



Bus Stop Manual



Questions or issues?

*Please contact Tina Vaslet by
email (tvaslet@piercetransit.org)
or phone (253.983.2706).*

Table of Contents

Introduction.....	3
Section 1 – Bus Stop Standards.....	4
1.1 MINIMUM STANDARDS.....	4
1.2 SITE CHARACTERISTICS FOR INSTALLATION.....	4
1.3 PASSENGER IMPROVEMENTS.....	5
1.4 BUS ZONES.....	6
1.5 BUS PULLOUTS.....	9
1.6 STOP PLACEMENT IN RELATION TO INTERSECTIONS.....	9
1.7 PLACEMENT IN RELATION TO CROSSWALKS, PEDESTRIAN & VEHICLE MOVEMENTS.....	11
1.8 SPACING AND FREQUENCY.....	11
1.9 STOP RELOCATION GUIDELINES.....	12
1.10 SIGNAGE AND PASSENGER INFORMATION.....	12
Section 2 – Amenities.....	17
2.1 BENCHES.....	17
2.2 SHELTERS.....	18
2.3 OTHER AMENITIES.....	22
2.4 BUS STOP AMENITIES STANDARDS.....	23
2.5 PASSENGER AMENITY REMOVAL THRESHOLDS.....	23
2.6 PASSENGER AMENITY REPLACEMENT THRESHOLDS.....	23
Section 3 – Bus Stop Program.....	25
3.1 PROGRAM OVERVIEW.....	25
3.2 PERMITTING.....	25
3.3 PROPERTY OWNER NOTIFICATIONS.....	25
3.4 LAND USE REVIEWS.....	25

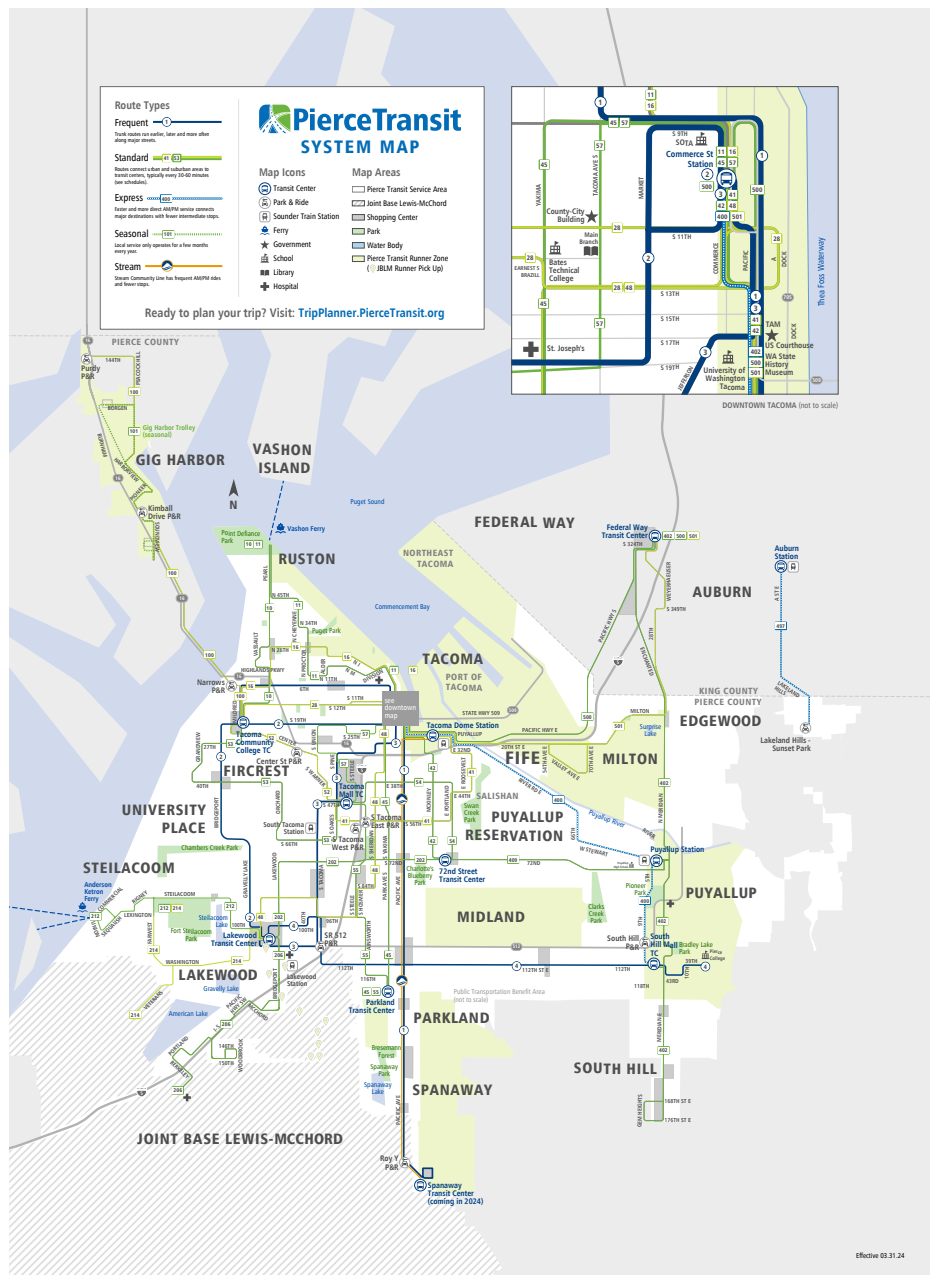
Introduction

PURPOSE STATEMENT

Our bus stops are often the first point of contact with our passengers. The spacing, location, and design of bus stops significantly influence transit system performance and, more importantly, customer satisfaction. This manual identifies agency standards for the location and installation of new bus stops and amenities and establishes a framework for future bus stop improvements.

BRIEF HISTORY

Pierce Transit provides public transportation services in Pierce County, Washington's second largest county with approximately 927,000 residents. The defined service area, or Public Transportation Benefit Area (PTBA), covers nearly 300 square miles in Pierce County's urban area and contains about 70% of the county population. The service area includes the incorporated cities and towns of Auburn, Edgewood, Fife, Fircrest, Gig Harbor, Lakewood, Milton, Pacific, Puyallup, Ruston, Steilacoom, Tacoma, and University Place. It also includes multiple population centers within unincorporated Pierce County. As of July 2024, Pierce Transit serves just over 1,900 bus stops, 8 transit centers and 26 park & rides.



Section 1 - Bus Stop Standards

1.1 MINIMUM STANDARDS

At a minimum, bus stops require:

1. A firm, stable surface measuring 5' (parallel to the curb) x 8' (perpendicular to the curb) that serves as a boarding area for customers to safely wait for, board, and alight the bus.
2. An area for a bus to safely serve the bus stop on or off the roadway.
3. A Pierce Transit bus stop sign.
4. An accessible pedestrian path from the bus to the boarding area. If present, the shelter and bench areas must also connect to the pedestrian path.
5. Some jurisdictions also require that curb ramps and sidewalk be provided.
6. Bus stops should be a minimum of 20' away from a crosswalk, 15' from fire hydrants, 10' from a utility pole and 4' from a tree (RCW 46.61.570). See Section 1.7 below for additional details on bus stop placement in relation to crosswalks.

1.2 SITE CHARACTERISTICS FOR INSTALLATION

VISIBILITY

Bus stops should be in clear view of approaching traffic. A bus stop should not be located just beyond the crest of a hill or out of sight on a curve. The bus stop pole, sign, shelter or other amenities must not obscure other traffic control devices or signs.

ACCESSIBILITY

The following criteria must be met for Pierce Transit to consider a bus stop accessible:

A firm, stable surface with ample space to deploy the wheelchair lift to board or alight a passenger with a mobility device at the bus stop pole. At their discretion, an Operator may stop the bus within 40' of either side of the bus stop pole if the defined zone is blocked or if there is a more suitable location to board or alight someone with specific needs. Careful consideration must be given to this situation. The "non-designated" bus zone must be clear under normal circumstances.

ADA CONSIDERATIONS

New bus stops or elements of a bus stop that are improved must meet minimum ADA requirements. As time and resources allow, existing stops that do not meet current ADA requirements should be brought up to current code. While Pierce Transit does not typically construct or maintain pedestrian facilities, including sidewalks, curb cuts or crosswalks, Pierce Transit will coordinate with all local jurisdictions to encourage inclusion of these facilities as part of private or public development.

SAFE OPERATION

Pierce Transit will conduct an on-site review of each proposed bus stop or improvement to determine whether the proposed location will allow passengers to safely wait and board while also allowing buses to safely approach, dwell, and depart from the location.

JURISDICTION APPROVAL

Each jurisdiction has a unique approval process and requirements for bus stop installations or improvements. Jurisdictional approval is always required before a bus stop can be installed. See Section 3.2 below for additional details on permitting.

