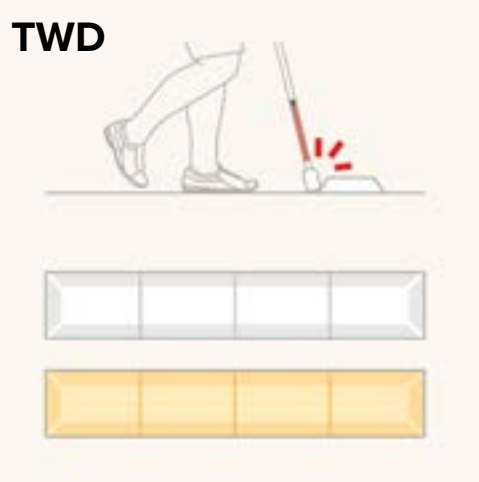


PRT welcomes collaboration from municipalities and community groups to improve bus stops in your neighborhood. Contact us at ProjectCoordination@RidePRT.org

TACTILE SURFACES



Detectable Warning Surface (DWS) is a standardized surface comprised of truncated domes that warn of hazards on a circulation path. DWS is required at curb ramps and along transit boarding platforms



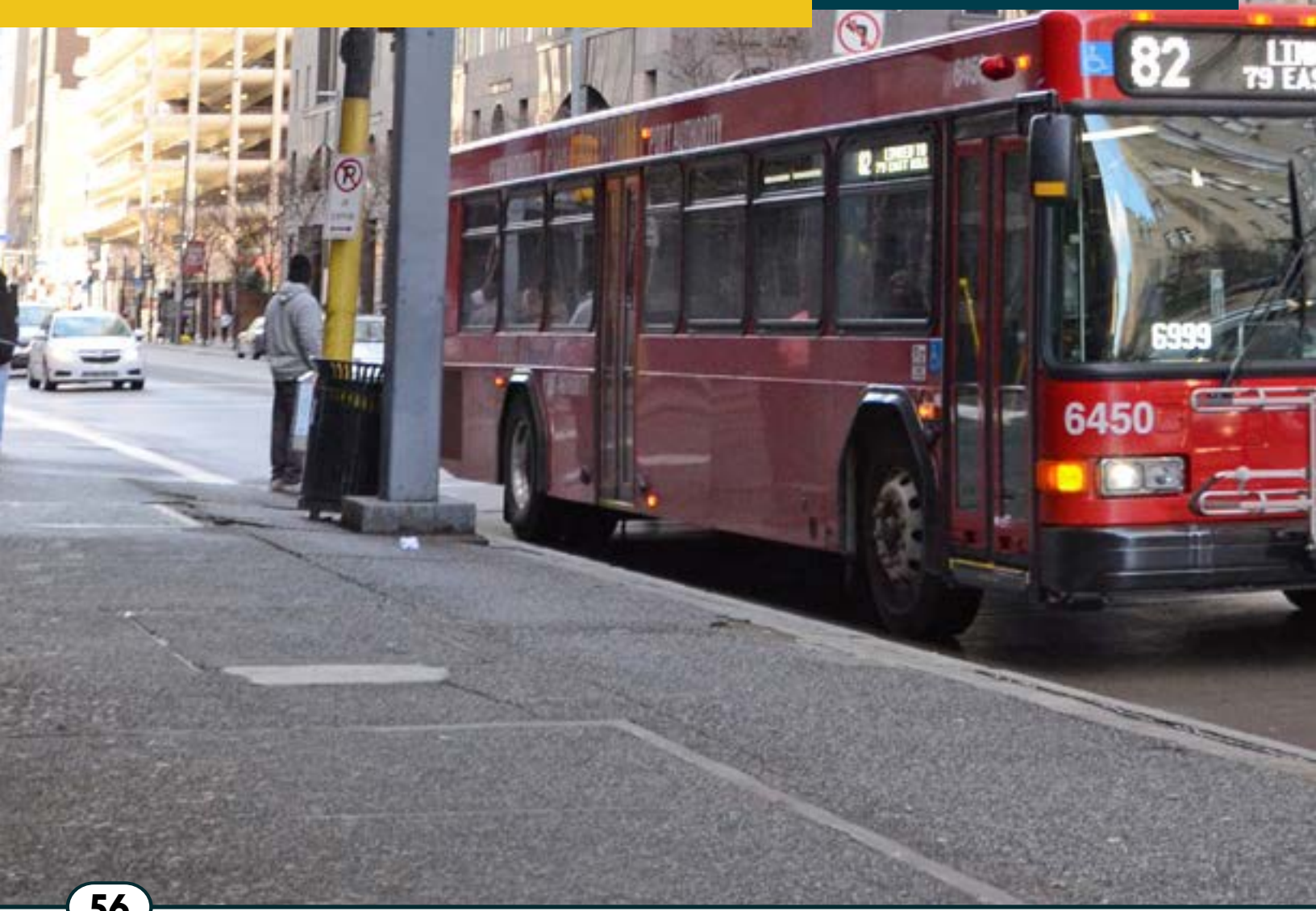
Tactile Warning Delineator (TWD) is a raised, trapezoidal surface that indicates the edge of a sidewalk or pedestrian route. TWDs warn of a hazard when crossed.

Tactile Directional Indicator (TDI) is a surface comprised of raised, parallel, flat-topped, elongated bars. ... In most cases, TDIs are installed parallel to the direction of travel and centered in the clear pedestrian route. Blind pedestrians and those with low vision understand that TDIs can normally be followed along either side. They also understand that TDIs may be crossed without encountering a hazard, as TDIs do not indicate a hazard or risk.

TDIs have a growing number of uses. TDIs are recommended for leading people to transit stops, aligning with street crossings, and identifying clear pathways in a shared street. Two-foot-wide strips of TDIs oriented perpendicular to the direction of travel are recommended to help pedestrians find and align with crosswalks. A similar layout can be used across a sidewalk to orient pedestrians to a transit stop.

Source: NACTO Urban Bikeway Design Guide, https://nacto.org/publication/urban-bikeway-design-guide/designing-bikeways-for-all-ages-and-abilities/designing-for-non-visual-navigation/

4. STREET AND ROADWAY CONFIGURATION



STREET AND ROADWAY CONFIGURATION

STREET AND ROADWAY DESIGN

INTERSECTION DESIGN

MULTIMODAL DESIGN

Pittsburgh Regional Transit
345 Sixth Ave, 3rd Floor
Pittsburgh, PA 15222

https://www.rideprt.org/

412-566-5500

The conditions of the street and intersection leading up to a bus stop is just as important as the stop itself. People walking and biking deserve safe, accessible pathways access transit services. The guidelines in this chapter would be most useful for municipal partners working on street design projects as well as consultants, PennDOT, and PRT staff. This chapter provides guidance related to street and roadway design for transit, including:

- **Street and Roadway Design**
  - » What are important design considerations when making changes to streets and roadways that support transit?
- **Intersection Design**
  - » What are important design considerations when making changes to intersections that support transit?
- **Multimodal Design**
  - » What are important design considerations for bus and bike interactions and shared facilities?

BACKGROUND

PRT does not own the roads or sidewalks which support its bus stops, only the infrastructure at the stop. Therefore, PRT relies on its project partners (including but not limited to the City of Pittsburgh, Allegheny County, PennDOT, and private developers) to ensure transit-supportive design choices are made when street and roadway changes occur. See the **Project Partners** section to learn more about who PRT works with to improve transit stops and operations.

A bus serving a stop at Penn Ave. and Spirit St.

STREET AND ROADWAY DESIGN

This section discusses the design of streets that support transit. Recommended dimensions and other useful guidance pertaining to travel lanes, pedestrian crossings, road surfaces, overhead clearances for buses, and bus layovers are provided.

TRAVEL LANES

- PRT recommends 11' travel lanes.
- In constrained conditions, buses can accommodate narrower travel lanes, typically down to 10', depending on traffic speed, volume, and other conditions. At higher speeds, or where more maneuverability is desired, 12' lanes may be acceptable.
- Curbside lanes should account for the added width of bus mirrors, which may overhang the sidewalk in narrow conditions.
- Contact PRT to review project plans for new streets with transit routes, or where existing lane widths will be altered.
- Refer to Vehicle Widths & Buffers from NACTO's Transit Street Design Guide.

PEDESTRIAN CROSSINGS

- Ensure a safe and accessible path is provided to and from each stop in a stop pair. Because stops in a pair are often located across the street from each other, including a safe crossing is critical.
- Controlled intersections (signal or stop) generally provide safer crossings. Signalized intersections should include pedestrian signals. Crosswalks should be indicated with high-visibility markings.
- Refuge island or other elements are recommended to shorten crossings and slow vehicles, especially on streets with 3-4 travel lanes.
- Uncontrolled crossings should include features like high-visibility crosswalks, pedestrian beacons, refuge islands, curb extensions, or other elements to improve crossing safety. Uncontrolled crossings of streets wider than three (3) travel lanes are discouraged without robust safety improvements to slow traffic speed and improve visibility.
- Refer to the NACTO Urban Street Design Guide's Crosswalks and Crossings.

ROAD SURFACES

- Road pavement should be of sufficient strength to accommodate repetitive bus axle loads of up to 25,000 lbs.
  - » Concrete is preferred to avoid failure problems that are experienced with asphalt, especially where buses start, stop or turn. Concrete aids in the retention of roadway surface shape, drainage capabilities and skid resistance.
- Pavement design at the bus stops should match the adjacent roadway material. Differing adjacent materials cause significant issues at the interface joint between the two. Standalone concrete bus pads next to asphalt roadways are not recommended.

TRANSIT PRIORITY STRATEGIES

PRT supports the use of transit-exclusive infrastructure to prioritize efficient movements. The following types of transit-priority lanes help reduce operating costs and keep riders moving faster.

Transit Lanes

- **Curbside Transit Lane**
  - » Lane adjacent to curb is dedicated to transit vehicles.
  - » On streets with in-lane sidewalk stops.
  - » On streets with no curbside parking, or where removal of curbside parking is acceptable.
  - » Lane can have differing, flexible uses throughout the day.
  - » See NACTO Curbside Transit Lane guidance for more information.

Curbside Transit Lane on Liberty Ave.

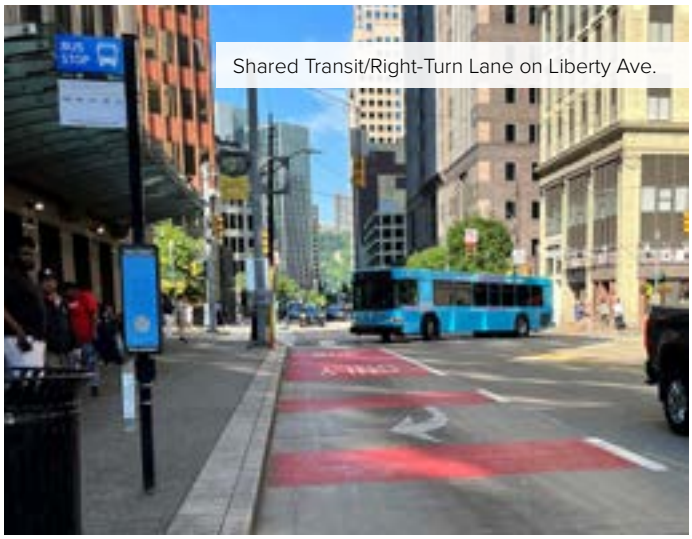
- **Floating or Parking-Adjacent Offset Transit Lane**
  - » Right-most moving lane is dedicated to transit vehicles, offset from curb by parking, curb extensions, or raised cycle tracks.
  - » Where use of curbside parking lanes for transit is precluded by existing bulb-outs or other roadway geometry considerations.
  - » Raise visibility of high-quality, especially rapid, transit service.
  - » See NACTO Offset Transit Lane guidance for more information.


Example Floating Transit Lane (SFMTA)

- **Peak-Only Bus Lane**
  - » Dedicated bus lane for transit at peak traffic hours when it most benefits bus operations.
  - » Off-peak, lane is typically a general travel lane, a lane for parking, or curbside access.
  - » Ideal for streets with predictable bus delay due to peak period commuting traffic.
  - » See NACTO Peak-Only Bus Lane guidance for more information.

Example Peak-Only Bus Lane

- **Shared Transit/Right-Turn Lane**
  - » Right-side dedicated transit lane can allow other vehicles to use it for a right turn at an approaching intersection.
    - ▶ Can improve safety in areas where prohibiting right turns for other vehicles can result in poor driver compliance and potential traffic conflicts.
  - » Streets with a right-turn lane but no transit lane can permit buses, and no other vehicles, to use the right-turn lane for through-movements.
    - ▶ Appropriate street signage required.
  - » See NACTO Shared Transit/Right-Turn Lane guidance for more information.



Shared Transit/Right-Turn Lane on Liberty Ave.

- **Shared Bus-Bike Lane**
  - » On streets in networks with constrained space, bikes can be permitted to use bus lanes.
  - » This configuration is not appropriate for very high bus volumes and is not the most comfortable bike facility for cyclists.
  - » Buses are discouraged from passing cyclists and cyclists may do so only at stops.
  - » See NACTO Shared Bus-Bike Lane guidance and **Bus and Bicycle Interactions** section for more information.

Example Shared Bus-Bike Lane on Smithfield St.

Queue Jumps and Bypass Lanes

- Queue jumps and Bypass Lanes are short bus lanes that can provide buses with a bypass at critical pinchpoints.
- Typically used in conjunction with transit priority signals, allowing buses to get an advance green before other traffic.
- See NACTO Queue Jump Lanes guidance for more information.

Example Queue Jump Lane

BUS OVERHEAD CLEARANCE

- The bus profile area should be kept free of overhead obstructions such as trees, signs, bridges, and utility wiring. Overhead obstructions must remain at least 11.5’ above the surface of the street for the bus to clear without collision.
- A clear space of 2’ should be maintained from the edge of the street to avoid collision with bus mirrors.

BUS LAYOVERS

- After completing a trip, buses may stop for an extended period to layover, providing the operator with a break while awaiting the next scheduled departure.
- Layover areas should be located as close to a route terminus as possible, to reduce non-revenue travel time (i.e., deadheading).
- Layover areas should typically be located within easy access of a restroom or relief area. Access to restrooms may be coordinated with an adjacent private business or institution. Where a restroom is not available, PRT may provide a port-a-potty.

On-Street Layovers

- On-street layovers zones should be in pull-out areas located outside travel lanes.
- Coordinate with municipal partner to prohibit parking in the layover zone.
- Where multiple buses or routes layover in the same area, requiring independent access in and out of the layover zone, ensure the zone is of sufficient length to provide transition areas between buses.

Off-Street Layovers

- Layover locations on PRT property are preferred when available.
- Off-street layovers are often located in shopping centers or other large sites, requiring coordination with property owner.
- Identify a terminal bus stop location that can be easily access before and after a layover without requiring excessive circuitous routing.

Mellon Terrace on-street layover area

INTERSECTION DESIGN

This section discusses the design of intersections that support transit and is most useful for municipal partners implementing street design projects.

TURN MANAGEMENT

- Making turns can be challenging for buses on Pittsburgh's narrow streets; however, due to routing constraints, tight turns cannot always be avoided.

