Purpose

Currently, not all bus stops served by Pierce Transit conform to the guidelines and standards outlined in Section I. In many cases the bus stop can be brought up to these standards through the construction or placement of additional amenities. The type of improvements appropriate for the individual stop varies depending upon the physical conditions and other circumstances of each stop. Ridership, roadway conditions and adjacent activities all affect the need for specific facilities. While we are also cognizant of Title 6 of the Civil Right Act, our methodology in determining which bus stops will be improved is not based on the economic structure of the neighborhood.

As President John F Kennedy said in 1963 of Title 6:

Simple justice requires that public funds, to which all taxpayers of all races [colors, and national origins] contribute, shall not be spent in any fashion which encourages, entrenches, subsidizes or results in racial [color or national origin] discrimination.

Since Pierce Transit is a public agency, maintaining a fair distribution of transit service and amenities will continue to be an important factor in all levels of planning. The basis for our improvements is outlined below.

BUS STOP INVENTORY & ASSESSMENT

Pierce Transit conducts periodic inventories and assessments of bus stops, including Transit Centers and Park & Rides. The 1999 inventory and assessment identified a significant number of bus stops that were not accessible or that needed other improvements. This inventory was used to identify and prioritize the work program for the years 2002 through 2008. From 2003 on, the Bus Stop Program intends to continually assess the need for improvements, eliminating the need for additional system-wide assessments.

SITE SELECTION CRITERIA

Potential bus stop improvements are identified through requests from passengers, Operators and civic organizations, analysis of activity at bus zones and staff observations. Formerly, a points ranking criteria system was used to determine the priority list. However, in 2003, a simplified version was created. The ranking of non-improved (or partially improved) stops is based primarily on boardings. Seventy percent of the improvements are distributed on the highest ranked stops in urban areas, 20% are distributed in suburban areas and the remaining 10% in emerging areas. This allows us to improve bus stops throughout the service area as opposed to simply those with highest ridership. The boundary of these population divisions was determined by Service Planning and is included in Pierce Transits' 20 year plan (See page \$1.37 for the boundary map).

Purpose

SITE SELECTION CRITERIA - continued

Several factors influence the priority level of an improvement such as:

1. Accessibility

Whenever possible, stops that are not ADA compliant will be upgraded to make them accessible. In some cases, bus stops may be improved solely to improve accessibility.

2. Existing Safety/Security Problems

High priority must be placed on resolving existing safety and security problems when they are noted.

3. Passenger Volume

The number of boarding and alighting passengers on an average weekday.

4. Frequency of Service and Transfers

If service is infrequent or if passengers must typically wait more than 15 minutes for a transfer bus, the bus stop location may be improved. Timed transfers are not always available. Amenities such as benches and shelters can significantly increase the comfort level of patrons and increase ridership.

5. Access to Community Activity Centers

Bus stops that serve major destinations rank higher than those that do not.

6. Community Planning Efforts

When a jurisdiction has identified the area surrounding a bus stop as a location of special emphasis that merits improved amenities, Pierce Transit will assign higher priority to the improvements of the bus stop at that location. This will likely be a joint project between Pierce Transit and the jurisdiction.

7. Availability of Alternative Covered Waiting Areas

The need for a transit shelter is reduced if protection from the elements already exists in public space, such as covered walkways. With an adjacent property owner's permission, a privately owned awning may serve this function.

8. Property Owner Requests

When an adjacent property owner requests a shelter placement or opposes such a placement, Pierce Transit will consider that information when evaluating that location for improvements.

Function & Responsibilities

Pierce Transit's bus stop program – the Bus Stop Program (BSP) is administered by Construction Projects. Responsibilities within this program include:

DAY TO DAY OPERATIONS

- a. Developing and managing the bus stop improvement program budget.
- b. Prioritizing bus stop improvements.
- c. Coordinating with Facilities Maintenance for bus stop installations, improvements and maintenance.
- d. Reviewing land use actions. Work with various jurisdictions and developers to ensure that bus stops are improved with new developments and improvement projects.
- e. Coordinating and managing the Bus Stop Work Group.
- f. Coordinating bus stop issues with local and state jurisdictions, including street improvements and road construction.
- g. Evaluating all new bus stop issues with local and state jurisdictions, including street improvements and road construction.
- h. Notifying key Pierce Transit staff when bus stop changes are made.
- i. Maintaining HASTUS, the Bus Stop Database and hard copy files when bus stops are added, changed or removed.
- j. Maintaining paper files on each bus stop as well as a record of requests for new or relocated stops, improvements or amenities that were denied.
- k. Coordinating all bus stop changes required as a result of three annual service changes.
- Coordinating any necessary Customer Services Inventories and distribute as needed.