RAILROAD TRACKS

In general, bus stops shall not be placed in a location that would place the bus closer than 50 feet to an at-grade railroad crossing. In some instances, there are exceptions to this standard (RCW 46.61.570).

ADDITIONAL CONSIDERATIONS

- Proximity to surrounding stops along the route
- Proximity to sidewalk access
- Proximity to the partner stop which serves the opposite direction of the route
- Proximity and interaction with bicycle lanes and facilities
- Existing land characteristics (right of way, surface material, trees, utility poles, etc.)
- Existing amenities that could be used by passengers such as shelters, lighting, etc.
- Proximity to major trip generators (shopping, medical services, apartments, schools)
- Traffic volumes, conditions, and speed limits
- Bus pullout
- Longevity of stop location
- Demonstration of benefit (i.e., giving priority to bus stop locations where the most benefit will be gained from improvements)
- Business vs. residence (when all other factors are equal, bus stops should be located adjacent to a business as opposed to a residence)
- Input from riders or other members of the public regarding potential stop locations

1.3 PASSENGER IMPROVEMENTS

BOARDING & ALIGHTING AREA PADS

Boarding area pads are generally constructed as a means of providing a firm boarding or alighting area or as a means of providing better wheelchair access to a bus stop location.

Typically, pads are constructed of concrete. PROWAG requires that pads be stable, firm, and slip-resistant. In some cases, they are large enough to support a shelter and/or bench in addition to a boarding and alighting area.

The minimum space required per ADA law is 5' (parallel to the curb - slope to match street grade) by 8' (perpendicular to the curb - slope not to exceed 2.1% per PROWAG R309.1.1.2). Asphalt, at a depth of 2" minimum, is acceptable only when used for a passenger boarding area, not a shelter or bench.

Pads should be constructed to meet ADA standards to the maximum extent possible or as required by the local jurisdiction. The location of the pads should be adjacent to the bus stop and configured in a way that prevents light poles, landscaping, or other obstructions from interfering with the boarding or alighting of passengers.

SHELTER & BENCH PADS

The standard shelter pad should be 15' wide, 5' deep and 6" thick where possible. At locations with limited space and/or other limiting factors where a standard size shelter pad may not be feasible, a smaller shelter pad may be installed but must be no smaller than 10' wide, 4' deep and 6" thick. These measurements are not to include the adjacent sidewalk.

Bench pads, at a minimum, should be 8' wide, 2' 6" deep and 4" thick. This allows space for a 4' bench and an area of 2' 6" x 4' as required by PROWAG R404. The slope of bench and shelter pads shall comply with the clear space requirements set forth in R404.2.

GRADING

Grading of the stop area may be necessary to improve drainage at locations that do not have pedestrian infrastructure, such as concrete pads, sidewalks, or curbs. These stops are typically found in rural or undeveloped areas and may consist of a simple signpost indicating the stop location. Passengers may need to stand on grass, gravel, or dirt while waiting for the bus. The absence of paving can present challenges, particularly in wet or uneven conditions, and may require additional considerations for safety and usability. When standing or flowing water disrupts passenger

boarding, filling and grading can redirect rainwater. Often this can be accomplished at a small cost by Pierce Transit's Facilities Maintenance crews but may occasionally require the use of extensive fill material and heavy equipment.

SIDEWALKS AND RAMPS

Sidewalks and ramps are often necessary to provide access between the bus stop and adjacent businesses, crosswalks, and corners. Generally, Pierce Transit coordinates with the local jurisdictions to identify the need to have sidewalks constructed. However, when a short length of sidewalk is needed but not likely to be built by a local jurisdiction or developer, Pierce Transit may opt to construct it. Some jurisdictions require it as part of a new or improved bus stop. All sidewalks and ramps must meet ADA guidelines and local jurisdictional codes.

BOLLARDS

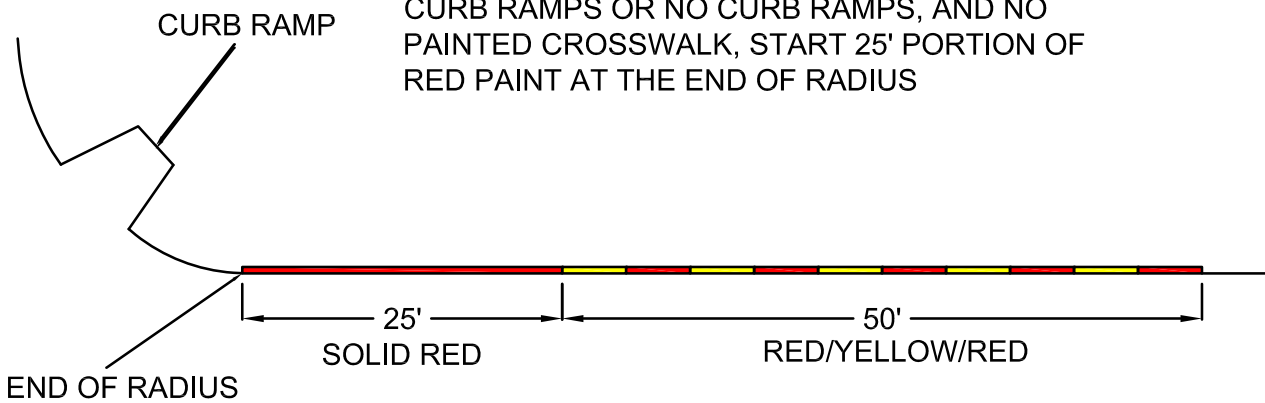
Bollards are typically steel pipe or concrete posts, 6' tall, 4" in diameter, which are installed with locking sleeves. The height above ground should be between 30"-36" so bicycle handlebars don't hit them. Bollards provide protection to the shelter, bench, or bus stop pole when they are close to parking lots, gas stations or other areas where the possibility of vehicular contact is increased.

1.4 BUS ZONES

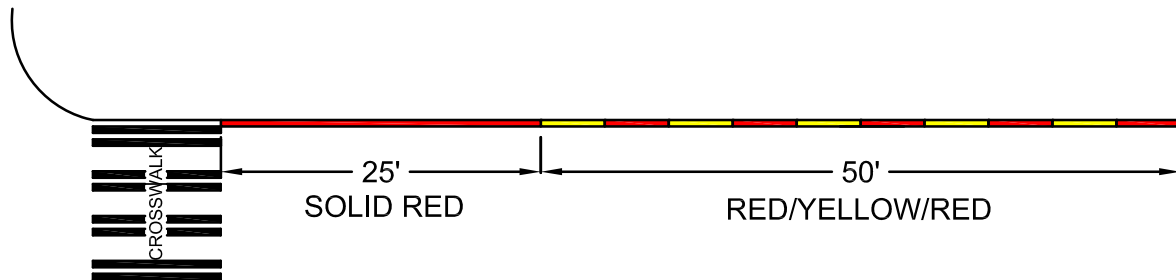
Bus Zones are established to provide an area for buses to get both coach doors parallel to the curb, preferably with stable landing areas. Bus Zone standards include:

- No obstructions within 5' of the rear of the bus to avoid tail strikes.
- Generally, a bus zone is twice the length of the bus. These lengths can be decreased when the bus stop is immediately far side since the intersection length can be used to decelerate and align the bus to the curb. The zone length may need to increase if it is between or adjacent to a bulb-out and/or on-street parking.
- The pole and sign should be placed as close to the front of the zone as possible. Due to some bus stop configurations, there may be some instances where the pole and sign may need to be set back slightly. For example, advertising shelters can block signs so it's often best to install the pole and sign near side of those shelters. To avoid placing a bus stop pole directly in front of someone's residence, Pierce Transit will sometimes shift the pole so it sits between two properties, thus shifting the pole away from the head of the zone.
- Local authorities are unable to enforce parking restrictions without proper bus stop curb painting. When painting is deemed appropriate, the zone must start and end with red paint and alternate red with yellow in 5' increments. On streets already designated as no parking, a 15' section of curb painting may be used to help identify the bus stop. Occasionally, cars park too close to a corner and hinder bus turning movements. If the jurisdiction allows it, Pierce Transit may opt to paint the curb red all the way to the corner. Furthermore, if there is an area where cars are not allowed to park regardless of a bus zone, jurisdictions might request that the area is striped as part of a good neighbor policy. For example, if there is a bus stop 20' from a crosswalk, a request may be made to stripe the curb red from the bus stop to the edge of the crosswalk even if it is not a part of the designated bus zone. Refer to Curb Painting detail provided on the next page.
- Although an 80' zone is preferred, when painting the curb based on this guideline, 75' is the nearest combination of striping beginning and ending in red. Since most of Pierce Transit's stops are at the far side of the intersection, the remaining 5' is recovered by proximity to crosswalks, intersections, or other no parking areas.