Actual and Effective Corner Radii

- Facilitating bus turns typically requires an effective corner radius of at least 35'. This is often a concern for right turns which tend to have smaller effective corner radii than left turns (see **Figure 16: Actual Versus Effective Corner Radii**).
- Actual corner radii reflect the radius of the built curb.
- An effective turning radius accounts for all the space a vehicle can use to make a turn, including parking or bike lanes.
- Making right turns from curbside lanes reduces the effective radius and may require significant stop bar setbacks to accommodate the turn.
- Offsetting the travel lane away from the curb, such as by locating parking or bike lanes between the curb and travel lane used for the right turn, can increase the effective corner radius, permitting easier turning movements.

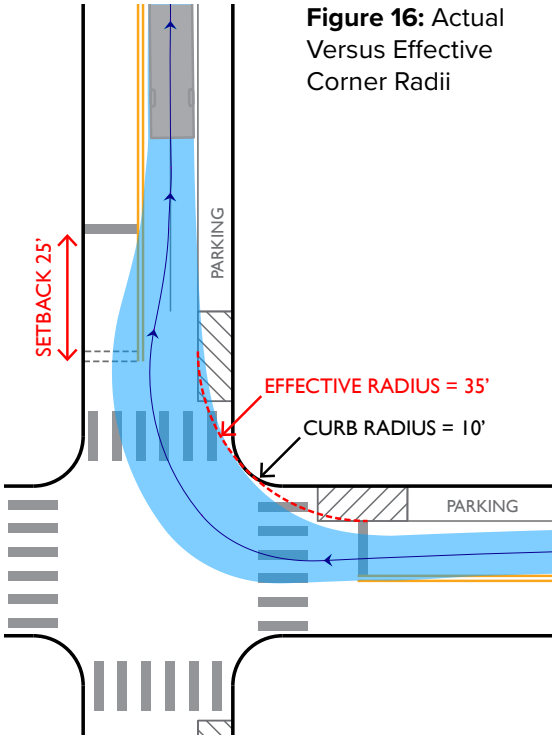


Figure 16: Actual Versus Effective Corner Radii

Parking Near Intersections

- Parking should be prevented at intersection approaches to improve visibility and provide additional space for bus turn sweep.
- Parking near controlled intersections and crosswalks is legally restricted by PA Vehicle Code (Title 75 §3353) and may not occur within 20' of crosswalks or 30' from stop signs and signals.
- Curb extensions prevent parking near intersections. Interim elements like flex posts or planters may be used where a curb extension is not possible.

Recessed Stop Bars

- Where buses make turns at constricted intersections, stop bars adjacent to the receiving lane may need recessed (shifted away from the intersection) to ensure buses can make a turn without being blocked by stopped vehicles.
- Placing recessed stop bars more than 50' from a crosswalk is not recommended due to poor compliance.
  - » Include "Stop Here on Red" signs and stop bar (marking preferably in thermoplastic);

TRAFFIC CALMING ELEMENTS

Safe streets and accessible crossings are critical to providing access to transit. Most traffic calming and pedestrian safety elements are compatible with transit when designed with buses in mind. Pay close attention when designing around bus stops as well as where buses make turns which may be affected by vertical elements and moved curbs.

- Many streets which do not have regular bus service may still be used for detours and should use a bus as a control vehicle in design if they are near a bus route.
- Designers should use turn simulation software to ensure vehicle movements are facilitated by a proposed new street geometry.
- Check with PRT to verify the type of bus used on a route, or if a street near a regular bus route is commonly used for detours. You may also contact PRT to request a bus for a test run.

Curb Extensions and Boarding Bulbs

Curb Extensions, also known as Bumpouts, or as Boarding Bulbs when a bus stop is present, can create shorter, safer crossings as well as providing additional space at bus stops while facilitating accessible, in-lane stops. Curb extensions may be permanently constructed in concrete, or built using interim or temporary materials like paint and flexposts (where a bus stop is not present), or asphalt or modular platforms for locations at bus stops.

- Typically located at intersections, It is important that curb extension geometry is designed to permit buses to make turns. This may also be an important factor in facilitating detour routes on streets without regular service.
- The desired length of a curb extension used as a transit stop may vary; while it is desirable to serve all bus doors, shorter lengths that serve only the front door may be acceptable for low-use bus stops. See the appendix for details about curb extension length and dimensions.

An articulated bus navigating around a neighborhood traffic circle at Euclid and Callowhill

Horizontal Deflection Elements

Horizontal deflection elements slow traffic speeds by forcing motorists to shift their travel path to divert around items like refuge islands, chicanes, neighborhood traffic circles, or other traffic calming devices.

Neighborhood Traffic Circles

Neighborhood Traffic Circles (also known as Mini-Roundabouts) are located in the center of an intersection and require vehicles to circumnavigate the roundabout, slowing traffic speeds. Mini-roundabouts often require vehicles make tight turns to navigate around them, slowing speeds and improving safety.

- On narrow neighborhood streets it can be difficult to accommodate a bus as a Design Vehicle around a mini-roundabout.
- Consider mountable surfaces to permit bus turns while slowing turns for other vehicles.
- On bus routes or adjacent streets that may be used for detours, consider a bus as a Control Vehicle able to be accommodated by the intersection geometry.
- In tight conditions, some larger vehicles make left turns in front of a mini-roundabout as the geometry may prevent these vehicles form being able to navigate around it. This may be acceptable for short-term detours but is not a desirable movement for regular bus service.
  - » The City of Pittsburgh has a Memorandum of Understanding (MOU) with PRT in effect to allow this movement in case of detours.

Raised Street Surfaces (Vertical Deflection Elements)

Raised elements, such as speed humps, tables, or cushions, and raised crossings can reduce traffic speeds to improve safety for people accessing transit. Properly designed raised surfaces do not present a hinderance to bus operations.

- Consider using mountable surfaces in conjunction with horizontal deflection elements which may reduce corner radii and make bus turns more difficult.

MULTIMODAL DESIGN

This section is most useful for municipal partners implementing street design projects. Conflicts between buses and other modes like bicycles and scooters can be mitigated through thoughtful design. Bus stops are often a conflict point between buses and bicycles, as buses must often pull into or over bike lanes to serve a stop.

BUS AND BICYCLE INTERACTIONS

On streets with bike facilities, the interaction between buses and bikes can be mitigated through various design options. Preferred designs will reduce the conflict points between buses, bikes, and pedestrians as much as possible, however PRT recognizes constrained conditions will require mitigation and reduction of conflicts where they cannot be completely avoided.

Bus Stops in Bike Lane

- Stop is served by bus stopping in curbside bike lane.
- Used on constrained streets without room to separate the bike and bus spaces.
- Markings should clarify the shared nature of the bus stop/bike lane area, utilizing markings such as BIKE / BUS legends, dashed green, or others.
- This configuration may require enforcement to prevent other vehicles from blocking the bus stop and bike lane.

Bus Serves Curbside In-Lane Stop from the Bike Lane on Negley Ave.

Shared Bike Lane and Boarding Area

- Used on constrained streets without room to separate the bike and bus spaces.
- The bike lane rises to sidewalk level and becomes a shared boarding area, passing between the curb and passenger waiting area.
- People boarding and alighting the bus cross the shared bike area.
- Use signage and crosswalk/yield markings to indicate area is shared with pedestrians, and cyclists are required to yield to people boarding and alighting the bus.

- Use green to highlight the bike lane adjacent to the shared boarding area.
- Place Tactile Surfaces (see Page 55) to provide non-visual cues in areas of potential conflict.
- Boarding platform should end at least 6’ from the crosswalk to allow bicyclists to queue.
- See NACTO Shared Cycle Track Stop guidance for more information.

Shared Bike Lane and Boarding Area on Stanton Ave.

Bike Lane Routed Behind Bus Stop

- The bike lane bends behind the bus stop to allow buses to serve the stop without bike conflicts.
- Typically used in areas with wide sidewalks which provide space to accommodate a bus stop, bike lane, and pedestrian through path.
- Use signage and crosswalk markings at pedestrian access points, indicating cyclists are required to yield to pedestrians.
- Bike lane may rise to sidewalk level; or remain at street level with pedestrian ramps to cross.


Bike Lane Routed Behind Bus Stop (Seattle)

Bus Crosses over Bike Lane for Pull-Out Stop

- Buses cross the bike lane to pull into a dedicated bus bay.
- Requires No Parking Zone for length of stop and transition areas.
- Dash bike lane striping and/or green paint in transition zone.

Pull-Out Stop across bike lane at Forbes and Morewood

Shared Bus-Bike Lane

- Allows cyclists to use bus lanes where dedicated bike facilities are not available.
- Bus lanes should have operating speeds under 20 mph and serve stops with at least four minutes between buses.
- Include BIKE / BUS ONLY pavement markings and signage (see image below for example).
- Preferred width of under 12’ discourages bikes from passing stopped buses.
- See NACTO Shared Bus-Bike Lane guidance for more information.

Shared Bus-Bike Lane on Smithfield St.

Bus stop at Liberty Ave. at 10th St.

5. IMPLEMENTATION PROCESS

IMPLEMENTATION PROCESS

- CHANGES AT OR NEAR A BUS STOP
- ADDING NEW BUS STOPS TO A ROUTE
- RELOCATING BUS STOPS
- REMOVING BUS STOPS
- CONSTRUCTION MITIGATION AND COORDINATION
- WORKING AND PERMITTING WITH OTHER PUBLIC AGENCIES
- DESIGN, PERMITTING, AND CONSTRUCTION DECISION-MAKING

Pittsburgh Regional Transit
345 Sixth Ave, 3rd Floor
Pittsburgh, PA 15222

https://www.rideprt.org

412-566-5500

This chapter contains applicable information about how bus stop modifications take place, focusing on when modifications typically occur and what the process is. Details about the following modifications are expanded on and additional resources and contacts have been included where applicable:

- Changes at or near a bus stop
- Adding, relocating, or removing bus stops
- Modifications during construction and permitting

BACKGROUND

Bus stops are catalogued and georeferenced by PRT for traveler wayfinding and real-time arrival information, analysis, and monitoring. This geographic information system (GIS) data can be viewed in table format on PRT's ArcGIS Hub website or downloaded for personal use, which requires GIS-compatible software. Georeferenced stop locations and ridership data is updated regularly and made publicly available on PRT's ArcGIS Hub and a full system map is also available on their website.

Modifying existing bus stops or adding a new stop can be a complex process involving careful analysis and coordination with stakeholders on equity, accessibility, safety, and operational efficiency considerations. When considering bus stop modifications, several end-user groups may be impacted and, often, trade-offs will need to be made. Prioritizing the needs of pedestrians and transit riders traveling to and from their bus stop over the wants of adjacent property owners may be necessary.

PRT's top priority is rider and operator safety; to ensure it, sometimes bus stops need to be removed. Typically, bus stop modifications are initiated in two ways:

1. A PRT analysis of location conditions is completed using the Bus Stop and Street Design Guidelines.
2. A new bus stop or modification is requested from elected officials, community-based-organizations, transit riders, or property owners.

When requesting the modification of existing or new bus stops, applicants should allow PRT, at a minimum, two weeks before receiving a response. This will vary on a case-by-case basis.

PRT Is Here To Help

To coordinate with PRT regarding bus stop changes:

- **Email our Project Coordination team: ProjectCoordination@rideprt.org**
- **Visit PRT's Bus Stop and Street Design Guidelines Engage page, which includes contact information for relevent people and departments.**
- **Call the PRT Administrative Office at 412-566-5500.**
- **For emergency road closures, call Bus Traffic Operations at 412-851-4900**
- **Write or visit PRT at 345 Sixth Ave, 3rd Floor, Pittsburgh, PA 15222.**

Who Owns Our Infrastructure?

- The vast majority of PRT bus stops and shelters are not located on PRT property but instead, are located on right-of-way owned by the City of Pittsburgh or other municipalities, Allegheny County, and/or PennDOT.
- Project partners are responsible for initiating coordination efforts and working with PRT to ensure bus stops on their property are accessible and comply with Americans with Disabilities Act (ADA) standards.
  - » PRT is only responsible for incorporating ADA-compliant bus stops on property owned by the transit agency.
- Since PRT does not have authority over or own most of the street network it operates on, additional permitting and approval steps will be required by the relevant road owner, including the City of Pittsburgh or another municipality, Allegheny County, PennDOT, or private owner.
  - » For partners interested in learning more about road ownership, Allegheny County previously developed a tool to seamlessly and quickly geo-locate this information.

Figure 17: Typical Infrastructure Ownerbyship by Entity Involved

	Roads	Sidewalks & Curbs	Crosswalks	Bus Shelters & Stops
PRT				X
Municipality	X	X	X	X
Allegheny County	X			
PennDOT	X	X	X	
Private Owner(s)	X	X		X

* An X indicates the potential owner/entity is typically responsible for the maintenance of these infrastructure components. Some exceptions may apply.

CHANGES AT OR NEAR A BUS STOP

- Includes adding, removing, moving, or changing amenities such as seating, lighting, or a bus shelter, at a bus stop that already exists.

WHEN MIGHT THIS HAPPEN?

- Community-based organizations request a modification to amenities at an existing bus stop.
- A developer proposes changes at a bus stop as part of a streetscape or building project.
- PRT determines that modifying amenities at existing bus stops is desired.
- PennDOT or a local municipality or county requests a modification to amenities at an existing bus

Figure 18: Process for Making Changes At or Near a Bus Stop

STEP 1 - SUBMIT A REQUEST

Send a request to PRT Transit Amenities for modifications to amenities at an existing bus stop or segment of stops. The request can come from a community organization or group, PRT staff, a developer, or other public agencies, including a municipality, county, or PennDOT.

WHO INITIATES STEP ONE?			
Community	PRT Staff	Developers	Other Public Agencies
X	X	X	X

STEP 2 - REVIEW GUIDELINES

Review design guidelines and prioritization criteria for improvements (i.e., thresholds based on boarding numbers for seats, shelters, etc.)

WHO INITIATES STEP TWO?			
Community	PRT Staff	Developers	Other Public Agencies
X	X	X	X

STEP 3 - PRT COORDINATES IMPLEMENTATION IF APPROVED

If the modification request is approved, PRT staff will coordinate implementation, including a review of site plans to be submitted at the municipal level. In the event a new shelter and/or concrete pad is being added, PRT or another entity may be responsible for managing the implementation. PRT typically is responsible for moving or installing the Bus Stop sign.

WHO INITIATES STEP THREE?			
Community	PRT Staff	Developers	Other Public Agencies
	X	X	X

ADDING NEW BUS STOPS TO A ROUTE

- Generally, bus stops are located near key intersections, major activity generators, and areas that accommodate people with disabilities. Therefore, not all major destinations within the transit network will be able to have a bus stop directly in front of it.
- However, there are instances where PRT may consider the addition of a new stop to a bus route, particularly around large commercial or mixed-use development sites that generate a significant number of daily trips.

WHEN MIGHT THIS HAPPEN?

- A developer or community-based organization requests the addition of a new bus stop at or in a development, such as a strip mall, apartment complex, larger development site (i.e., Hazelwood Green, Southside Works, etc.).

Figure 19: Process for Adding New Bus Stops to an Existing Route

STEP 1 - SUBMIT A REQUEST

Send a request for a bus stop addition. The request can come from a community organization or group, PRT staff, a developer, or other public agencies, including a municipality, county, or PennDOT.