BUS STOP WORK GROUP (BSWG)

The Bus Stop Program may solicit guidance from the Bus Stop Work Group on non-standard bus stop issues. Through the BSWG, the BSP gains perspectives on bus stop issues from a wide resource pool from within the agency. The Bus Stop Work Group meets on an as-needed basis to discuss issues that cannot be resolved by the application of the guidelines in this manual. In addition to the BSP section of the Construction Project division, the following divisions are represented in the BSWG:

Facilities Maintenance
Safety & Training
Service Supervision
Operations Planning
Marketing
Special Events/Detours
Community Services
Administrative Services
Security, as needed



Day to Day Operations

All day to day bus stop issues must be resolved according to the local jurisdictional policy and Pierce Transit's policy. Routine maintenance needs, such as replacement of signs or trash collection are referred directly to Facilities Maintenance via telephone, email or a Route Repair Slip. Other bus stop issues, including safety accessibility, requests for new stops, requests to relocate stops and requests for benches or shelters should be directed to the BSP for action/coordination (see Appendix 5 for samples of all forms referred to in this section).

PROCEDURES

The BSP prefers that a Request for Bus Stop Change Form be used to report issues identified by or reported to Pierce Transit staff. All issues received are logged and reviewed; safety concerns are given priority. Requests for improvements (shelters, benches, and pads) that are not safety-sensitive are evaluated and prioritized for action. The BSP processes the majority of safety and accessibility issues and requests for stop addition, movement or removal. Whenever a request or complaint is received, all or some of the steps outlined below are completed. For most actions, an appropriate form is available.

- a. Review the stop history, including previous issues and their resolutions, and current and past ridership at that stop. Inquire about any possible jurisdictional projects or new development, which may impact the bus stop.
- b. A Bus Stop Program member makes a site visit to assess the current conditions and identify possible solutions. When there is a safety issue, the BSP and Safety & Training visit the stop jointly. Likewise, if there is a security concern, the BSP and Transit Public Safety will coordinate a resolution. If a new stop or stop relocation is considered and an appropriate location is identified, the proposed new bus stop pole location is marked.
- c. When there is no consensus, discuss the issue at BSWG meetings.
- d. New stop pole locations are marked (if not already done at the first site visit) and called in to the one-call utility locator service.*
- e. A work request is sent to Facilities Maintenance.
- f. Facilities Maintenance performs the work after the utility locates are completed, and adjusts the bus stop sign pole location as needed to avoid underground utilities.
- g. The BSP issues a memo to the Detour Distribution List and posts a copy in the Operators' Lobby about the change.
- h. The BSP updates the Bus Stop database and HASTUS, then files all documentation on the issue in the individual bus stop file.

*Through One Call Concepts, which is responsible for determining the proximity of underground utilities on behalf of all major utilities such as Puget Sound Energy, Qwest, Tacoma Power, etc.

Installation & Improvement Process

The review process includes an evaluation of each bus stop's accessibility to patrons with disabilities. The Americans With Disabilities Act encourages transit systems to strive to become fully accessible to customers with disabilities. Accessibility standards are specified in Section 2. Whenever a bus stop is installed or upgraded the Act mandates that it be accessible. If a stop is not accessible, the design or the location of the stop should be modified in order to provide accessibility. If it is still not possible to provide an accessible bus stop, the installation or improvement will normally not occur.

The Bus Stop Program uses the following steps when developing and designing a new bus stop as well as bus stop improvements:

1. Preliminary Scoring

The first step in the placement process will be a preliminary scoring of the bus stop, primarily using boarding levels. Stops that clearly do not have the potential to justify installation or improvement should be eliminated from the list of candidate sites.

2. Public Input

Pierce Transit maintains a list of requested new stops and improvements that originate from members of the public, Pierce Transit staff and local jurisdictions. This list, augmented by many stop locations that have come to the attention of the Development Department staff and members of the Bus Stop Work Group, will constitute the list of bus stop locations to be considered for improvement.

3. Site Review

A field visit is typically required as part of the evaluation process. Staff will determine a tentative placement for the bus stop that ensures accessible transit operations and will identify any safety issues that may result from the placement. At the same time surrounding activities should be observed to assist in selecting the type of amenity desired and its best location.

4. Right-of-Way Determination

Preliminary contact will be established with the local jurisdiction to determine the exact location of the public right-of-way relative to the proposed improvement. Refer to the *Jurisdictional Procedures* binder for guidelines.

5. Final Scoring & Determination of Project List

Based upon the results of the site review and right-of-way determination a final scoring will be conducted. Selected projects, and the nature of the improvement to be undertaken, will be identified and ranked.

The BSP will determine the number of stops included and their priority level in the current improvement list. While boarding criteria will be the basis for this decision special circumstances will arise that incorporate additional factors in the final determination of improvements to be pursued.



Installation & Improvement Process - continued

6. Drawing of Site Plans

Site plans will be of sufficient quality and detail to meet the needs of jurisdictions and contractors. Pierce Transit staff typically produce these drawings. However, if the site is complex, the design may be outsourced.