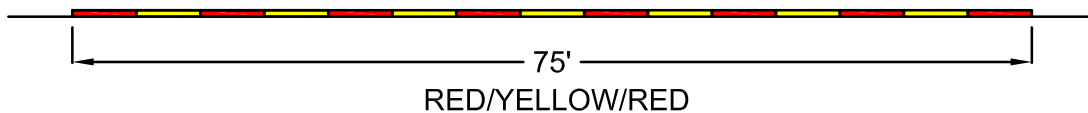
FOR BUS STOPS ADJACENT TO 45 DEGREE CURB RAMP, AND NO PAINTED CROSSWALK, START 25' PORTION OF RED PAINT AT THE END OF RADIUS



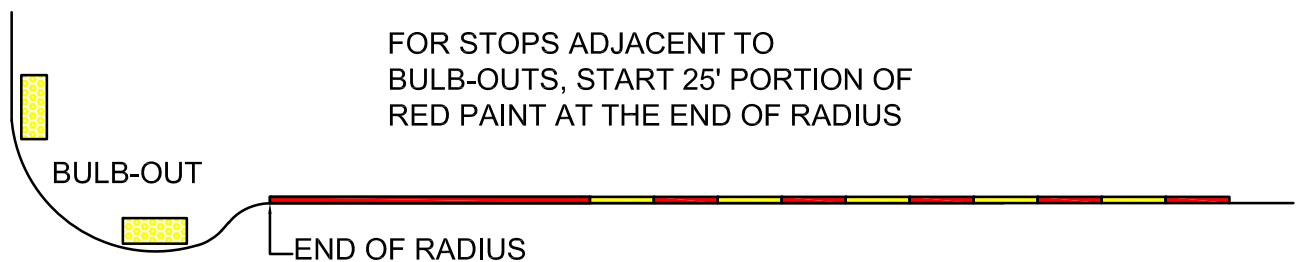
FOR BUS STOPS ADJACENT TO PAINTED CROSSWALKS, START 25' PORTION OF RED PAINT AT THE CLOSEST EDGE OF THE CROSSWALK STRIPING

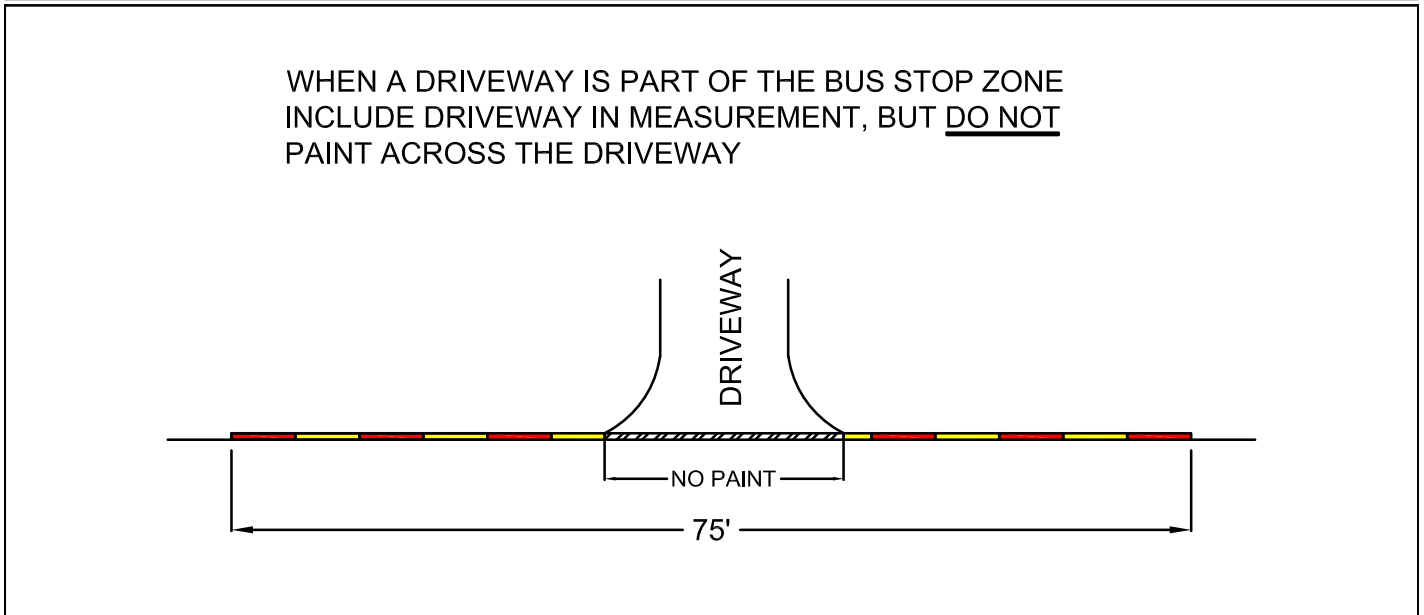
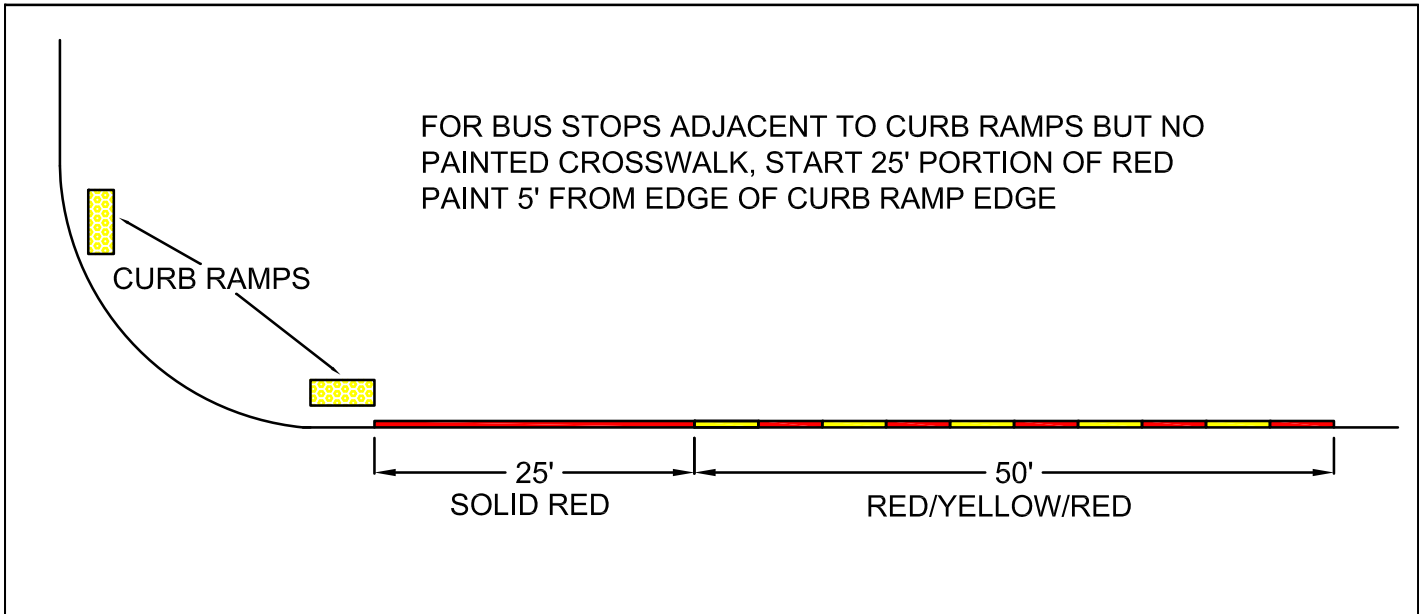


FOR MID-BLOCK STOPS PAINT 75' OF RED/YELLOW/RED IN 5' INCREMENTS



FOR STOPS ADJACENT TO BULB-OUTS, START 25' PORTION OF RED PAINT AT THE END OF RADIUS





GENERAL NOTES:

- ☯ IN GENERAL, PIERCE TRANSIT PAINTS 75' OF CURB WHERE THERE IS ON-STREET PARKING AND ONLY 15' WHERE ON-STREET PARKING IS NOT ALLOWED
- ☯ ZONE PAINT SHALL BEGIN AND END IN RED
- ☯ RED/YELLOW/RED SECTIONS SHALL BE IN 5' INCREMENTS
- ☯ OCCASIONALLY THERE ARE ADDRESSES OR OTHER LETTERING ON THE FACE OF THE CURB - DO NOT PAINT OVER THOSE
- ☯ WHEN A BUS STOP IS PERMANENTLY REMOVED, OR RELOCATED, ONLY THE 25' PORTION OF RED PAINT SHALL REMAIN. THE RED/YELLOW/RED (5' INCREMENTS) SHALL BE GRAYED OUT
- ☯ PUYALLUP ALLOWS CURB PAINTING AT SELECT LOCATIONS, BUT PERMISSION MUST BE GRANTED AHEAD OF TIME
- ☯ UNIVERSITY PLACE REQUIRES A PERMIT TO PAINT CURBS
- ☯ DO NOT PAINT RADIUS (CURVED PORTION) OF CURB
- ☯ CONTACT THE BUS STOP PLANNER WITH QUESTIONS (253-983-2706)

1.5 BUS PULLOUTS

Bus pullouts are dedicated stopping areas with deceleration/acceleration tapers where buses pull completely out of the lane of travel. A fully developed pullout is more than a widened shoulder; it is constructed with curb, gutter and sidewalk as well. Pullouts are generally undesirable because they cause delays and increase the chance of collisions as buses re-enter the roadway. However, there are some circumstances where pullouts are needed:

- State law recommends that any bus stop on a state route, outside city limits be completely off the road. Exceptions may be made if the speed limit is under 45 mph and if it is a multiple lane road.
- On non-state roadways with a speed limit over 40 mph, every effort will be made to pull off the roadway. This is based on TCRP recommendations, which are lower than the WSDOT requirement of 45 mph.
- At heavily used stops, those where two buses are likely to be serving the stop simultaneously, at stops with longer than average bus dwell times, such as those serving disabled or elderly populations and where otherwise required.
- Layover points where the Operator takes a break or must wait for a connecting bus.
- Relief points where Operators change shifts.