ENTITY INITIATING THE STEP			
Community	PRT Staff	Developers	Other Public Agencies
X	X	X	X

STEP 2 - EVALUATE NEW LOCATION

Evaluate a potential location for a new stop based on bus stop placement factors, including access, safety, and operational efficiency factors.

ENTITY INITIATING THE STEP			
Community	PRT Staff	Developers	Other Public Agencies
	X		

STEP 3 - PRT IMPLEMENTS IF APPROVED

If the request is approved, then PRT staff will manage the implementation of the new stop.

ENTITY INITIATING THE STEP			
Community	PRT Staff	Developers	Other Public Agencies
	X		

RELOCATING BUS STOPS

- While many PRT stops are located within the public right-of-way on public property, a significant portion of the system's bus stops are located on property owned by either private property owners or another local public agency, such as a municipality or Allegheny County. The relocation of a bus stop involves a variety of safety and operational considerations.

WHEN MIGHT THIS HAPPEN?

- PRT determines that there is a need or opportunity to improve the safety, accessibility, and/or operational efficiency of a bus stop or route by relocating an existing stop.
- PennDOT or a local agency requests the relocation of a bus stop based on state or local planning efforts or as part of a bigger street or corridor-level project.
- A developer requests the relocation of an existing bus stop to provide more convenient access to residents, visitors, and employees.

Figure 20: Process for Relocating Bus Stops

STEP 1 - REVIEW REQUIREMENTS

For partners pursuing projects within City of Pittsburgh limits, refer to requirements in the Department of Mobility & Infrastructure's Guidelines for the Temporary Relocation or Removal of Bus Stops for Construction Activities, alongside PRT's temporary relocation process.

ENTITY INITIATING THE STEP			
Community	PRT Staff	Developers	Other Public Agencies
X	X	X	X

STEP 2 - SUBMIT A REQUEST

Send a request for relocating an existing bus stop or segment of stops. The request can come from a community organization or group, PRT staff, a developer, or other public agencies, including a municipality, county, or PennDOT.

ENTITY INITIATING THE STEP			
Community	PRT Staff	Developers	Other Public Agencies
	X		

STEP 3 - PRT IMPLEMENTS IF APPROVED

PRT will coordinate and complete relocation of the stop(s) if the request is approved. The former stop and notice of the change may remain posted for up to 30 days after approval.

ENTITY INITIATING THE STEP			
Community	PRT Staff	Developers	Other Public Agencies
	X		

REMOVING BUS STOPS

- Includes when a single bus stop or several bus stops on a street segment or route are removed, usually through a process known as bus stop consolidation.

WHEN MIGHT THIS HAPPEN?

- PRT determines through a planning effort or a public agency's adjacent planning effort that there is an opportunity to improve the safety, accessibility, or operational efficiency of a bus stop or route.
- PRT permanently discontinues a bus service due to the location being dangerous for pedestrians and transit riders to access.

Figure 21: Process for Removing Bus Stops

STEP 1 - ANALYZE THE STOP

Analyze the stop(s) for safety, accessibility, transfer points, trip generators, ridership, and bus stop spacing guidelines. Work with municipal partner to determine if safety and/or accessibility upgrades are possible.

ENTITY INITIATING THE STEP			
Community	PRT Staff	Developers	Other Public Agencies
	X		X

STEP 2 - NOTIFY RIDERS AND THE PUBLIC

Post rider announcement online and at relevant bus stops to notify transit users and the general public about the proposed stop removal at least 30 days before stop is removed. In case of an immediate safety concern, stop removal can happen sooner or without advance notice.

ENTITY INITIATING THE STEP			
Community	PRT Staff	Developers	Other Public Agencies
	X		

STEP 3 - PRT REMOVES BUS STOP

PRT staff will remove the bus stop sign. The former stop and notice of the change may remain posted for up to 30 days after stop removal. Note that this process is for permanent changes to stops, not temporary construction.

ENTITY INITIATING THE STEP			
Community	PRT Staff	Developers	Other Public Agencies
	X		

CONSTRUCTION MITIGATION AND COORDINATION

- Anyone performing work must first coordinate with the proper municipal entity to ensure that all required permitting approvals are secured and the Construction Management Plan is approved. Following this, PRT should be contacted if work affects a bus stop or access to that bus stop (sidewalk or pedestrian network that might prohibit a safe crossing, etc.).
- Some projects that impact transit may require a temporary route or bus stop change.
- Anyone performing work that will impact PRT bus stops and/or routes or require a bus detour should contact PRT to coordinate as soon as possible. At a minimum, three-week notice should be provided; see **PRT Is Here to Help** on Page 72 for PRT's contact information.
- To review development plans with PRT staff and receive feedback on the proposed project plans, PRT requests the following items for review, including:
  - » Name of entity requesting a review and contact information of appropriate contact person.
  - » Project name and location, such as project address, GPS coordinates, or a description of the specific geographic area(s).
  - » List of bus routes and bus stops (including ID number of known) anticipated to be impacted.
  - » Any drawings showing the above and any additional relevant project details.
  - » Requested date for PRT responses.
- For relevant projects that fall within city limits, the City of Pittsburgh's Department of City Planning Construction Management Plans (CMP) webpage includes details so applicants understand when during the permitting process a CMP should be initiated. For other municipalities outside of the city limits, contact their Public Works Department to determine how to proceed.

An asphalt temporary boarding bulb on Fifth Ave. near Atwood St.

TEMPORARY BUS STOPS

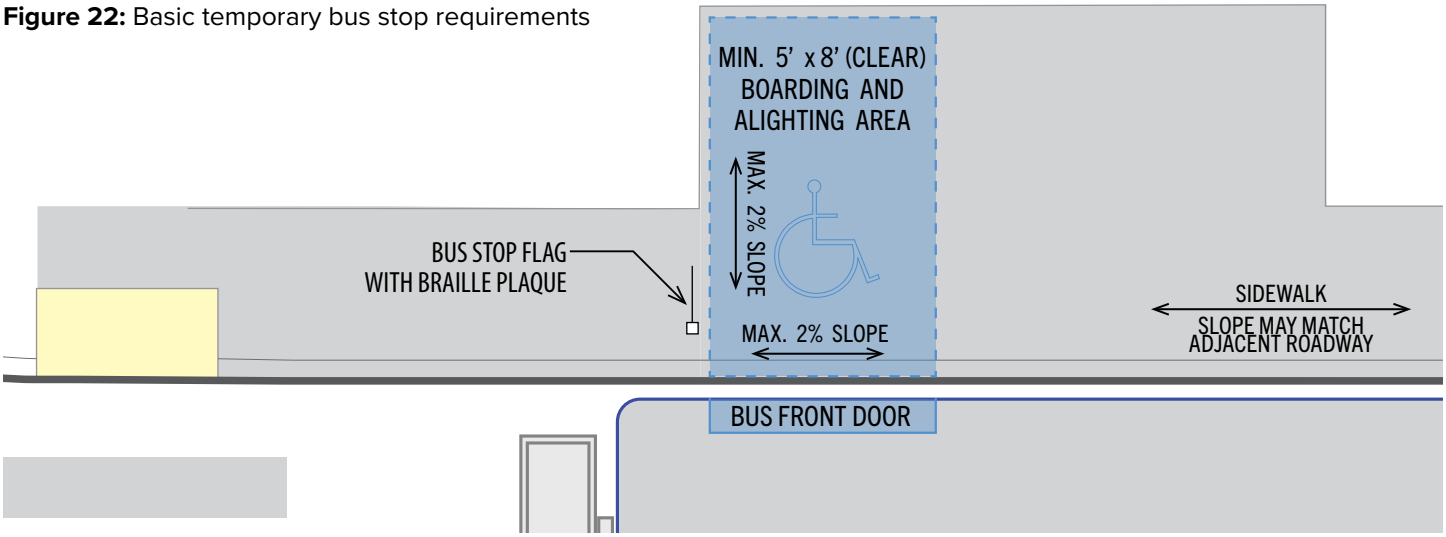
Creating a temporary bus stop may be necessary when an established bus stop is closed or inaccessable due to construction activities at or near the stop.

- Review PROWAG requirements for maintaining accessilibity during temporary changes or closures.
  - » Where a pedestrian circulation path or transit stop is temporarily closed by construction, maintenance operations, or similar conditions, an alternate pedestrian access route or transit stop shall be provided that meets standard PROWAG design requirements (§R204).
  - » PPTA has guidance on PROWAG requirements, including a checklist for locating bus stops.

Locating Temporary Bus Stops

- Locate stop as near as possible to existing stop.
  - » Consider stop spacing to avoid being too close or far from adjacent stops (see Page 17).
- Stop must meet basic stop requirements, including
  - » Stop must be on a firm and stable surface.
  - » Ensure a 5'x8' ADA boarding area is available for front door.
  - » Ensure bus can pull to curb. Consider restricting any parking that may obstruct the area. If pulling to the curb is not possible, consider a Temporary In-Street Stop (see below).

Figure 22: Basic temporary bus stop requirements



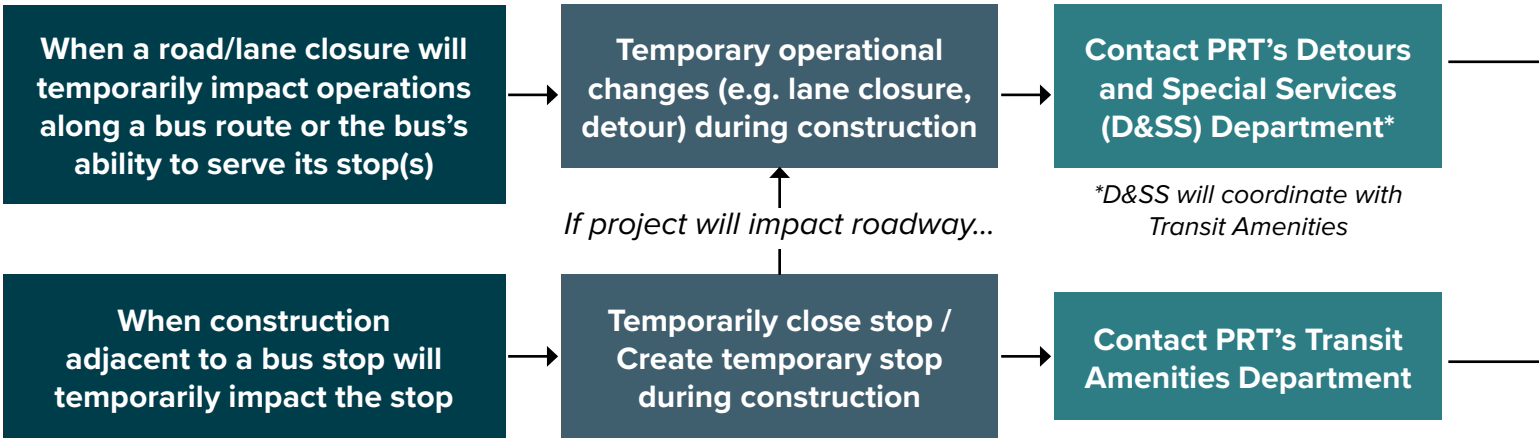
Temporary In-Street Stops

- Temporary Boarding Areas can be located at street level if there are not adequate locations for a stop on the curb. See **Sample In-Street Stop Configurations** on page 91.
- Place bus stop sign with Braille plaque on sidewalk to help riders identify the stop location.
- Ensure there is a 5' x 8' ADA boarding area free of obstructions.
- Ensure there is an accessible path and ramp from the sidewalk to the street-level boarding area.
- Use Tactile Surfaces to direct visually impaired riders from sidewalk to boarding area, and to deliniate In-Street boarding area from adjacent travel lanes. See **Tactile Surfaces** on Page 55 for more information.

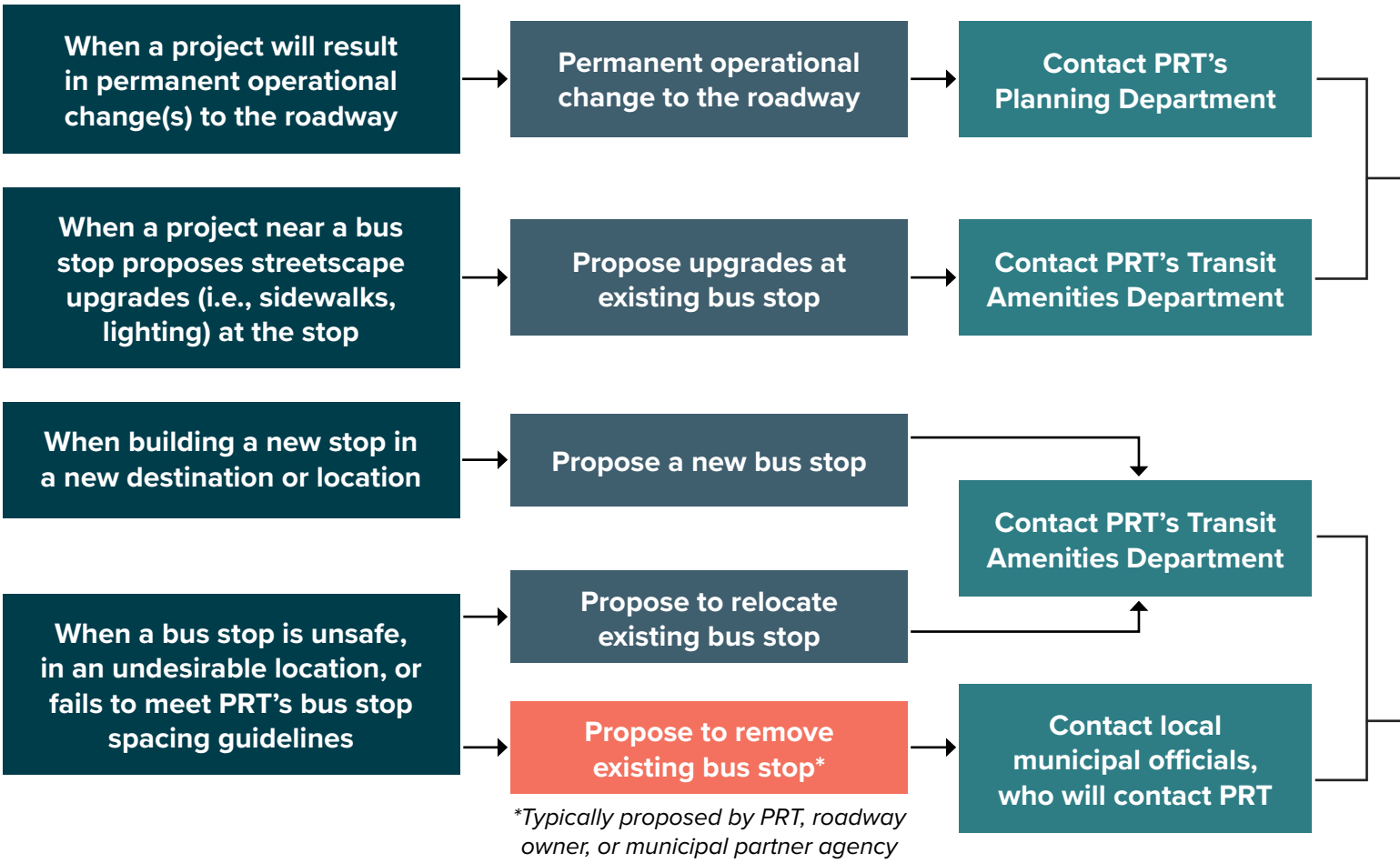
DESIGN, PERMITTING, AND CONSTRUCTION DECISION-MAKING

This section details the decision-making surrounding the design, permitting, and construction of new, relocated, or upgraded bus stops in the form of a flowchart.