1.6 STOP PLACEMENT IN RELATION TO INTERSECTIONS

FAR-SIDE STOPS/ZONES

A far-side stop/zone is immediately following an intersection. Far-side stops/zones are the preferred location for bus stops and are specifically recommended when:

- The intersection is controlled by signals, stop signs, or yield signs.
- Traffic is heavier on the near side than on the far side of the intersection.
- Many left or right turns occur.
- Heavy traffic movements might cause delays in bus schedule.
- Pedestrian access and existing landing area are better on the far side than the near side.

Advantages

- Transit Signal Priority (TSP) equipment is more effective at far side stops.
- Reduces double stopping.
- Right turns by vehicles can be made with less conflict with stopped buses (except those turning from the cross street).
- Left-turning buses approaching a far-side stop (after the turn is made) begin their left turn from the proper lane.
- Buses stopped in a zone do not obstruct sight distance to the left for vehicles entering or crossing from a side street.
- At a signalized intersection, buses can find a gap to enter the traffic stream when the traffic light cycles.
- Buses in the bus stop will not obscure traffic control devices or pedestrian movements at the intersection.
- Minimizes sight distance problems on approach to the intersection.
- Less curb space is needed for the bus zone since the intersection length can be used to decelerate and align the bus to the curb.
- Encourages passengers to cross behind the bus.

Disadvantages

- Intersections may be blocked if vehicles park illegally in the bus stop, causing the bus and/or traffic to back up into or across the intersection.
- A bus serving a far-side stop restricts sight distance to the right of a vehicle entering from a side street or driveway.
- May increase sight distance problems for crossing pedestrians.
- The bus may have to stop far side after just stopping at a red light, impacting general traffic.
- Motorists may not expect the bus to stop after a red light

NEAR-SIDE STOPS/ZONES

A near-side stop zone is one that is located immediately before an intersection. Near-side stops are less desirable and should be used when:

- There are no far-side options.
- When transit operations are more critical than traffic or parking.
- Traffic is heavier on the far-side than on the nearside of the intersection.
- Pedestrian access is better on the near-side than the far-side.

Advantages

- There is less interference with traffic turning onto the bus route street from a side street.
- Passengers generally depart from the bus close to an intersection that might include a crosswalk or other traffic controls.
- May allow for boarding and alighting while the bus is already stopped for a red light.
- The bus has maximum options after serving the stop: right turn, left turn (from a single lane of traffic) or straight.

Disadvantages

- Transit Signal Priority (TSP) equipment is less effective at near-side stops.
- The bus may double stop: once to serve the bus stop and then again if the light turns red.
- Personally operated vehicles (POVs) may attempt to make a right turn across the front of a bus stopped at a near-side stop.
- A bus standing at a near-side stop may obscure the sight distance of a driver entering the street from the right as well as pedestrians crossing the street.
- A bus serving a near-side stop may block a stop sign on the right corner or interfere with right turn lanes.
- More curb space is usually needed, which results in additional loss of parking.
- If the bus is serving a near-side stop and then must immediately make a left turn, it would be forced to either cross multiple lanes in a short distance or make a left turn from the right curb/parking lane. This is highly undesirable.
- Oncoming traffic may make a left turn across the front of the bus, assuming it is going to remain stopped.

MID-BLOCK STOPS/ZONES

A mid-block stop/zone is located 300' or more beyond or before an intersection. A mid-block stop should be located at the far side of a mid-block pedestrian crosswalk, if one exists, so standing buses will not block a motorist's view of pedestrians in the crosswalk. They are recommended when:

- Traffic or physical street/sidewalk characteristics prohibit a near or far-side stop adjacent to an intersection.
- There is a trip generator or destination such as large employer, commercial establishments, or development.
- There are long distances between cross streets.
- There is a crosswalk and/or flashing beacons.

Advantages

- Buses at mid-block stops cause a minimum of interference with the sight distance of both vehicles and pedestrians.
- Stops can be located adjacent to major activity centers.
- May result in passenger waiting areas experiencing less pedestrian congestion than at an intersection

Disadvantages

- The removal of considerable curb parking is required in areas where on street parking would otherwise be permitted.
- Pedestrian jaywalking is more prevalent if the mid-block stop is not located where there is a mid-block crosswalk.
- Patrons from cross streets must walk farther to catch the bus.

1.7 PLACEMENT IN RELATION TO CROSSWALKS, PEDESTRIAN & VEHICLE MOVEMENTS

DISTANCE FROM BUS STOP TO CROSSWALK PRIOR TO A CONTROLLED INTERSECTION – NO TSP

Traffic Engineers ultimately make the final determination of bus stop placement in relation to crosswalks, vehicle ingress and egress, etc. However, these are the general guidelines outlined in RCW 46.61.570:

- 20' when the bus stops in a driving lane with an overhead traffic signal.
- 30' when there is a stop sign and flashing overhead stop beacon.
- 50' when there is only a stop sign.

DISTANCE FROM STOP ZONE TO CROSSWALK PRIOR TO A CONTROLLED INTERSECTION – WITH TSP

At a minimum, stops should be located 100' prior to a controlled intersection with TSP, however, 200' is preferred where possible.

STOPS NEAR CROSSWALKS

The bus should not block any part of a crosswalk, marked or unmarked, while it is serving a stop. Typically, the bus stop sign should be no closer than the length of the bus plus 20' beyond the crosswalk (e.g. 60' for a 40' bus) or 20' prior to the crosswalk.

STOPS AT DRIVEWAYS

Efforts should be made to locate bus stops to leave a 20' clear space adjacent to any existing driveways. Bus stops should not be placed within 20' of the driveway entrance to any fire station and on the side of a street opposite the entrance to any fire station within 75' of said entrance when properly signposted. There may be existing stops that utilize driveways for boarding and alighting. In such cases, the bus stop is situated to provide proper sight lines and safety for customers and residents. These are called "non-designated" boarding areas since there is no way to mark them.

STOPS NEAR RIGHT TURN ONLY LANES

Whenever possible, a minimum of 20' of separation between the bus stop and the beginning of the right turn only lane should be provided. In some cases, local jurisdictions will add "except transit" to "right turn only" signage, authorizing transit exemption.

NOTE: All decisions related to bus stop siting are evaluated by Pierce Transit Training staff.

1.8 SPACING AND FREQUENCY

Population density is the primary factor used to determine the appropriate number of bus stops within a particular area. A balance must be maintained between stop spacing and frequency: the more stops on a particular route, the longer the trip. Conversely, the fewer number of stops, the shorter the trip. Spacing may range from one stop per block where city blocks are 500 or more feet in length to stops every two to three blocks where city blocks are shorter or when there are no major destinations or trip generators. Typically, no two stops should be within 1/8 of a mile (660') of another within urban areas and 1/4 of a mile (1320') within rural areas. Additional details on stop spacing and frequency are provided in Appendix B of the Destination 2045 Long Range Plan.

1.9 STOP RELOCATION GUIDELINES

Pierce Transit may decide to move a bus stop to improve operational safety or customer convenience. In general, a bus stop/zone will not be moved that is safely and efficiently meeting Pierce Transit's needs unless one or more of the following criteria are met:

- The local jurisdiction requests the relocation.
- An equal or better boarding location exists that meets Pierce Transit and the local jurisdiction's requirements for safety, vehicle access, landing area, pedestrian access, and bus stop/zone spacing.
- In the context of a complaint asking for a stop relocation, if doing so will completely resolve the issue, such as vandalism or harassment of adjacent property owners, and not simply relocate the problem.

As a last resort, Pierce Transit may consider closing a bus stop if numerous acts of vandalism against private property or physical assaults are reported that can be shown to have a direct connection to bus stop users.

1.10 SIGNAGE AND PASSENGER INFORMATION

ROUTE SIGN DESIGN AND CONTENT

All permanently mounted signs should include the route number(s) served, a wheelchair symbol where applicable, a no parking symbol, Pierce Transit's logo, customer service phone number and website address. Bus stop signs are rectangular and 16" W X 26" H.