TEMPORARY CHANGES



PERMANENT CHANGES



To alert PRT of Emergency Road Closures, contact Bus Traffic Operations 412-851-4900

Click Here for PRT's Contact Information *(Page 72)*

Click Here for the Construction Mitigation and Coordination Section *(Page 78)*

**Typical 30-day notice except in dangerous/ emergency situation*

WORKING AND PERMITTING WITH OTHER PUBLIC AGENCIES

STEPS TO TAKE

- For projects within the City of Pittsburgh, the Department of City Planning and Department of Mobility & Infrastructure are the two departments that participate in the review and approval process. For some projects, DOMI is the reviewer for the site plan submitted to Zoning. For other developments, additional material and studies are needed for DOMI to evaluate the proposed project's impact fully.
- Similar to securing construction permits and establishing a CMP, the Site Plan Review is an external process and a primary component of most Zoning Development Review applications that must be completed by the City of Pittsburgh or other relevant municipality.
- For applicants with projects that fall in the City of Pittsburgh limits, details on the Site Plan Review process can be found here. Depending on the scope of work and location, any of the additional Planning Reviews, Public Notices, and Public Hearings may apply, including Design Review, Historic Commission Review, and Environmental Reviews.
- For projects outside of the City of Pittsburgh, contact municipal staff for permitting questions.

DRAWING DETAILS

PRT and local municipal engineers must review and approve professionally stamped construction drawings before construction begins on a project that impacts the existing public transit network and/or transit infrastructure owned by PRT.

To help PRT's review of proposed project plans, the following drawing detail elements will be most useful for PRT to 1) determine if a design meets guidelines, 2) help decide where amenities are best placed, and 3) ensure accessible boarding is provided:

- » Bus stop location(s) and bus loading zone(s)
- » Sidewalk and bus stop area depths
- » Curb ramp and crosswalk locations
- » Pavement markings
- » Pole and channel locations
- » Lighting
- » Tree pits and landscaping
- » Public right-of-way
- » Storm drains
- » General utility locations
- » Management and Protection of Traffic (MPT) Plans, as needed

- All documents should include a title, date, and author or contact information.
- Plan or section drawings should include a north arrow and scale (as applicable), and should maintain a consistent scale and orientation relative to north where possible.
- It is often helpful to include a roll plot of a project along a corridor that is othrewise broken into separate sheets.

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Pittsburgh Regional Transit

APPENDIX A

APPENDIX A

STANDARD SHELTERS

BUS FLEET DIMENSIONS

PLATFORM & BOARDING BULB DIMENSIONS

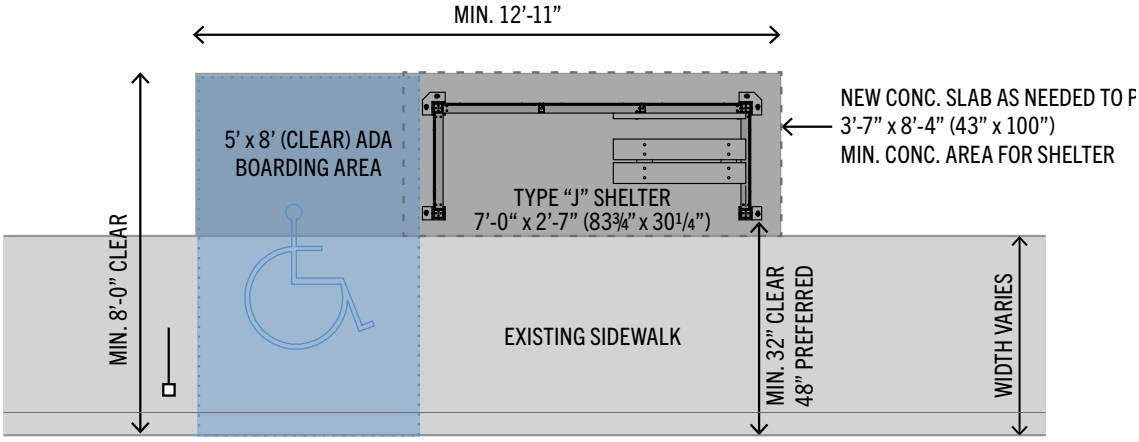
Pittsburgh Regional Transit
345 Sixth Ave, 3rd Floor
Pittsburgh, PA 15222

https://www.rideprt.org/

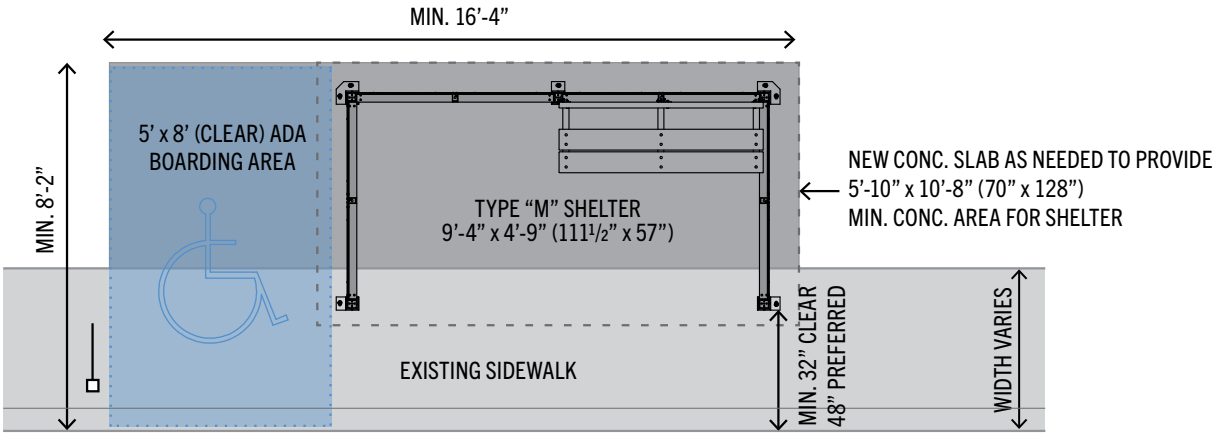
412-566-5500

STANDARD SHELTER TYPES

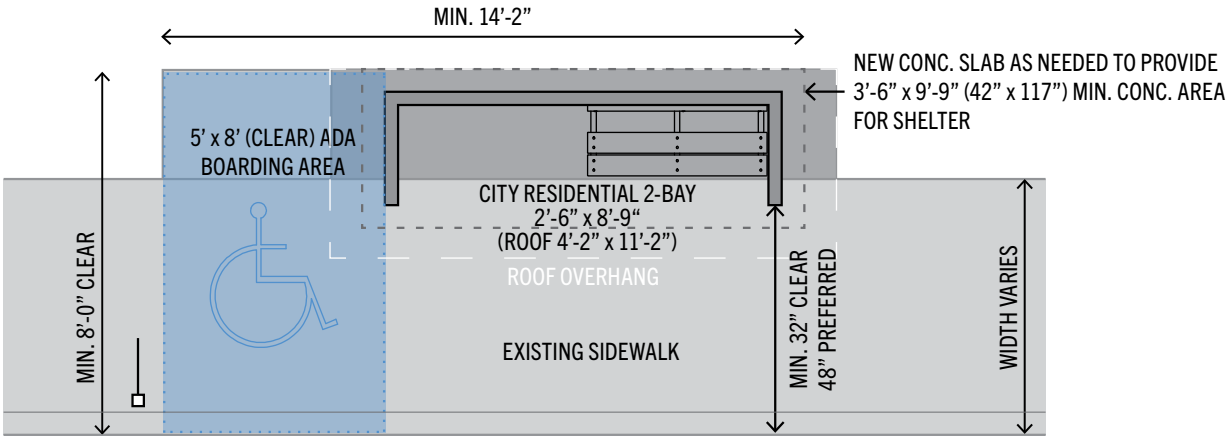
PRT Type "J" Shelter



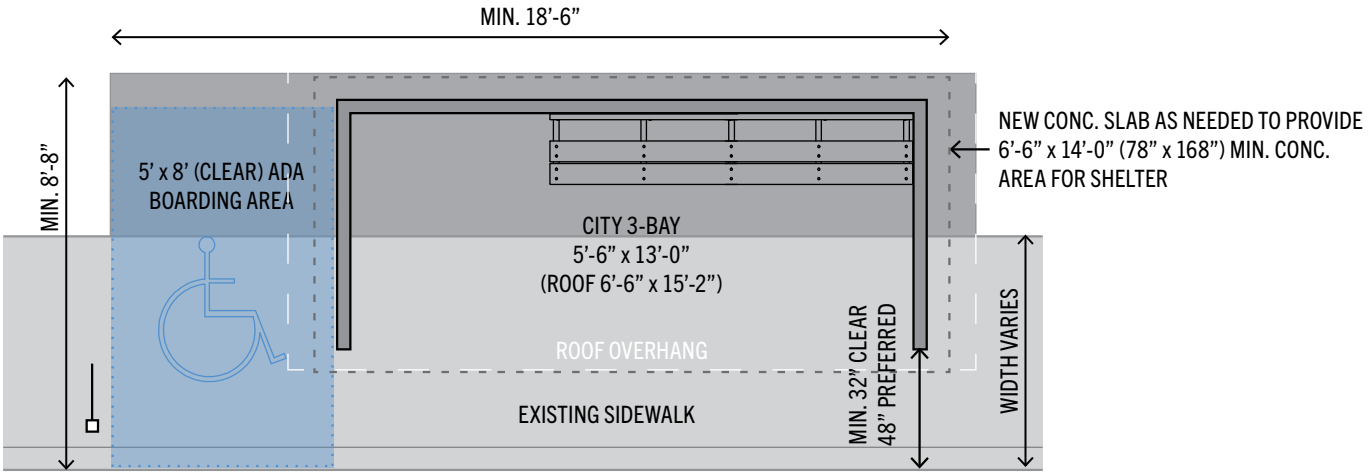
PRT Type "M" Shelter



City of Pittsburgh (Gateway) Residential 2-Bay Shelter

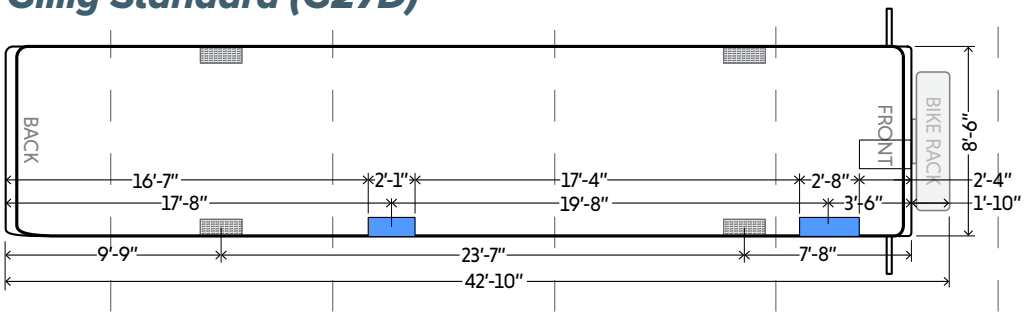


City of Pittsburgh (Gateway) 3-Bay Shelter

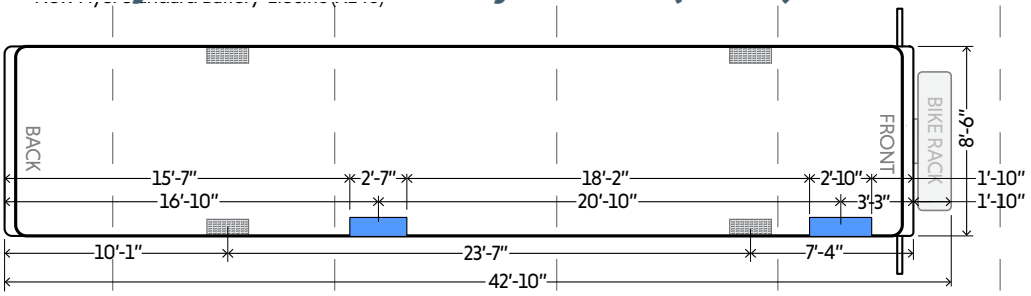


BUS DIMENSIONS

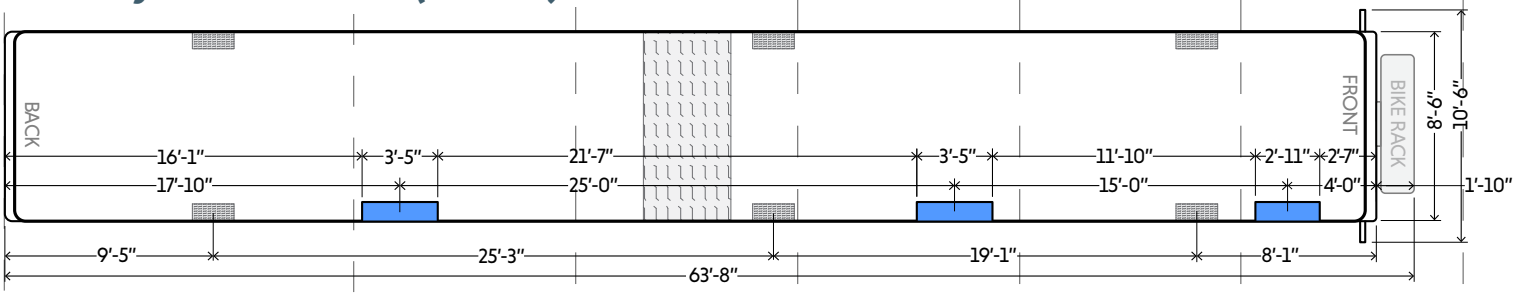
Gillig Standard (G27D)



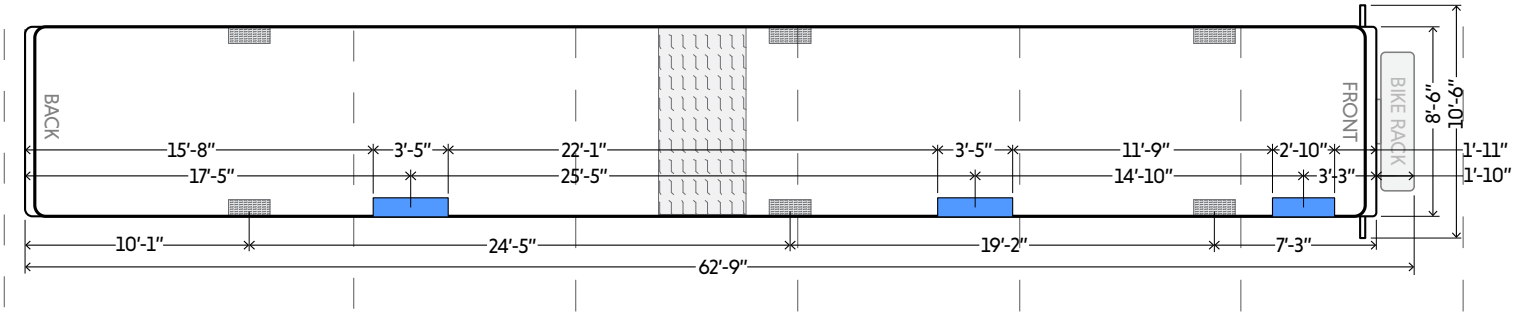
New Flyer Standard Battery-Electric (XE40)