SIGN INSTALLATION OPTIONS

There are five variations: singular, butterflyed, stacked, shared, and shelter-mounted. Signs and other amenities on bus stop poles within pedestrian paths or circulation areas should be installed so as to not extend out more than 4" on either side.

Singular

Most bus stops have only one sign. They are always installed perpendicular to the street and may be installed on either side of the pole depending on clearance requirements.

Butterflied

Two bus stop signs are mounted 180 degrees from one another, perpendicular to the road.

Stacked

Two bus stop signs are mounted on the same side of the pole, one on top of the other.

Shared

Ideally, the bus stop sign will be mounted on its own pole. However, in overlapping service areas, it is common to mount two or more agencies' signs on a single pole. Sharing a pole with regulatory or traffic signs should be avoided whenever possible. However, it is permissible to install signs on a light standard when approved by the local jurisdiction. If there are too many signs on the light standard, creating clutter or poor distinction between signs, relocation of the sign to a dedicated bus stop pole is recommended. Never mount a bus stop sign to a wooden utility pole or regulatory sign pole.

Shelter-mounted

Mounting signs to the roof rail of a shelter is the least preferred option and should only be done when all other options are not viable.

BUS STOP POLE DIMENSIONS

A typical bus stop pole is a square walled aluminum pipe; 1-³/₄" inside dimension, 2" outside dimension, and may vary in height depending on the pole type and site characteristics. Bus stop poles should be perforated.

POLE INSTALLATION OPTIONS

There are several installation options: plated, in-ground, and extended.

Plated

Plated poles are surface-mounted. They are the standard as they do not require locates and are easy to install and replace.

In-ground

In areas without sidewalks, or where sidewalks are less than 5' wide, the pole should be installed no closer than 10' (preferably 12') from the edge of the road, with the sign facing perpendicular to the road, mounted on the street side of the pole. This allows for future sidewalk construction. Poles are installed at a depth of 18-24" with a concrete footing.

Extended

There are instances when a pole is simply not tall enough to house multiple signs and/or a sign and blinky light. In those instances, a pole extension may be used.

NOTE: *Non-concrete surfaces such as asphalt or brick are not suitable surfaces for any surface mounted installations as they do not provide adequate structural strength or integrity.*

Additional Pole Markings

- A metal plate is affixed at the top of each pole. It shows the bus stop's 4-digit unique number from HASTUS.
- Extra visibility of the pole is created with a clear reflector. Two feet is the approximate height of the bus's headlights, so the top set screw for the reflector is mounted at 40-41" from the ground for maximum reflectivity.

PASSENGER INFORMATION

Passenger information comes in several different forms. Specific standards for the design and placement of route and schedule information can be found in the Pierce Transit Sign Guide. For Transit Centers, Sounder Stations, and other major transit destinations, refer to the Multi-Agency Signage Grid which specifies which transit agency is responsible for corresponding passenger information. Business advertisements, social notices, or information leaflets placed in or on Pierce Transit amenities or properties are prohibited and will be removed.

At the discretion of Pierce Transit's Marketing dept., one or more of the following rider information types may be installed:

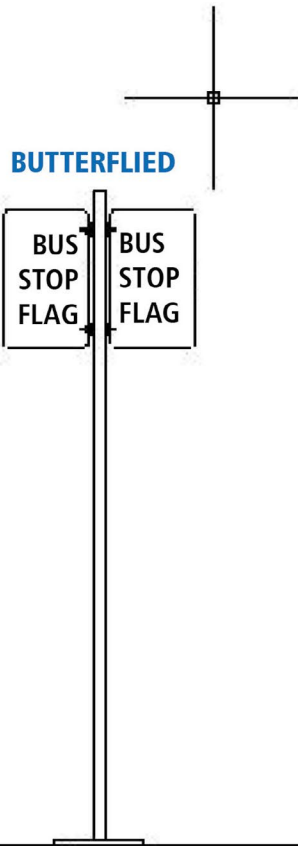
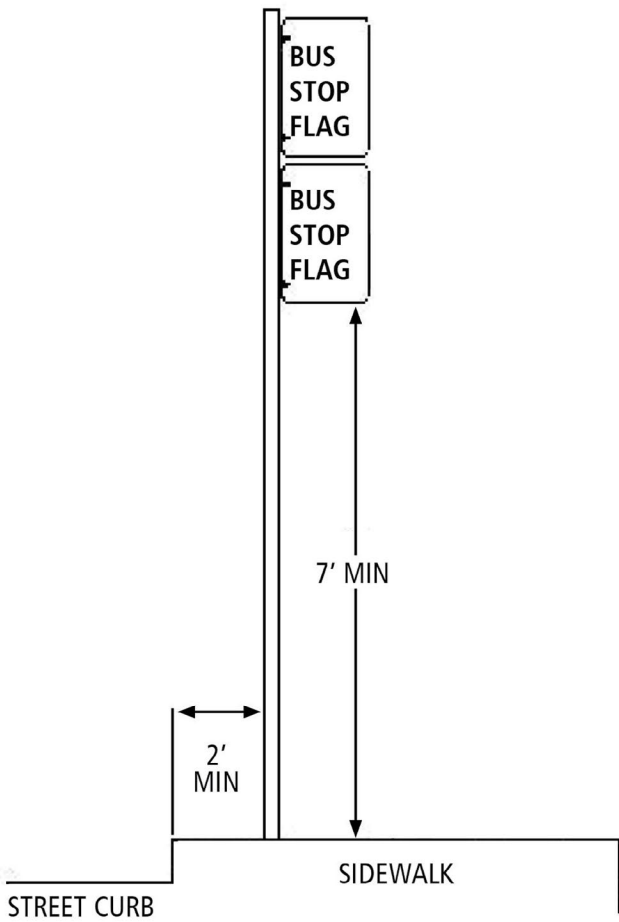
Midis

The dimensions are 8.5" x 14" and contain general information related to bus and route information. Midis are generally provided only at bus stops that are designated transfer locations and/or timepoints and are installed on the bus stop pole, or directly to a shelter support beam, about 4' from the ground. Marketing designs and prints all midi materials. Facilities Maintenance installs the midi frames and midis during Service Changes.

Large Ride Guides

Freestanding, two-sided display cases to present route information and promotional pieces and are installed primarily at multiple route stops, major intersections, and transit centers. They are installed perpendicular to the street and must not obstruct the sight line of the bus operator's view of a passenger or sight lines to/from intersections or driveways.