New Flyer Articulated (D60LF)



New Flyer Articulated (XD60, XE60)

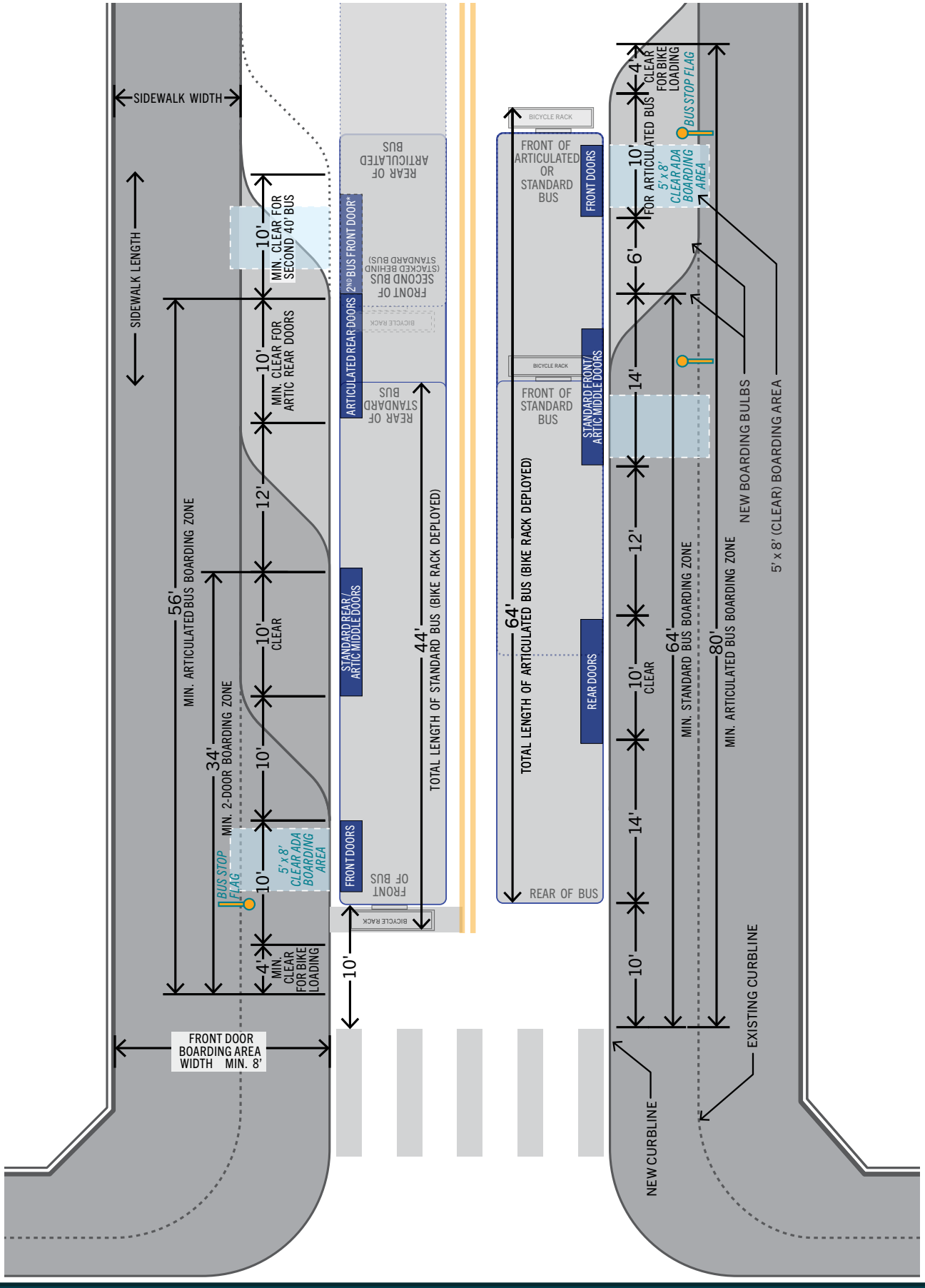


*Dimensions represent typical measurements for similar buses and may vary by model and vehicle.

	Gillig 35' Short	Gillig 40' Standard	New Flyer 40' Std.	New Flyer 40' Std.	New Flyer 60' Artic.	New Flyer 60' Artic.	New Flyer 60' Artic.
Model	G27B 102N4	G27D 102N4	XD40	XE40	D60LF	XD60	XE60
Fuel	Diesel	Diesel	Diesel	Battery Electric	Diesel	Diesel	Battery Electric
Vehichle number series	1700's	6000's	6800's	7000's	3300's	3400's 3500's	8000's
VEHICLE ENVELOPE							
Overall Height	10'-3"	10'-9"	10'-6"	11'-2"	10'-2"	10'-6"	11'-0"
Body Length (with bumpers)	37'-0"	41'-0"	41'-0"	41'-0"	61'-10"	60'-11"	60'-11"
Overall Length (with bumpers and bike rack deployed)	39'-10"	42'-10"	43'-9"	42'-10"	62'-8"	62'-9"	62'-9"
Body Width (no mirrors)	8'-6"	8'-5"	8'-6"	8'-6"	8'-6"	8'-6"	8'-6"
Overall Width	10'-6"	10'-6"	10'-6"	10'-6"	10'-6"	10'-6"	10'-6"
DOOR STEP HEIGHTS							
Front Door Step	15.2"	15.2"	14"	13.5"	16.6"	14"	14"
2nd Door Step	15.6"	15.8"	14"	14"	17.7"	14"	14"
3rd Door Step	—	—	—	—	17.4"	14"	14"
Kneeling: Front Door Step	**...**	*11.8"*	*10"*	*8.7"*	*11.9"*	*8.5"*	*7.8"*
Kneeling: 2nd Door Step	**...**	*12.4"*	**...**	*12.5"*	*13.6"*	*13"*	*9"*
Kneeling: 3rd Door Step	—	—	—	—	*13.3"*	*13.9"*	*8.3"*
VEHICLE WEIGHT (tons)							
Vehicle Curb Weight	...	14.3	...	17.8	22.1	20.4	24.9
Vehicle Gross Weight	19.8	20.8	...	22.0	33.4	34.7	39.1
PASSENGER CAPACITY							
Seated Capacity	32	40	39	39	56	51 / 52	52
Capacity with Standees	79	72	81	82	106	111	111
Wheelchair capacity	...	2	2	2	2	2	2

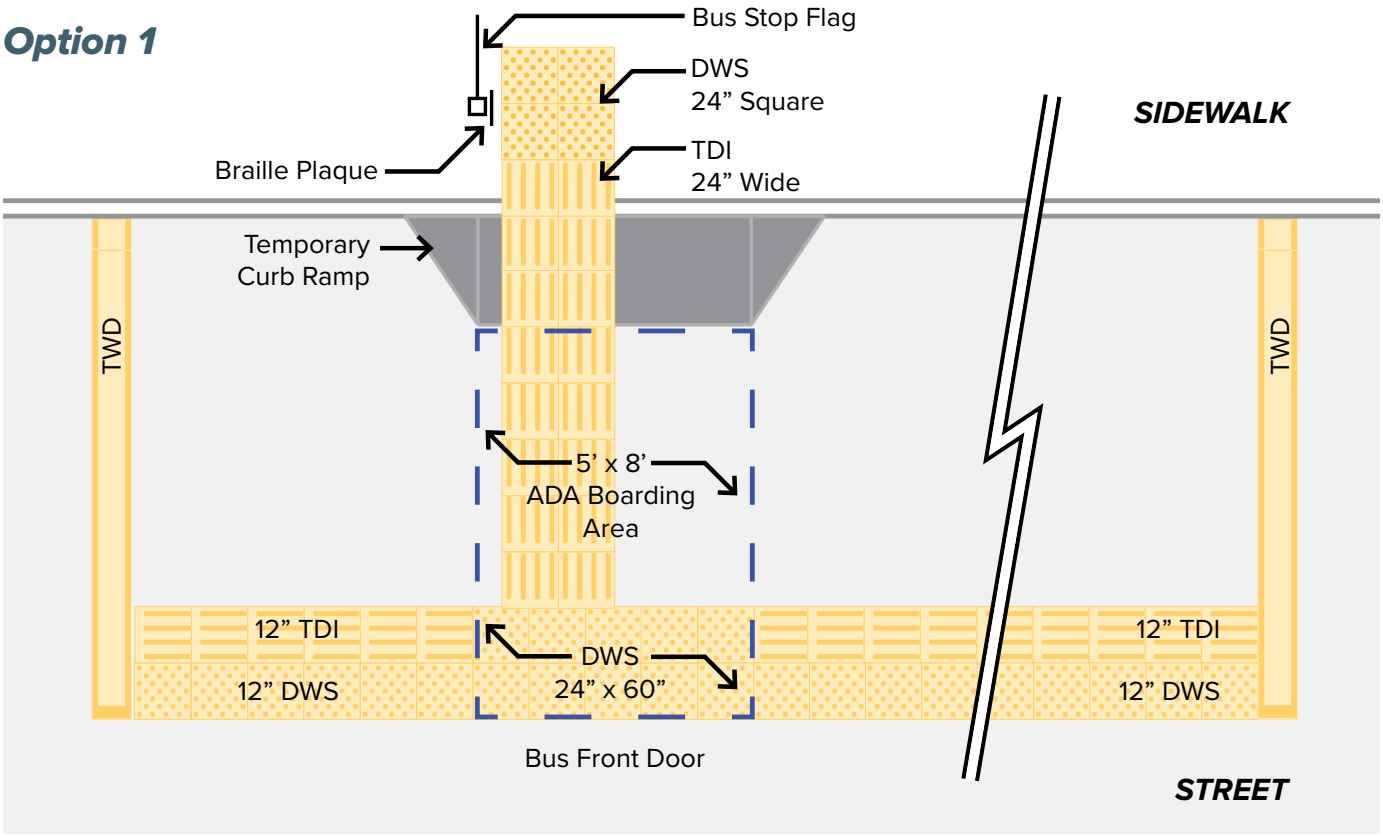
BOARDING BULB DIMENSIONS

NEAR-SIDE STOP | FAR-SIDE STOP

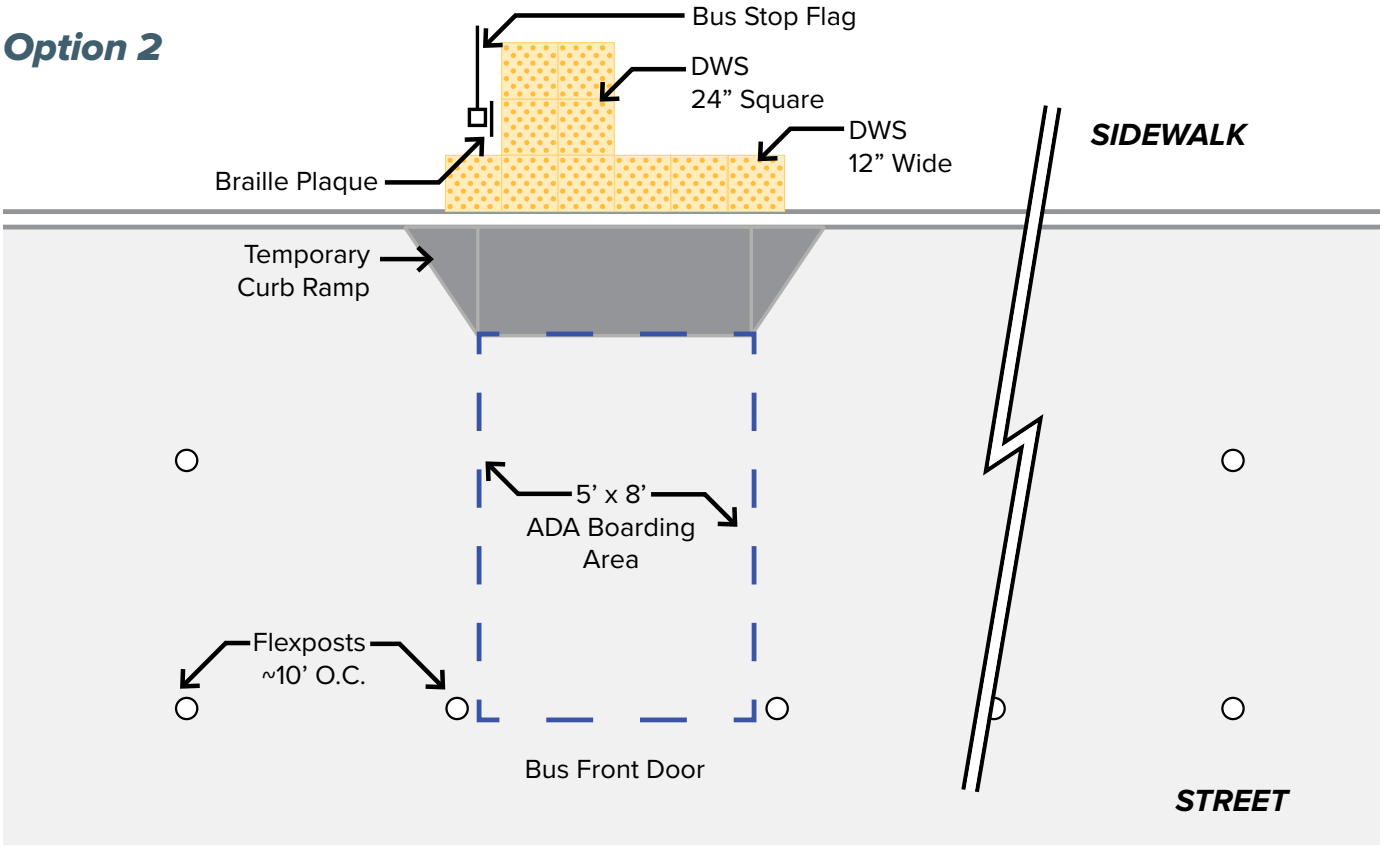


SAMPLE IN-STREET STOP CONFIGURATIONS

Option 1



Option 2



PLATFORM LENGTH

Based on stop location and type, the length of curb needed for a bus stop platform varies. Platform areas should be carefully designed to ensure door zones are kept clear and accessibility is maintained.

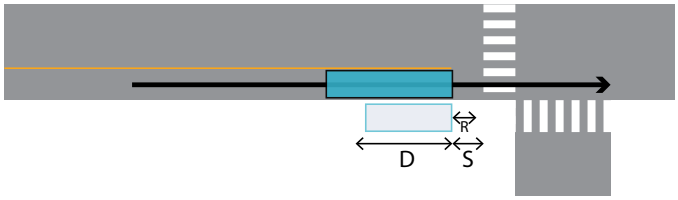
The dimensions shown below represent only a sample of possible configurations; required platform length can be calculated for any configuration using the Typical Dimensions listed below.