TALLER POLE
MAY BE NEEDED WHEN
BUTTERFLYING ISN'T AN OPTION



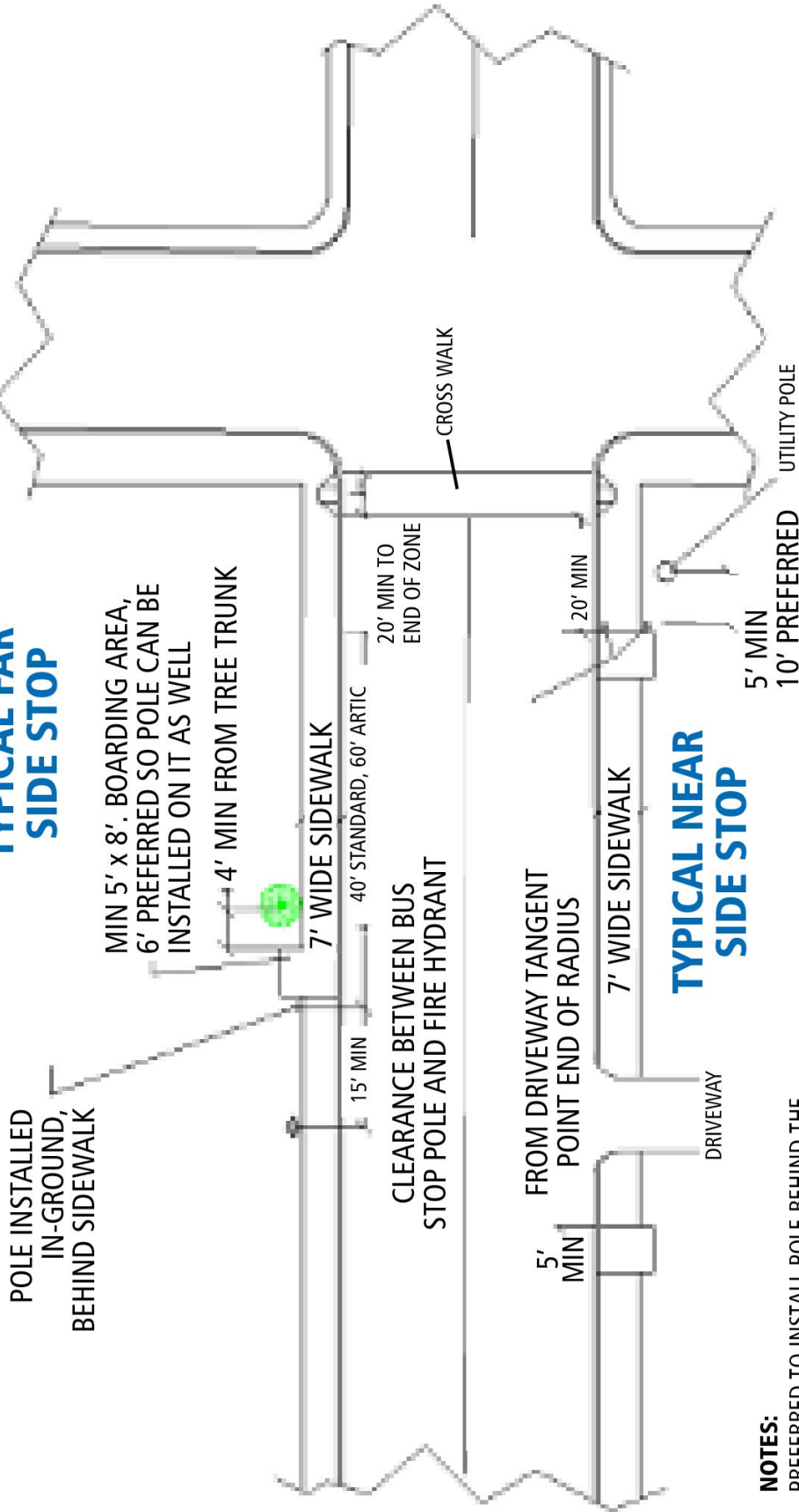
STRAPPED TO ROUND METAL POLE



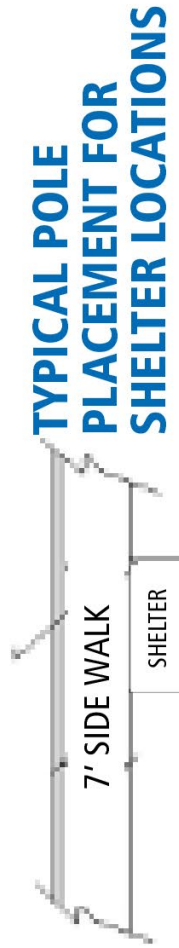
GENERAL GUIDELINES

- * NO LESS THAN 7' FROM THE GROUND
- * NO LESS THAN 2' FROM FACE OF CURB
- * AVOID WOODEN PHONE/UTILITY POLES

TYPICAL FAR SIDE STOP



TYPICAL NEAR SIDE STOP



TYPICAL POLE PLACEMENT FOR SHELTER LOCATIONS

NOTES:
 PREFERRED TO INSTALL POLE BEHIND THE SIDEWALK OR IN THE PLANTING STRIP TO MAINTAIN AN UNOBSTRUCTED WALKWAY.

A PLATED POLE MAY BE INSTALLED A MIN OF 24" FROM FACE OF CURB

Section 2 - Amenities

2.1 BENCHES

In 2022, Pierce Transit set out to install a bench at every stop where feasible. Benches may be required at a bus stop impacted by development either as a requirement set forth by a city's municipal code, or by the Bus Stop Program's recommendation to a jurisdiction. In this case the developer will pay for the cost of the infrastructure and Pierce Transit installs and maintains the bench. Pierce Transit does not maintain custom benches that are unique or specific to a local jurisdiction, nor does it grant permission for their installation in the public right of way.

BENCH INSTALLATION GUIDELINES

- Benches must be located outside of the minimum 5' x 8' accessible boarding area and should not obstruct the alighting area.
- Ideally, the bench will be behind the sidewalk, or at the back of the sidewalk, creating maximum distance between the lane of travel and the bench.
- Benches should be installed parallel to the street whenever possible.
- If sidewalk is present, bench placement must allow a minimum of 5' of sidewalk clearance for passing pedestrians. (Tacoma requires 5' in residential areas and 7' for arterials.) When there is insufficient sidewalk width or no sidewalk, or as required by some jurisdictions, a small foundation pad beneath the bench is required.
- Benches may be surface mounted directly to the sidewalk in some jurisdictions. When installing a bench, the area must be large enough to accommodate the bench and 1.5' of clear space in front, as well as a 2.5' x 4' clear space to the side for passengers using mobility devices. The clear space must be paved so it is accessible.

NOTE: *Non-concrete surfaces such as asphalt and brick are not suitable surfaces for plated bench or pole installations.*

BENCH OPTIONS

Below are the various bench styles found in our system:

4' Bench

The current standard for all bus stops outside of transit centers and park & rides is a 4' black bench with no backs or arms. There are still several green benches in use. They should be replaced with black benches as they become damaged.

Flip Bench

Six feet long flip benches have been used at some transit centers. The only flip bench remaining in the system is at the Point Defiance Ferry Terminal.

6' Bench

These benches are being phased out of the system. 6' long with a back, typically used at standalone bus stops.

Transit Center - Leaner

These remain at Kimball Drive Park & Ride, 72nd Street Transit Center, and the South Hill Mall Transit Center.

Private Bench

There are currently some private benches in the system, however, Pierce Transit is not responsible for their maintenance.



4' Bench with clear space (Pierce Transit's current standard)

2.2 SHELTERS

Shelters offer passengers a location protected from the weather to wait for a bus. The placement of a shelter is prioritized primarily by overall utilization of the bus stop. A minimum of 8 average weekday boardings is required to warrant a shelter. A bench and trash can are typically installed as part of the shelter installation. A shelter should be located within the available public right-of-way, on a site that allows for clear and open pedestrian movements. If the shelter is not equipped with a solar light, it should be located at or near street lighting to improve the visibility of the stop whenever possible.

Based on jurisdictional requirements, a new development or community project may be required to provide a shelter. The developer will pay for the shelter, but Pierce Transit installs all amenities and is responsible for the ongoing maintenance. The shelter becomes the property of Pierce Transit. Pierce Transit may elect to move the shelter after a period of two years should the stop not meet the minimum weekday boardings required to warrant a shelter.

SPACE REQUIREMENTS AND SITE CONFIGURATIONS

The site must be large enough to accommodate the shelter and provide additional standing, waiting, and walking space around the shelter. A 15' x 5' concrete pad may be desired to accommodate a 32-gallon garbage can should it be warranted. Each location needs to be individually designed. Typically, the local jurisdiction will not allow a shelter to encroach on the sidewalk. The preference is for it to be installed behind the sidewalk. Exceptions may be made if there is an extra wide sidewalk or a large planter strip adjacent to a parking lane.

Pierce Transit evaluates the specific site using criteria such as available right of way, prevailing winds, passenger and driver visibility, passenger access into and out of the shelter, passenger convenience and pedestrian/traffic safety. In cases where the site is too constrained to allow for a shelter and adequate circulation, and where the stop cannot be reasonably relocated, a shelter may not be possible.

SHELTER PLACEMENT GUIDELINES

- The shelter should not create visual obstructions for vehicular traffic. Reasonable sight distances from adjacent intersecting streets and driveways should be maintained.
- A waiting passenger should have an unobstructed view of oncoming traffic, and the transit operator should easily see waiting passengers.
- Maintain a 2' minimum (3' is preferred) perpendicular setback between the curb face and the leading edge of the shelter roof, bus stop pole and signs, or any street furniture.
- Maintain a 4' minimum (5' is preferred) clear pedestrian pathway, either in front or behind the shelter, and from the buildings, and other street furniture.
- When open to the street, the shelter is set back a minimum of 5' from the curb to give maximum protection from roadway overspray and to allow a wheelchair passenger access to the shelter. In this configuration, a separate 5' x 8' area must be provided outside the shelter. When possible, the shelter should be placed with the open side facing away from the road or prevailing winds for maximum protection.
- The shelter should be placed within 10' to 15' of the head of the bus zone to minimize the walking distance from the shelter to the bus boarding area.
- Pierce Transit tries to avoid placing shelters where they will require retaining walls or other special structures; however, site-specific characteristics may require the installation of these components.
- ADA requires a minimum vertical clearance of 7' is maintained between the bottom of the roof or sign and the surface of the shelter pad or sidewalk.
- Other considerations include the impacts on adjacent properties and transit patron convenience.

NOTE: Pierce Transit typically oversees and funds hiring a contractor for site construction. Pierce Transit assembles and installs the shelter. The local jurisdiction issues the permit and performs any required inspections.

NOTES:

IN ORDER TO PROVIDE WAITING PASSENGERS THE HIGHEST LEVEL OF PROTECTION FROM THE ELEMENTS THE OPEN SIDE OF THE SHELTERS ARE USUALLY ORIENTATED AWAY FROM THE PREVAILING WINDS (HENCE THE VARIETY OF SHELTER ORIENTATIONS AND INSTALLATIONS.)

DEPENDING ON THE SHELTER LOCATION IN THE INTERSECTION, THE 8" THICK PORTION OF THE SHELTER PAD CHANGES WITH RESPECT TO THE SIDEWALK.

WHEN CURB PAINT IS APPLIED, THE 25' PRECEEDING THE CROSSWALK SHOULD BE RED.

ALL SHELTERS & PADS SHALL BE INSTALLED IN THE RIGHT-OF-WAY UNLESS A SIGNED PRIVATE PROPERTY OWNER AGREEMENT IS INCLUDED IN THE PERMIT APPLICATION PROCESS.

A MINIMUM OF 5' UNOBSTRUCTED SIDEWALK MUST BE MAINTAINED AT SHELTER LOCATIONS WHICH HAVE A PLANTING STRIP FOR PEDESTRIAN TRAFFIC. WHEN PLACING A SHELTER ON AN ARTERIAL STREET WITH A 5' SIDEWALK. THE SHELTER PAD MUST BE 2' WIDER. THIS WILL ACCOMMODATE THE 7' SIDEWALK REQUIREMENT FOR FUTURE DEVELOPMENT.

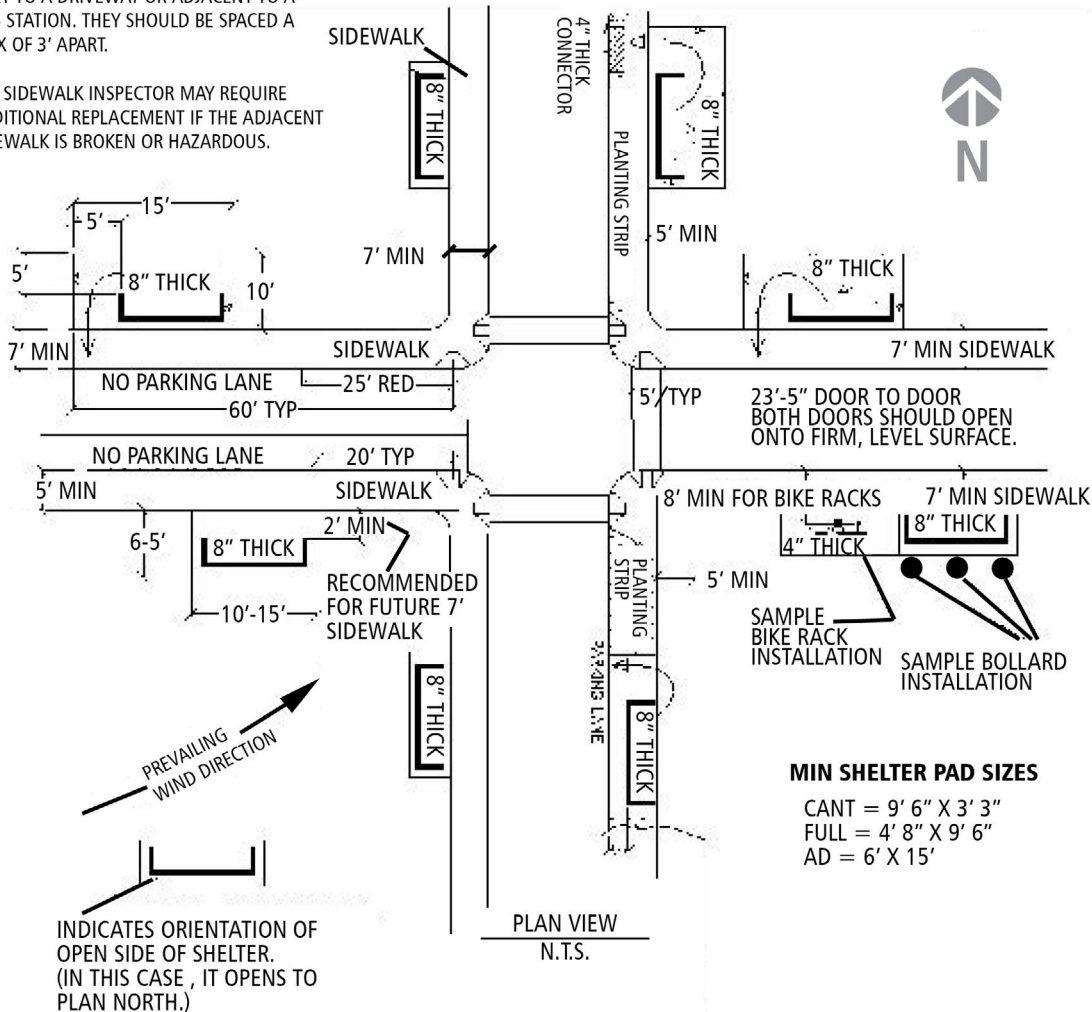
WHEN A SHELTER IS INSTALLED IN AN AREA WITH NO CURB IT SHALL BE LOCATED BEHIND THE EXISTING SIDEWALK. AN ASPHALT WALKWAY MUST BE INSTALLED TO MEET THE EXISTING ROADWAY. THE ASPHALT WALKWAY MUST BE 5' WIDE FROM THE FRONT OF THE SIDEWALK TO THE UNIMPROVED ROADWAY. THE WALKWAY SHALL HAVE A 2" DEEP ACP CLASS B ON A MINIMUM OF 4" CRUSHED SURFACE TOP COURSE BASE. THE ASPHALT WALKWAY MUST BE CONSISTENT WITH THE EXISTING STORM DRAINAGE SYSTEM.

A MIN 2' SETBACK FROM THE CURB IS REQUIRED FOR A STREET-SIDE INSTALLATION, 3' PREFERRED. THIS IS ONLY ACCEPTABLE IF A PARKING LANE EXISTS. OTHERWISE, THE SHELTER MUST BE INSTALLED BEHIND THE SIDEWALK.

A SHELTER PAD LOCATION SHALL BE A MINIMUM OF 15' FROM A FIRE HYDRANT , AND 4' AWAY FROM SURROUNDING TREE TRUNKS.

BOLLARDS SHOULD BE INSTALLED WHEN NEXT TO A DRIVEWAY OR ADJACENT TO A GAS STATION. THEY SHOULD BE SPACED A MAX OF 3' APART.

THE SIDEWALK INSPECTOR MAY REQUIRE ADDITIONAL REPLACEMENT IF THE ADJACENT SIDEWALK IS BROKEN OR HAZARDOUS.



AMENITIES WITHIN THE SHELTER

The shelter bench will be a 4' long backless bench with the exception of sponsored stops, which may have unique benches in accordance with sponsorship contracts. The bench is placed in the shelter to align the clear space (2.5' x 4') with the existing boarding area.

No amenities are placed inside the shelter except seating and leaning rails. Leaning rails are only used at Transit Centers.

Trash receptacles are mounted to the bus stop pole whenever possible. In rare cases where no pole exists, we may mount trash receptacles directly to one of the outer legs of the shelter, but it is not preferred.

SHELTER TYPES

Below is a description of Pierce Transit owned shelters:

Cantilevered

Approximately 9' x 3' of covered space without a bench with a maximum standing capacity of four passengers. When the area required to maneuver a standard sized wheelchair in and out of the shelter is deducted from the total covered area, the remaining space is enough for two additional people. With a bench (seating capacity of two) and a wheelchair, the standing capacity is reduced to zero.

True Cantilevered

Used in areas with limited right of way and has no side glass panels, thus providing minimal cover from the elements. These are being phased out and there is currently only one left in the system as of 2024.

Advertising

Advertising shelters are used along high traffic corridors where the advertising company, Pierce Transit, and the jurisdiction have determined they are appropriate. These shelters often have an illuminated canister on one end, which provides lighting inside the shelter and holds two back-lit posters that measure 47.25" x 68.75". Advertising Cantilever shelters (Ad Cants) provide approximately 9' x 3' of covered space without a bench, or a maximum standing capacity of four passengers.

Full

Existing full shelters in the system are being phased out in favor of cantilevered shelters as they require less space and allow the agency to consolidate inventory of parts. Full shelters provide approximately 9' x 5' of covered space without a bench, or a maximum standing capacity of seven passengers. When the area required to maneuver a standard sized wheelchair in and out of the shelter is deducted from the total covered area the remaining space is enough for four additional people. With a bench (seating capacity of two) and wheelchair, the standing capacity is reduced to two.

Custom

The design and construction of community-funded shelters may be undertaken in conjunction with residents, business districts or neighborhood groups, or the *local jurisdiction. While these shelters generally conform to the Pierce Transit standards, individual architectural elements may be modified to meet the unique needs of the community. If a non-standard shelter design is used, Pierce Transit will consider the purchase, storage, handling and replacement of custom parts. It may be necessary to enter a separate contract for maintenance of non-standard shelters. Typically, Pierce Transit will empty trash and conduct routine cleaning if the design meets Pierce Transit's criteria.