NOTES:

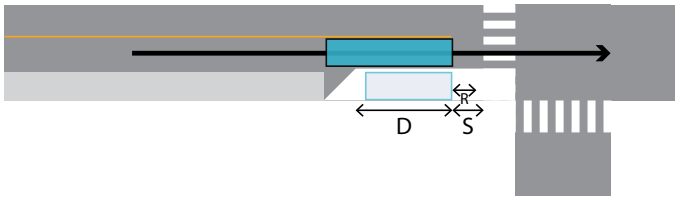
- Select an Articulated configuration if any route served by the stop may use articulated buses.
- For pull-out stops adjacent to an intersection, entry or exit transition can take place through the intersection when one end is open (not enclosed). Midblock pull-out stops are generally “enclosed”, while Near- and Far-Side stops are typically open-ended where not enclosed by a curb extension at the corner.
- After turns, stops may require extra length (typically about 50’) to allow buses to pull parallel to the receiving curb and bus stop, depending on street configuration. Check in field or with Autoturn.
- When designing a pull-out where it is desirable to allow buses to enter and exit independently of each other, such as for a layover area, provide enough space between each bus to allow an Entry and Exit Transition. These transition areas may overlap each other or other clear zones.

Near-Side In-Lane Single Standard Bus

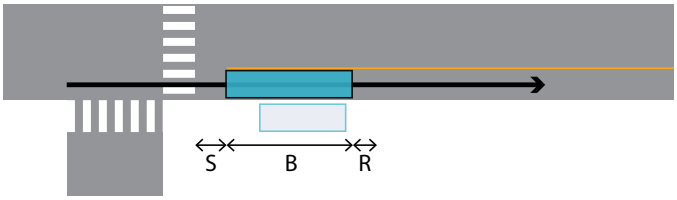
Curbside

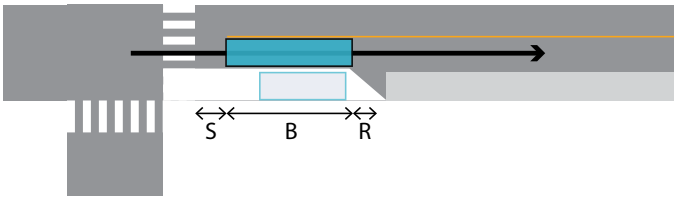


With Boarding Bulb

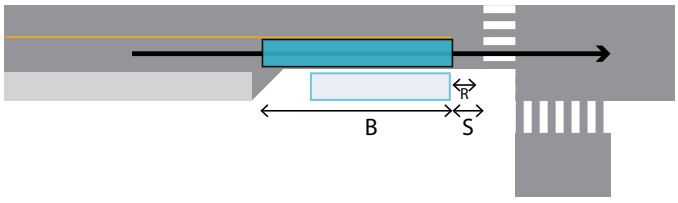


Far-Side In-Lane Single Standard Bus

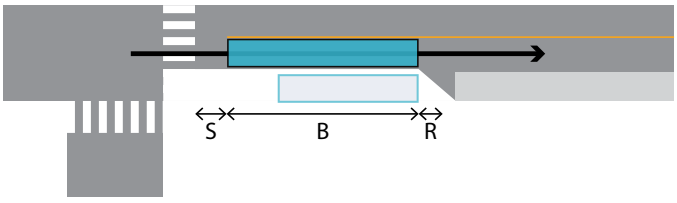




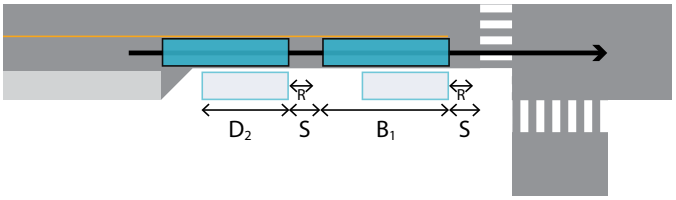
Near-Side In-Lane Single Articulated Bus



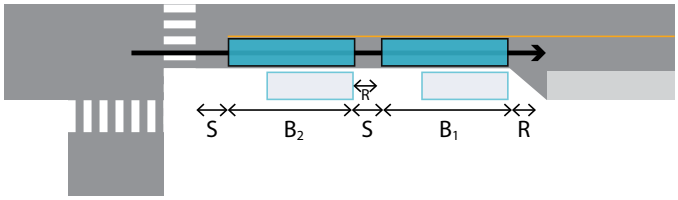
Far-Side In-Lane Single Articulated Bus



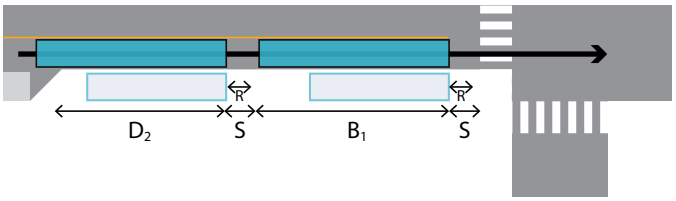
Near-Side In-Lane Double Standard Buses



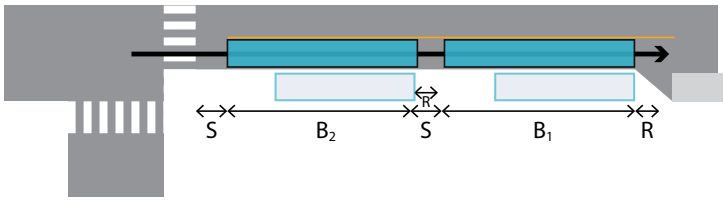
Far-Side In-Lane Double Standard Buses



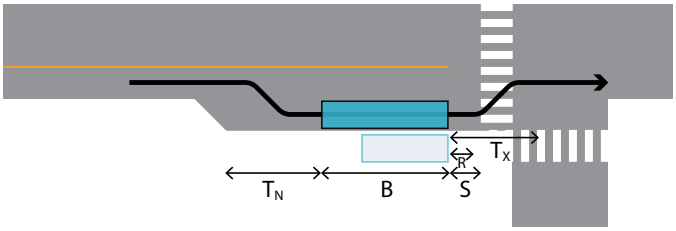
Near-Side In-Lane Double Articulated Buses



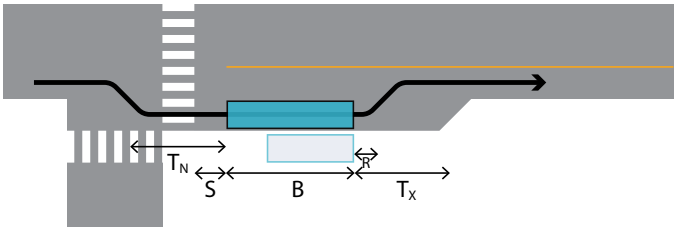
Far-Side In-Lane Double Articulated Buses



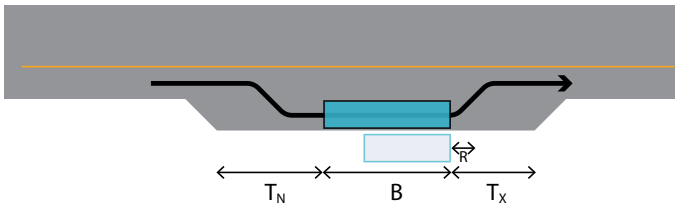
Single Bus Near-Side Pull-Out



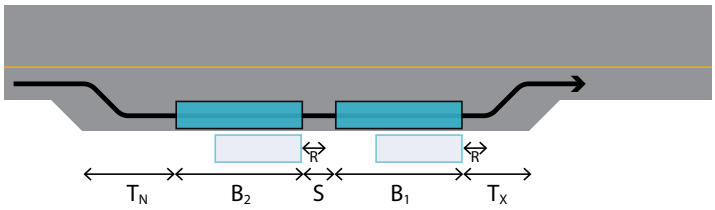
Double Bus Far-Side Pull-Out



Single Mid-block Bus Pull-Out



Double Mid-block Bus Pull-Out



TYPICAL DIMENSIONS

B	43’ / 65’	Standard / Articulated **Bus Zone** (full bus length with deployed bike rack)
D	30’ / 52’	Standard / Articulated **Door Zone** (front of deployed bike rack to rear door)
R	4’ (min.)	**Bike Rack Loading Clear Zone** (may overlap with Setback or Exit Transition area)
S	6’ (min.)	**Setback** from Crosswalk or Second Bus
T_N	35’ (typ.)	**Entry Transition**
T_X	25’ (typ.)	**Exit Transition** (15’ minimum on low-speed streets; 35’ min. on high-speed streets)

Pittsburgh Regional Transit

APPENDIX B

APPENDIX B

SAMPLE AGREEMENTS

GLOSSARY OF TERMS

Pittsburgh Regional Transit
345 Sixth Ave, 3rd Floor
Pittsburgh, PA 15222

https://www.rideprt.org/

412-566-5500

STANDARD PRT SHELTER AGREEMENT

AGREEMENT FOR TRANSIT PASSENGER SHELTER

The PORT AUTHORITY OF ALLEGHENY COUNTY d/b/a PITTSBURGH REGIONAL TRANSIT (hereinafter called "PRT") and the undersigned (hereinafter called "Property Owner") agree as follows:

1. PRT shall have the right, at its sole cost and expense, to install a Transit Passenger Shelter (hereinafter called "Shelter") on:

   (check one) [ ] Property Owner's premises
   [ ] Right-of-Way abutting Property Owner's premises

   _____
   Location Name

   and in consideration, PRT shall maintain such Shelter to the terms hereof, and rules and regulations from time to time adopted by PRT.

2. The Property Owner hereby consents to the installation of said Shelter and shall permit the public access thereto at all times.

3. For the purpose of inspection, repair, replacement, or any other maintenance activities, and the removal of the shelter installation from the premises, PRT and its employees shall have access thereto at all reasonable times. The Property Owner will otherwise continue to maintain its premises or right-of-way abutting its premises in and around said Shelter, including snow and ice removal, landscaping and pavement condition in a safe manner.

4. The Shelter, apparatus, appliances, appurtenances and facilities in connection therewith and installed hereunder shall be for the exclusive use of transit patrons, and no signs, apparatus, appliances, appurtenances, accessories or facilities not provided by PRT shall be attached thereto or used in connection therewith without expressed prior written permission of PRT.

5. The Shelter, apparatus, appliances, appurtenances and facilities provided therewith by PRT shall remain the property of PRT and PRT reserves the right to alter, modify, or completely remove the Shelter from the premises.

6. PRT, to the extent permissible by law and without waiving any immunities or defenses to which PRT is entitled under applicable law, hereby agrees to indemnify, defend and safe harmless the property owner from and against any and all claims, demands, actions, judgments, loss or damages for injury, including death, to any person or persons or loss or damage to property arising out of or resulting from the presence, erection, maintenance, or removal of said Shelter.

7. Either Party reserves the right to terminate this Agreement upon sixty (60) days written notice to the Other Party.

8. The Property Owner, his successors and assigns, shall have no authority to bind PRT in any way.

9. In addition to PRT's termination rights set forth at paragraph 7 above, it is also recognized and understood that in the event that vandals, a natural disaster and/or accident should destroy or significantly damage said Shelter, PRT reserves the right to terminate this Agreement without further obligation to the Property Owner. In the event that said Shelter is destroyed or significantly damaged, PRT shall make reasonable efforts to restore said Shelter to the condition it was in when installed, normal wear and tear excepted, in a timely manner. If said Shelter is damaged more than once in any twelve (12) month period, PRT reserves the right to terminate this Agreement without further obligation to the Property Owner and at PRT's sole discretion.

Accepted: By the Property Owner:

_____ _____
(Signature and Title) (Date)

By the Port Authority of Allegheny County
d/b/a Pittsburgh Regional Transit:

_____ _____
(Signature and Title) (Date)

STANDARD PRT BIKE RACK AGREEMENT

AGREEMENT FOR TRANSIT BIKE RACK

Port Authority of Allegheny County d/b/a Pittsburgh Regional Transit (hereinafter called "PRT") and the undersigned (hereinafter called "Property Owner") agree as follows:

1. PRT shall have the right, at its sole cost and expense, to install a Transit Bike Rack (hereinafter called "Bike Rack") on:

   (check one) [ ] Property Owner's premises
   [ ] Right-of-Way abutting Property Owner's premises

   at the following location: _____
   Location Name

   and in consideration thereof, PRT shall install and/or maintain such Bike Rack according to the terms hereof, and according to rules and regulations from time to time adopted by PRT.

2. The Property Owner hereby consents to the installation of said Bike Rack and shall permit the public access thereto at all times.

3. For the purpose of inspection, repair, replacement, or any other maintenance activities, and the removal of the Bike Rack installation from the premises, PRT and its employees shall have access thereto at all reasonable times as applicable and necessary. The Property Owner will otherwise continue to maintain its premises, or right-of-way abutting its premises in and around said Bike Rack, including snow and ice removal, landscaping and pavement condition in a safe manner.

4. The Bike Rack, apparatus, appliances, appurtenances and facilities in connection therewith and installed hereunder shall be for the exclusive use of transit patrons, and no signs, apparatus, appliances, appurtenances, accessories or facilities not provided by PRT shall be attached thereto or used in connection therewith without expressed prior written permission of PRT.

5. The Bike Rack, apparatus, appliances, appurtenances and facilities provided therewith by PRT shall remain the property of PRT, and PRT reserves the right to alter, modify, or completely remove the Bike Rack installation from the premises.

6. PRT, to the extent permissible by law and without waiving any immunities or defenses to which PRT is entitled under applicable law, hereby agrees to indemnify, defend and save harmless the Property Owner from and against any and all claims, demands, actions, judgments, loss or damages for injury, including death, to any person or persons, or loss or damage to property arising out of or resulting from the presence, erection, maintenance, or removal of said Bike Rack.

7. Either Party reserves the right to terminate this Agreement upon sixty (60) days written notice to the other Party.

8. The Property Owner, its successors and assigns, shall have no authority to bind PRT in any way.

9. In addition to PRT's termination rights set forth at paragraph 7 above, it is also recognized and understood that in the event that vandals, a natural disaster and/or accident should destroy or significantly damage said Bike Rack, PRT reserves the right to terminate this Agreement without further obligation to the Property Owner. In the event that said Bike Rack is destroyed or significantly damaged, PRT shall make reasonable efforts to restore said Bike Rack to the condition it was in when installed, normal wear and tear excepted, in a timely manner. If said Bike Rack is damaged more than once in any twelve (12) month period, PRT reserves the right to terminate this Agreement without further obligation to the Property Owner and at PRT's sole discretion.