**Rarely, a jurisdiction will require a specific style shelter at a particular location. Both agencies must agree on the initial expenses and the long-term maintenance.*



Cantilever Shelter (Pierce Transit's current standard)



Custom shelter example (found at Tollesfson Plaza)

2.3 OTHER AMENITIES

LEANING RAILS

Used in areas where passenger volumes are heavy but either no space is available for benches or wait time is minimal.

BIKE RACKS

Bike racks are provided to allow one-time or short-term cyclists a secure means of locking their bikes at bus stops where transfers are common, at major destinations like shopping malls, and near bike lockers.

BIKE LOCKERS

These covered secured storage facilities are installed at most of Pierce Transit's Park & Rides and Transit Centers. For a monthly fee and key deposit, users are issued a key to a designated locker. Pierce Transit has chosen a modular design that allows us to easily increase or decrease capacity at facilities as needed.

BIKE SPA (Secure Parking Area)

Tacoma Dome Station has a secure area with bike racks and a repair station available for a rental fee.

BUS SIGNAL LIGHTS

As the bus approaches the passenger pushes the button to activate a light at the top of the pole, commonly referred to as "blinky lights." These devices are especially useful in poorly lit areas, high-speed corridors, or where other factors have contributed to passengers being passed up. These are installed at a small subset of Pierce Transit stops.

SOLAR LIGHTING

A solar lighting system requires no trenching for conduit, permits, inspections or monthly electric bills and is an economically and environmentally friendly alternative to traditional lighting. Solar panels may be installed where sufficient sunlight exists to ensure their operation. Starting in 2024, all new Brasco style shelters include solar lights.

TRASH RECEPTACLES

Trash receptacles are often desirable as a convenience to customers as well as to maintain a clean environment and are intended for Pierce Transit customers only. Installation of trash receptacles at bus stops is based on ridership, with stops averaging 5 or more weekday boardings eligible for a trash can. Pierce Transit uses a 10-gallon, drop bottom, pole mounted trashcan at most stops. Occasionally, two cans are needed. At extremely busy stops, a 32-gallon can may be used. Trash cans should not conflict with the boarding or alighting areas, nor block the view of waiting passengers, and should be accessible to all users. Whenever possible, they should not be installed directly beneath midis or pushbuttons. In some business districts, particularly in Tacoma, the business district or the city have installed a non-standard trash can. Facilities Maintenance staff installs, maintains, and empties all trash receptacles at Pierce Transit's bus stops, with the exception of city-owned and private cans. The Facilities Assistant Manager determines the interval for emptying trash cans. The Facilities Assistant Manager also determines if additional trash cans or larger cans are needed.

NEWSPAPER/ADVERTISING DISPENSERS & VENDING MACHINES

Advertising and newspaper companies have the right to occupy the public right of way. However, if passenger or operational safety or litter becomes an issue, the Bus Stop Program staff will contact the specific vendor to seek assistance in the relocation or removal of newspaper dispensers. If the vendor is not responsive, Pierce Transit may remove the dispenser and store until the vendor retrieves it. If a newspaper company wants to place a box at a Pierce Transit facility, they must obtain a Facilities Use permit.

CART CORRALS

Care corrals provide a dedicated area for the safe storage of shopping carts and may be desirable at bus stops located near shopping areas. These should be considered during the land use review process for large shopping developments.

2.4 BUS STOP AMENITIES STANDARDS

Pierce Transit uses ridership as the main determinant of where to place amenities in the system and further aims to maintain compliance with those standards at all stops.

- Shelter – 8 or more average weekday boardings.
- Trash can – 5 or more average weekday boardings.
- Bench – due to the Bench at Every Stop project, the goal is to install a bench wherever possible.

Additional details can be found in Appendix B of the Destination 2045 Long Range Plan.

2.5 PASSENGER AMENITY REMOVAL THRESHOLDS

When amenities are abused through illegal dumping, repeated vandalism, or ongoing public safety concerns, the agency may be forced to remove them from the stop. In those cases, the following criteria are used by staff to evaluate whether removal of a shelter, bench, or garbage can is necessary:

- 3 separate public safety related complaints, either internal or external, within a year, and not submitted by the same person or group.
- For shelters and benches, public safety assessment from PT Public Safety Team.
- Evaluation of:
 - Ridership demand
 - Proximity of equity area and/or opportunity zone
 - Need of surrounding users (i.e. hospital, school, senior center, or social service hubs, etc.)
 - Crime and nuisance activity within ¼- to ½- mile radius
 - Previous year work order history, cost, and staff time

Any amenities that are removed will be relocated to another qualifying stop in the system.

2.6 PASSENGER AMENITY REPLACEMENT THRESHOLDS

When an amenity (shelter, bench, or garbage can) is removed due to vandalism, illegal dumping, or public safety concerns, a replacement assessment will be conducted no sooner than one year post removal to determine if, when, and where the amenity should be reinstated. The following criteria will guide replacement decisions:

Primary Criteria for Replacement Consideration:

- Ridership Demand: Stops with high daily boardings and alightings, particularly those in high-ridership corridors, will be prioritized.
- Equity & Environmental Justice Considerations: The proximity to an equity area or opportunity zone, will be evaluated.
- Community Context: Stops serving essential destinations such as hospitals, schools, senior centers, and social service hubs will be prioritized for replacement.
- Crime & Nuisance Activity Analysis: Spatial analysis of crime incidents within a ¼- to ½-mile radius will be conducted to assess the level of nuisance and safety concerns at and around the stop.

Supplementary Evaluations:

Historical Maintenance Costs & Work Orders: If repeated incidents of vandalism, damage, or excessive maintenance costs occur at a given location, alternative solutions will be considered before reinstating the amenity.

Weighted Multi-Factor Analysis:

Pierce Transit will employ a weighted multi-factor analysis tool to balance community needs, ridership data, and safety concerns.

Relocation & Redistribution of Amenities:

If a removed amenity is deemed unsuitable for reinstatement at its original location, it will be maintained at another qualifying stop within the Pierce Transit service area.

Section 3 – Bus Stop Program

3.1 PROGRAM OVERVIEW

Pierce Transit's Bus Stop Program maintains an inventory of all stops in the system and associated passenger amenities. In addition to evaluating new stops, handling relocations, and managing the placement of amenities, the Bus Stop Program responds to land use reviews and advises on appropriate bus stop improvements. Pierce Transit also ensures that any changes follow Title VI requirements. Specific areas of responsibility include:

- Bus stop inventory and assessments
- Bus stop site selection
- Tracking and coordinating responses to safety or security issues at stops
- Evaluating land use applications in coordination with jurisdictions
- Engaging in community planning efforts
- Interfacing with property owners adjacent to bus stops
- Tracking the distribution of amenities and ensuring compliance with standards

3.2 PERMITTING

A permit is needed for the installation of a new bus stop, the relocation of an existing bus stop, and for improving an existing bus stop with a shelter and/or bench. Replacement of *existing amenities does not require permitting, nor does the installation of smaller amenities like trash cans and midis. At a minimum, a notice should be provided to the appropriate jurisdiction when replacing or updating benches and/or shelters.

**Certain jurisdictions may require a permit to replace an existing shelter. Verify with the relevant jurisdiction prior to amenity replacements or updates.*

3.3 PROPERTY OWNER NOTIFICATIONS

As a courtesy, when installing a new bus stop and/or shelter in the public right of way, property owners directly adjacent to the site will be notified as part of the jurisdictional permitting process. Notifications regarding the installation of other amenities may be sent when required by the jurisdiction through the permitting process. Pierce Transit will make every attempt to address any concerns that are raised prior to the installation. If property owner concerns can be resolved without significantly impacting service, safety, or passenger comfort, then site plans will be modified accordingly.

3.4 LAND USE REVIEWS

Pierce Transit requests that the jurisdictions within our service area send us land use permit applications when new developments, major redevelopments, or road improvements are being considered. In some cases, we have discovered these types of projects only through field observation. We then contact the appropriate jurisdiction for details. Our interest in reviewing the applications is to determine what impacts the development will have on public transit and to mitigate those impacts.

Four main elements are considered:

- Proximity of the development to existing or forthcoming transit routes. Typically, any stops within 500' of a project would be eligible for bus stop improvements, but this can vary depending on the jurisdiction and the size of the project. Some jurisdictions offer credits to developers for making offsite improvements.
- Size and usage of the development. (e.g. large multi-family developments may trigger bus stop improvements, but small developments, like a gas station would not.)
- Number of vehicular trips generated per day – Pierce Transit estimates that 1-3% of average daily trips will be made on transit, thus increasing ridership at nearby bus stops.

- Location and level of improvements at nearby existing stops, if any. Pierce Transit determines which bus stops are to be improved but can also opt not to improve a bus stop, for any reason. For example, if the bus stop is scheduled for removal, or if the Municipal Code calls for a shelter install but the stop is not expected to meet the ridership threshold for a shelter installation. In the case of the latter, Pierce Transit can request the installation of the shelter pad, but not require the developer to provide a shelter.

After the application is reviewed, a request is sent to the jurisdiction with appropriate bus stop improvements and/or relocation of the stop.