Accepted: By Property Owner:

_____ (Signature and Title) _____ (Date)

By PRT:

_____ (Signature and Title) _____ (Date)

SAMPLE EASEMENT AGREEMENT

Doc-INTS

Allegheny County
Jessica Osorfolo
Department of Real Estate
Pittsburgh, PA 15219

**** Electronically Filed Document ****

DO NOT REMOVE-THIS PAGE IS PART OF THE RECORDED DOCUMENT

Document Number: 2023-10439
Recorded As: ERX-DEED AGREEMENT
Recorded On: April 27, 2023
Recorded At: 12:58:00 pm
Number of Pages: 14
Book-VI/Pg: Bk-DE VI-19280 Pg-67
Recording Fee: $161.75
Parties:
EDGEWOOD BOROUGH
ALLEGHENY COUNTY PORT AUTH
Receipt Number: 4239018
Processed By: Patricia Rankin

I hereby certify that the within and foregoing was recorded in the Department of Real Estate's Office in Allegheny County, PA

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Doc ID:10439

545129

DRE Certified
27-Apr-2023 12:24PM By: T G

EASEMENT AGREEMENT

THIS EASEMENT AGREEMENT ("Agreement") is made as of this 27th day of April, 2023, by and between the **Borough of Edgewood** (the "Borough"), a municipal corporation formed under the laws of the Commonwealth of Pennsylvania, having an address at 2 Race Street, Edgewood, Pennsylvania 15218, and **Port Authority of Allegheny County** ("Port Authority"), a body corporate and politic organized and existing under the Second Class County Port Authority Act, 55 P.S. §§ 551 et seq., as amended (the "Act"), with an address of 345 Sixth Avenue, Third Floor, Pittsburgh, PA 15222

RECITALS:

WHEREAS, the Borough is the owner of that certain real property located at the corner of Edgewood Avenue and Gordon Street, Borough of Edgewood, County of Allegheny, Commonwealth of Pennsylvania, as more particularly described on Exhibit "A" attached hereto and incorporated herein (the "Property");

WHEREAS, Port Authority is engaged in the development, modification and improvement of its Martin Luther King, Jr. East Busway (the "Project") connecting downtown Pittsburgh and East End neighborhoods;

WHEREAS, Port Authority desires to enter onto the Property to adjust, modify, re-align, and ultimately replace the curb and sidewalk fronting Edgewood Avenue and make certain other improvements in connection with the Project, including but not limited to installation of curb bump-outs and extensions located at or near the corner of Edgewood Avenue and Gordon Street, as more particularly depicted on those plans prepared by GAI Consultants and dated April 2022 (the "Plans"); and make certain other improvements in connection with the Project (the "Curb Extension Improvements");

WHEREAS, in connection with the Curb Extension Improvements, Port Authority anticipates removing and, as applicable, replacing curbs and sidewalks, as well as installing and constructing structures, foundations and other equipment and/or improvements related thereto as shown on the Plans.

WHEREAS, construction and the continued use of the Curb Extension Improvements will require a perpetual and permanent easement granting access to the Property;

WHEREAS, the Borough is willing to grant such a permanent easement for the Curb Extension Improvements;

WHEREAS, the parties desire to also set forth certain ownership and maintenance obligations as described herein; and

WHEREAS, construction and operation of the Curb Extension Improvements will serve the public interest, will be beneficial and advantageous to both parties, will facilitate the

expeditious and effective movement of transit patrons, and will contribute to the well-being of the citizens of the Borough.

NOW, THEREFORE, in consideration of the above recitals incorporated herein and of the mutual covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and intending to be legally bound, the parties covenant and agree to the following:

1. GRANT OF EASEMENTS. The Borough hereby grants, sells, bargains and conveys to Port Authority and its successors and assigns, a perpetual and permanent easement, on, over, under and through the Property (hereinafter, the "Permanent Easement"). The Permanent Easement Area shall be for the use and enjoyment of Port Authority and its successors, assigns, contractors, subcontractors, consultants, and representatives, including the right to construct, operate, secure, maintain, repair and replace one or more Curb Extension Improvements thereon. The Permanent Easement may also be used, without limitation, for use as a laydown area, storage of vehicles, materials and equipment, and staging of construction work involving the Project. The Borough agrees not to obstruct or interfere, or to permit others to obstruct or interfere, in any manner, with Port Authority's free and uninterrupted use and enjoyment of the Curb Extension Easement.

2. DURATION OF EASEMENT. The Permanent Easement may be terminated only upon the mutual written agreement of the Borough and Port Authority and/or their respective successors and assigns. In the event of any such mutual written termination, the Borough and Port Authority and/or their respective successors and assigns shall execute and record with the Office of the Department of Real Estate of Allegheny County, Pennsylvania a document in recordable form (the "Termination Agreement") identifying with particularity the specific grants of easement rights and privileges set forth in this Agreement that are to be terminated. If any grants of easement rights and privileges set forth in this Agreement are not specifically identified in the Termination Agreement, the easement rights and privileges not specifically identified in the Termination Agreement shall be conclusively regarded as remaining in full force and effect.

3. CONSTRUCTION AND MAINTENANCE.

a. Port Authority shall use the Permanent Easement in such a manner as to minimize damage to any adjoining property. Subject to the terms of this Agreement, Port Authority, either directly or through its contractor(s), shall bear all costs and expenses associated with the installation, repair or replacement of any sidewalk, street, pavement, and curb damage and damage to other surface and sub-surface property or structures of the Borough which result from construction of the Curb Extension Improvements within the Permanent Easement by Port Authority or its contractors.

b. Upon completion of the Curb Extension Improvements, the Port Authority, at its cost, shall be responsible for the repair, maintenance, replacement and, if necessary, the final removal, of the Curb Extension Improvements, including the concrete landing, curbs, sidewalks, bollards, and ramps comprising or installed within the Permanent Easement by the Port Authority.

its agents, or lessees. The Port Authority shall, at its own cost, also maintain all signage installed within the Permanent Easement as part of the Curb Extension Improvements or thereafter by the Port Authority, its agents, or lessees. For avoidance of doubt, during the pendency of this Agreement, the Borough shall own the Curb Extension Improvements other than signage installed by Port Authority, which Port Authority shall own.

c. Upon completion of the Curb Extension Improvements, the Borough, at its cost, shall keep the Permanent Easement area in good order by regularly removing trash and garbage, by performing line striping, and by removing snow and ice from the Permanent Easement as necessary. To the extent that the Borough wishes to install any trees, planters, other vegetation, retaining walls, structures, signage, or other improvements within the Permanent Easement area, it shall provide detailed plans for such improvements to the Port Authority and obtain the prior written consent of the Port Authority prior to making any such improvement installation(s). If any such improvements are approved by Port Authority and then installed by the Borough at the Borough's sole cost, the Borough shall own and also, at its own cost, maintain all trees, planters, other vegetation, retaining walls, structures, signage or other improvements installed or placed within the Permanent Easement by the Borough, its lessees, or agents. The Borough shall also pay for any repairs to Curb Extension Improvements necessitated by any such Borough additions.

4. PORT AUTHORITY'S CONTRACTORS/SUBCONTRACTORS. For any construction, reconstruction, repair, replacement or maintenance performed by or on behalf of Port Authority within the Permanent Easement Area by persons or entities other than Port Authority's own personnel, Port Authority shall require such person or entity to obtain general liability insurance, covering both personal injury and property damage, with limits of not less than $1,000,000 per occurrence and $2,000,000 annual aggregate, Workers Compensation with PA Statutory Limits and Automobile Liability coverage with $1,000,000 Combined Single Limit. The Borough shall be named as an additional insured as their interests appear pursuant to this Agreement on all required insurance policies with the exception of Workers' Compensation coverage.

5. INDEMNITY: The parties shall provide either directly, to the extent permitted by law, or through their contractor(s) utilizing the Permanent Easement Area, and without waiving any immunity provided by law (including but not limited to Sovereign Immunity applicable to Port Authority), for the defense of any and all suits, action or claims brought against the other, and indemnify and hold harmless each other for or on account of any loss, costs (including reasonable attorneys' fees) or expenses caused by or in any manner growing out of the improper or negligent performance of construction, reconstruction, repair, replacement, maintenance or use of the Permanent Easement Area by such party or its contractor(s); provided, however, no party shall be responsible for defending, indemnifying and/or holding the other party harmless from and against any and all loss, costs (including reasonable attorneys' fees) or expenses arising out of the negligence, gross negligence or willful misconduct of said other party or such party's officers, agents, employees or contractors.

6. COMPLIANCE WITH LAWS. The parties shall obey and comply with all laws, statutes, ordinances, resolutions and administrative regulations which are or shall become applicable to construction, use and maintenance of the Permanent Easement.

7. SUCCESSORS AND ASSIGNS. References in this Agreement to either of the parties hereto by name or otherwise shall be deemed to include its respective successors and assigns, unless otherwise inconsistent with the terms and provisions hereof.

8. APPLICABLE LAW. This Agreement and all of the terms and provisions hereof shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania. If any provisions or portions of this Agreement or the application thereof to any person, entity or circumstance shall, to any extent, be invalid or unenforceable, the remainder of the application of such provisions or portions thereof to any other person, entity or circumstance shall not be affected thereby, and each provision shall be valid and enforceable to the fullest extent permitted by law.

9. MODIFICATION OR ASSIGNMENT. Except as otherwise set forth herein, this Agreement cannot be assigned, changed or terminated orally, but only in a writing signed by both of the parties, their successors and assigns; provided, however, that Port Authority may assign its rights under this Agreement to any public or municipal body which is a successor of Port Authority, without the consent of the Borough.

10. NOTICES. Any notices required or permitted to be given under the terms of this Agreement shall be in writing, and shall be deemed given when received only if sent to the following addresses by (a) certified or registered United States Mail, return receipt requested, postage prepaid, or (b) Federal Express or a comparable overnight or next business day courier service, or (c) hand delivered, at the following addresses (or to such other or additional addresses as a party may designate by notice), or (d) by electronic transmittal, provided next day delivery is made in accordance with (b) above:

If to Port Authority:
Port Authority of Allegheny County
345 Sixth Avenue, 3rd Floor
Pittsburgh, PA 15222
Attn: Mike Cetra, Chief Legal Officer
Email: mcetra@portauthority.org

With a copy to:
Eric J. Zagrocki, Esquire
Eckert Seamans Cherin & Mellott, LLC
US Steel Tower – 44th Floor
600 Grant Street
Pittsburgh, PA 15219
E-mail: EZagrocki@EckertSeamans.com

[illegible]

If to the Borough:
Borough of Edgewood
ATTN: Borough Manager
2 Race Street
Edgewood, PA 15218
Email: manager@edgewoodboro.com

With a copy to:
Thomas P. McDermott, Borough Solicitor
GTN Law
519 Court Place
Pittsburgh PA 15219
Email: tmcdermott@gtnlaw.com

or to such other address as the party to receive the communication may designate by written notice to the other. Notice shall be deemed given on the date of receipt as evidenced by return receipt or other courier's standard delivery documentation. Notice may be given by a party's respective legal counsel.

11. COUNTERPARTS. This Agreement may be executed in any number of counterpart copies, all of which counterparts shall have the same force and effect as if all parties hereto had executed a single copy hereof.

12. IDENTIFICATION OF THE TRANSIT STATION. The parties acknowledge that certain portions of the transit station may be used for identification of the station. The Port Authority shall in its discretion retain the sole rights with regard to the identification of the transit station. The Port Authority may display transit-related information on transit stop signage and structures within the Permanent Easement or at the subject transit station.

13. AUTHORIZATION. The Borough, as the owner of the Property, represents and warrants that it has the full power and authority to enter into this Agreement and to grant to Port Authority the easement rights as contemplated herein.

14. RIGHT TO RECORD AGREEMENT. The parties agree that this Agreement shall be recorded in the Office of the Department of Real Estate of Allegheny County, Pennsylvania.

[SIGNATURES APPEAR ON NEXT PAGE]

Doc-10439

IN WITNESS WHEREOF, the parties have set their hands and seals on the day and year first written above.

BOROUGH OF EDGEWOOD

By: _____
Name: Rob Zelonka
Title: Borough Manager

PORT AUTHORITY OF ALLEGHENY COUNTY

By: _____
Name: Richard J. Cesna
Title: Chief Exec Officer

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF ALLEGHENY)

On this the 24th day of April, 2023, before me, a Notary Public, the undersigned officer, personally appeared Michael J. Cetra, who acknowledged himself/herself to be the Chief Legal Officer of Port Authority of Allegheny County, and that he/she as such officer, being duly authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of said Port Authority of Allegheny County by himself/herself as such officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Commonwealth of Pennsylvania - Notary Seal
Karen G. Dorman, Notary Public
Allegheny County
My commission expires October 20, 2026
Commission number 1041696
Member, Pennsylvania Association of Notaries

Karen G. Dorman
Notary Public

My Commission Expires:

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF ALLEGHENY)

On this the 14th day of April, 2023, before me, a Notary Public, the undersigned officer, personally appeared Stephen B. Zahorchak, who acknowledged himself/herself to be the Borough Manager of the Borough of Edgewood, and that he/she as such officer, being duly authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of said Borough of Edgewood by himself/herself as such officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Notary Public
My Commission Expires: 01/18/2026

Commonwealth of Pennsylvania - Notary Seal
Antoinette M. Cruz, Notary Public
Allegheny County
My commission expires January 18, 2025
Commission number 1226504
Member, Pennsylvania Association of Notaries

EXHIBIT "A"

Perimeter Description of Outbound Bump Out at Edgewood Avenue and Garden Street

All that certain piece of ground located within the right-of-way of Edgewood Avenue, Block 177-H, situate in the Borough of Edgewood, County of Allegheny and Commonwealth of Pennsylvania, being bounded and described as follows.

Beginning at a point on the existing curb line of Edgewood Avenue, said point being 18.01 feet right of and opposite Edgewood Avenue Construction baseline, station 50+20.76, thence along the proposed curb line

S 78° 14' 40" E, 1.21 feet to a point, thence continuing along the proposed curb line

S 03° 51' 10" W, 46.06 feet to a point, thence continuing along the proposed curb line

A curve to the right, a radius of 2984.82 feet, an arc length of 31.57 feet, a chord bearing of S 11° 49' 38" W and a chord distance of 31.57 feet to a point, thence continuing along the proposed curb line

S 41° 41' 55" W, 14.37 feet to a point on the existing curb line, thence continuing along the proposed curb line

N 77° 58' 32" W, 0.67 feet to a point on the existing curb line, thence continuing along the proposed curb line

N 12° 30' 18" E, 2.50 feet to a point, thence continuing along the proposed curb line

S 77° 58' 32" E, 0.66 feet to a point on the existing curb line, thence continuing along the existing curb line

N 12° 21' 30" E, 7.26 feet to a point, thence

N 11° 55' 38" E, 22.21 feet to a point, thence

N 78° 14' 40" W, 2.19 feet to a point, thence

N 11° 58' 48" E, 1.05 feet to a point, thence

N 11° 28' 09" E, 10.95 feet to a point, thence

S 78° 14' 40" E, 2.24 feet to a point on the existing curb line, thence continuing along the existing curb line

N 11° 42' 34" E, 12.90 feet to a point, thence

N 10° 59' 18" E, 27.69 feet to a point, thence

N 10° 29' 50" E, 5.09 feet to a point, the point of beginning

Containing 479.90 square feet (0.0110 acres), more or less.

Perimeter Description of Inbound Bump Out at Edgewood Avenue and Gordon Street

All that certain piece of ground located within the right-of way of Edgewood Avenue, Block 177-H, situate in the Borough of Edgewood, County of Allegheny and Commonwealth of Pennsylvania, being bounded and described as follows,

Beginning at a point on the existing curb line of Edgewood Avenue, said point being 18.15 feet left of and opposite Edgewood Avenue Construction baseline, station 51 +49 .64, thence

S 76° 44' 14" E, 6.06 feet to a point, thence

S 16° 01' 33" W, 9.17 feet to a point, thence

S 13° 54' 14" W, 25.00 feet to a point, thence

N 76° 48' 36" W, 5.57 feet to a point on the proposed curb line, thence continuing along the proposed curb line

N 06° 50' 10" E, 25.15 feet to a point on the proposed curb line, thence continuing along the proposed curb line

A curve to the left, a radius of 3010.90 feet, an arc length of 6.08 feet, a chord bearing of N 13° 13' 38" E and a chord distance of 6.08 feet to a point, thence continuing along the proposed curb line

A curve to the left, a radius of 3010.90 feet, an arc length of 4.35 feet, a chord bearing of N 58° 01' 21" E and a chord distance of 4.35 feet to a point, the point of beginning.

Containing 254.84 square feet (0.0059 acres), more or less.

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1029845v.2

Perimeter Description of Inbound Curb Ramp at Edgewood Avenue and Gordon Street

All that certain piece of ground located within the right-of-way of Edgewood Avenue, Block 177- H, situate in the Borough of Edgewood, County of Allegheny, and Commonwealth of Pennsylvania, being bounded and described as follows,

Beginning at a point on the existing curb line of Edgewood Avenue, said point being 18.03 feet left of and opposite Edgewood Avenue Construction baseline, station 50+86.87, thence

S 77° 58' 32" E, 0.73 feet to a point, thence

N 12° 16' 47" E, 4.00 feet to a point, thence

S 77° 41' 49" E, 4.94 feet to a point, thence

S 12° 18' 44" W, 3.98 feet to a point, thence

S 77° 58' 32" E, 0.67 feet to a point, thence

S 12° 15' 39" W, 9.99 feet to a point, thence

S 11° 26' 29" W, 10.81 feet to a point, thence

N 76° 51' 24" W, 6.46 feet to a point on the proposed curb line, thence continuing along the proposed curb line

N 11° 57' 55" E, 6.04 feet to a point, thence continuing along the proposed curb line N 12° 15' 38" E, 14.64 feet to a point, the point of beginning.

Containing 151.92 square feet (0.0035 acres), more or less.

Doc-10439

CERTIFICATE OF RESIDENCE

I do hereby certify that the Tax Bill Address of the within named Grantee is:

Port Authority of Allegheny County
345 Sixth Avenue, 3rd Floor
Pittsburgh, PA 15222

I do hereby certify that the Mailing Address of the within named Grantee is:

Port Authority of Allegheny County
345 Sixth Avenue, 3rd Floor
Pittsburgh, PA 15222

ATTN: Yvonne Hilton, Director of Legal & Consulting Services

Yvonne S. Hilton

EASEMENT AGREEMENT

Between

BOROUGH OF EDGEWOOD, Grantor

and

PORT AUTHORITY OF ALLEGHENY COUNTY, Grantee

Dated _____ Recorded: BOOK_____ PAGE _____

DEPARTMENT OF REAL ESTATE, MAIL TO:

Port Authority of Allegheny County
d/b/a Pittsburgh Regional Transit
345 Sixth Avenue, 3rd Floor
Pittsburgh, PA 15222

ATTN: Yvonne S. Hilton, Director Legal & Consulting Services

COMMONWEALTH OF PENNSYLVANIA :
COUNTY OF ALLEGHENY :

Recorded on this _____ day of _____ _____, 2023, in the Department of Real Estate of Allegheny County, Pennsylvania, foresaid in Deed Book

Volume___ , Page /

Given under my hand and seal of the said office, the day and year aforesaid.

_____
MANAGER

Doc 10439

pennsylvania

REV-183

BUREAU OF INDIVIDUAL TAXES
PO BOX 280603
HARRISBURG, PA 17128-0603

16300191105

REALTY TRANSFER TAX STATEMENT OF VALUE

COMPLETE FACTS 3701 ON

RECORDER'S USE ONLY

State Tax Paid

Book Number | Page

Instrument Number

Date Recorded

SECTION I TRANSFER DATA

Date of Acceptance of Document
04/14/2023

Grantor(s)/Lessor(s)	Telephone Number	Grantee(s)/Lessee(s)	Telephone Number
Borough of Edgewood		Port Authority of Allegheny County	

Mailing Address	City	State	ZIP Code
2 Race Street	Edgewood	PA	15218

Mailing Address	City	State	ZIP Code
345 Sixth Avenue, Third Floor	Pittsburgh	PA	15222

SECTION II REAL ESTATE LOCATION

Street Address	City, Township, Borough	
Edgewood Avenue and Gordon Street	Edgewood	
County	**School District**	**Tax Parcel Number**
Allegheny	Woodland Hills	

SECTION III VALUATION DATA

Was transaction part of an assignment or sale/leaseback? ☐ YES ● NO

1. Actual Cash Consideration	2. Other Consideration	3. Total Consideration
1.00	+ 0.00	= 1.00
4. County Assessed Value	**5. Common Level Ratio Factor**	**6. Computed Value**
0.00	x 1.57	= 0.00

SECTION IV EXEMPTION DATA - Refer to instructions for exemption status

7a. Amount of Exemption Claimed	7b. Percentage of Grantor's Interest in Real Estate	7c. Percentage of Grantor's Interest Conveyed
$ 0.00	100 %	100 %

8. Reason for the Appropriate Exemption Below for Exemption Claimed

- ☐ Will or intestate succession (Name of Decedent) (Estate File Number)
- ☐ Transfer to trust. (Attach complete copy of trust agreement and all amendments.)
- ☐ Transfer between principal and agent/straw party. (Attach complete copy of agency/straw party agreement.)
- ● Transfer to the commonwealth, the U.S. and instrumentalities by gift, dedication, condemnation or in lieu of condemnation. (If condemnation or in lieu of condemnation, attach copy of resolution.)
- ☐ Transfer from mortgagor to a holder of a mortgage in default. (Attach copy of mortgage and notice of default.)
- ☐ Corrective or confirmatory deed. (Attach complete copy of the deed to be corrected or confirmed.)
- ☐ Statutory corporate consolidation, merger or division. (Attach copy of articles.)
- ☐ Other (Please explain exemption claimed, if other than listed above. If more space is needed, attach additional sheets.)

SECTION V CORRESPONDENT INFORMATION - All inquiries may be directed to the following person

Name	Telephone Number
Frank Mollerson	(412) 261-9677

Mailing Address	City	State	ZIP Code
564 Forbes Avenue, Suite 902	Pittsburgh	PA	15219

Under penalties of law, I declare that I have examined this statement, including accompanying information, and to the best of my knowledge and belief, it is true, correct and complete.

Signature of Correspondent or Responsible Party

Date
04/26/2023

FAILURE TO COMPLETE THIS FORM PROPERLY OR ATTACH REQUESTED DOCUMENTATION MAY RESULT IN THE RECORDER'S REFUSAL TO RECORD THE DEED

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PAGE 1

GLOSSARY OF TERMS

This glossary provides a partial list of selected terms, defining words or phrases that are frequently used or heard in transportation and transit planning.

- **Access:** Universal ability to board a bus.
- **ACCESS:** A coordinated shared-ride paratransit service providing door-to-door, advanced reservation transportation in Allegheny County.
- **ADA compliance:** Characteristics of transit equipment, service and boarding areas that comply with the Americans with Disabilities Act (ADA) of 1990 and subsequent amendments. ADA legislation that mandates equal access to all public transportation services, regardless of mobility status The ADA requires that fixed-route transit be accessible and that paratransit (curb-to-curb is required, but PRT currently exceeds this requirement by providing door-to-door) service be provided in the same geographic areas on the same days and hours as the fixed route service.
- **Alightings:** Passengers getting off a transit vehicle at a bus stop.
- **Amenities:** Specific passenger or bus features that enhance public transportation, including lighted, paved, handicapped-accessible walkways, shelters, benches, waiting pads, turnouts and bus stop signs.
- **Articulated bus:** A high capacity (60-75 seated passengers) transit vehicle consisting of two sections hinged to each other, permitting the vehicle to turn within a relatively short turning radius, yet with one engine and one driver. Articulated buses are typically just over 60 feet long and may be referred to as “60-foot buses.”
- **ATIS:** Advanced Travel Information Systems provide real-time status of travel vehicles and services, such as the predicted time of arrival of the next bus or buses. The ATIS data can be found on the internet, handheld devices, message boards or public kiosks at bus or rail stations.
- **Best practices:** An approach to transit planning that requires adherence to nationally recognized industry standards for physical facilities and services.
- **Boardings:** Passengers getting on a transit vehicle at a bus stop.
- **Boarding area:** The part of a bus stop directly adjacent to bus doors where passengers move between the sidewalk or bus stop area and on-board the bus.
- **Boarding bulb:** Also known as a curb extension, bus bulb, or bumpout. Portion of the curb juts into the roadway to meet the bus and provides a larger boarding area for patrons. Allows for in-lane bus stops.
- **BRT:** Bus Rapid Transit offers rail-like transit on an upgraded, rubber-tired bus service. BRT is characterized by attention to major transit corridors, simple but frequent service, preferential traffic light controls and fewer, enhanced stops.
- **Bus pad:** An area of the street, adjacent to the bus stop that is concrete-paved.
- **Bus shelter:** A covered passenger waiting area, often semi-enclosed with benches, that provides protection from the elements.
- **Bus stop:** A linear curbside area that is specifically designed for buses stopping to board and/or alight passengers.
- **Bus turning radii:** The dimensions necessary to accommodate bus turning at intersections, parking lots, transit centers and elsewhere.
- **Bus turnout:** A bus stop located in a recessed curb area, separated from traffic. Also known as a “buy bay” or “bus berth”.
- **Bump-out:** Portion of the curb juts into the roadway to shorten crossing distances or provide more space for amenities, like those at bus stops. Also known as “curb extensions.” Also see *Boarding bulb*.

- **Commuter bus:** Transit over mostly major highways or busways, with few stops and service provided primarily at peak morning and evening hours.
- **Couplet:** Pair of one-way streets which work together to provide bus service in opposite directions, when service cannot be operated on the same street in both directions.
- **Curb Ramp:** A slightly sloping paved area designed and designated to provide handicapped access from a sidewalk to a crosswalk at street grade.
- **Dwell time:** The time a bus spends at a stop, primarily for passengers to get on and off, measured as interval between its stopping and starting.
- **Egress:** Motion of a person or vehicle leaving or exiting a place. Both passengers and buses make their own manner of egress movements.
- **Far side:** A location of a bus stop placed immediately beyond the intersection.
- **Feeder service:** Service designed to feed into existing transit routes by picking up passengers from locations in a neighborhood or jobsite and dropping them off at a stop along the bus or rail line.
- **Fixed route bus service:** Transit provided along dependable and defined routes with published schedules and stops at designated locations.
- **Headway:** The frequency interval between the passing of successive buses moving along the same route in the same direction, usually expressed in minutes.
- **High-rise development:** A concentration of development characterized by multi-story buildings in excess of six stories. Clusters of high-rise buildings are frequently found in activity centers.
- **Ingress:** Motion of a person or vehicle entering a place. Both passengers and buses make ingress movements.
- **In-lane stop:** A bus stop on a boarding bulb or along a continuous curbside travel lane, where the bus does not shift lanes to serve the stop.
- **ITS:** Intelligent Transportation Systems will integrate bus operations and planning with higher levels of new technology. ITS is characterized by GPS tracking of vehicles, on-board cameras, linkage with highway and police agencies and accurate monitoring of passenger boarding patterns.
- **Kneeler:** A feature that can lower the body of the bus or entrance door to facilitate boarding by senior citizens or people with disabilities.
- **Landing pad:** A 5’ x 8’ area with a level, firm, and stable surface that provides space to deploy and maneuver onto a wheelchair ramp.
- **Layover:** Additional time included into a bus schedule between arrivals and departures, used for recovery of delays, driver breaks and preparation for the return trip.
- **Lollipop:** A deviation that causes a bus to leave an otherwise linear path.
- **Mid-block bus stop:** A transit stop located between distant intersections.
- **Mobility-limited:** Individuals having a physical or mental impairment that adversely affects their ability to use various types of transportation, including public transit.
- **Mode shift:** During a complete trip, the traveler will often divide the means of mobility among various conveyances. Various modes include walking, bicycling, bus, rail, paratransit, shared vehicles, single-occupancy vehicles, carpools or aircraft. Even a split between different kinds of service – such as local or express buses – is considered a mode shift.
- **Near side:** The location for a bus stop that is placed on the approach side of an intersection.

- **Overhang:** Portion of the bus body extending beyond the front or rear axle.
- **Queue jump:** A short section of preferential traffic lane that permits transit vehicles to bypass an automobile queue at traffic signal or congested section of the roadway.
- **Paratransit:** An shared-ride transit service without a fixed route offering door-to-door service for people with disabilities.
- **Park and ride lot:** A designated parking area provided for bus, light rail, van pool and car pool users to park and leave their cars and to continue to their trip in a multi-occupant vehicle, such as a car pool, van pool or bus. Sometimes referred to as “PNR.”
- **Pedestrian accessway:** A lighted, paved and handicap-accessible walkway that provides convenient access to transit facilities and bus stops from adjacent developments.
- **Platform:** The area of the curb and sidewalk adjacent to a bus stopped at a bus stop.
- **PROWAG:** Public Right-of-Way Accessibility Guidelines, a set of guidelines for making public spaces accessible to people with disabilities
- **Road grade:** The maximum slope or grade that a standard 40-foot transit bus can negotiate safely on a street, highway or ramp.
- **Standard bus:** A typical (non-articulated) bus measuring about 40 feet long, sometimes referred to as "40-foot buses."
- **Stop pair:** two stops that together provide service in opposite directions from a point near both stops, typically located across an intersection from each other.
- **Stop spacing:** The linear distance between individual bus stops.
- **Transit furniture:** Objects provided at a bus stop or transit center for the comfort and convenience of waiting passengers, such as a shelter bench, trash receptacle or other components.
- **Transit Signal Priority (TSP):** A technology and methodology for programming traffic signals to provide priority to transit vehicles.
- **Transportation modeling:** The combining of data from traffic and land use patterns, road capacities, traffic counts, population, employment information and other data into scenarios that describe existing and future travel behavior.
- **Travel lane:** A lane devoted exclusively to vehicular traffic.
- **Trip generator:** A land use or discrete activity that by nature of its operations tends to create a significant amount of travel. Also referred to as a “trip attractor”.
- **Wheelchair ramp:** PRT buses are equipped with mechanical wheelchair ramps that are controlled by operators and lowered from the bus door to allow wheelchair patrons to safely and easily board buses.
  In other contexts, Wheelchair Ramps are slightly sloping paved area designed and designated to provide handicapped access across height and texture difference such as sidewalks, stairs or other barriers to free movement of wheelchairs. Also see *Curb Ramps*.

Pittsburgh Regional Transit
345 Sixth Ave, 3rd Floor
Pittsburgh, PA 15222
412-566-5500

Bus Stop & Street Design Guidelines
Version 3.1
Published November 2025
Updated Nov 26, 2025