7. Jurisdictional Review and Approval

Before installing, improving, or moving a bus stop, Pierce Transit must obtain approval from the jurisdiction having authority (refer to the *Jurisdictional Procedures* binder). The jurisdiction will either approve, make recommendations to modify the project to comply with its local requirements, or deny the request altogether.

8. Property Owner Notification WITHIN THE RIGHT-OF-WAY

Once the jurisdiction has approved the installation or improvement, Pierce Transit will, as a courtesy, notify the adjacent property owner and accept comments about the proposed bus stop. If property owners' concerns can be resolved without significantly impacting service, safety or passenger comfort, then site plans will be modified accordingly.

OUTSIDE THE RIGHT-OF-WAY

When it is necessary for Pierce Transit to locate bus stops or improvements partially or wholly on private property, a private property use agreement or an easement is required. These agreements allow Pierce Transit to use a specified area for the shelter or landing pad, requires Pierce Transit to maintain the unit in a reasonable condition, includes a "hold harmless" clause to protect Property Owner from claims, injuries, loss and/or suits arising out of or in connection with the performance of the agreement. The agreement will usually remain in effect for at least 24 months and will continue until terminated after said period at the option of either party by providing written notice. Upon termination, at their own expense, Pierce Transit would restore the premises to its previous condition.

Regional Agency Relationships

With all of the following agencies, we must maintain a cooperative relationship since Pierce Transit utilizes bus stop zones within these transit agencies' service areas. When changes or additional signs are needed, they are generally coordinated directly with the appropriate agency. Sound Transit in particular requires a significant lead-time for changes to be made. This is important to remember for Service Changes. The point of contact from each agency can be found in the *Jurisdictional Procedures* binder.

METRO (King County)

Stops north of the Pierce County line, on a route currently served by Metro must be coordinated directly with Metro. Metro will then seek outside input if required. On a new route, Metro and the appropriate jurisdiction must be consulted simultaneously.

INTERCITY TRANSIT (Thurston County)

Stops south of the Pierce County line must be coordinated with I.T.

SOUND TRANSIT (Regional)

Pierce Transit's Operations Planning staff attends frequent joint agency meetings, especially when Service Change is involved. Our role is to take the lead on establishing bus stops that Sound Transit will serve and to assist in other areas. Pierce Transit staff has ultimate voice concerning operational issues.

Improvements and passenger amenities outside Pierce County are reviewed on a case-by-case basis.

Reporting

Evaluation of the Bus Stop Program's progress will include tracking and reporting in Construction Project's monthly report, and will include the following.

- Total number of active stops in system.
- The number of amenities such as shelters, benches, blinky lights and solar units.
- Resolution or discussion of safety issues.
- Track planned and completed improvements to bus stops, including shelter installation, bench installation, pad construction and improvements made by public and private developers.
- Land Use Applications reviewed.

Relocation Criteria

The Bus Stop Program may decide to move a bus stop to improve operating safety or customer service. In general, Pierce Transit will not move a bus stop/zone that is safely and efficiently meeting Pierce Transit's needs, unless the following criteria are met:

- 1. The local jurisdiction requests the relocation.
- An equal or better boarding location exists that meets Pierce Transit's standards for safety, vehicle access, landing area, pedestrian access, and bus stop/zone spacing.
- 3. If doing so will completely resolve the issue, such as vandalism or harassment of adjacent property owners, and not simply relocate the problem.
- 4. As a last resort Pierce Transit may consider closing a bus stop/zone if numerous acts of vandalism against private property or physical assault are reported that can be shown to have a direct connection to bus stop/zone users.
- 5. Other unique situations may arise and will be reviewed individually.



Shelter Removal Guidelines

On rare occasions, it may be necessary to consider removal of a shelter. This should be considered only after the Bus Stop Work Group has attempted to solve the problem (Section 3). Following are some circumstances in which removing a shelter may be appropriate:

Safety Concerns

A request to remove the shelter because it is posing a pedestrian or traffic problem.

Police Request

Request removal due to adjacent crime, noise or loitering.

Vandalism and Accidents

When a shelter is subjected to repeated acts of vandalism, or has been damaged a number of times by vehicular accidents, Facilities Maintenance may request the removal or relocation of a shelter. In general, three incidents in a single year constitute a significant problem.

Neighborhood/Community Requests

A request to remove the shelter by a neighborhood or community group representing a substantial number of people.

Private Property Owner Requests

A request to remove the shelter because of the extent of problems caused to adjacent private property.

Change in Environment

If there has been a change in the nature of adjacent land uses or the surrounding community.

Review Process

Pierce Transit requests that the jurisdictions within our service area send us land use permit applications when new developments, expansions or road improvements are in process. 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.

There are four main elements of special interest:

- Proximity of the development to existing or forthcoming transit routes
- Size and usage of the development
- · Number of trips generated per day
- · Location and level of improvements at nearby existing stops, if any

Once these elements are defined, we compose a formal reply to the jurisdiction. The intent of the reply is to improve or increase transit services to the development. Our reply is based on the minimum thresholds outlined by the individual jurisdiction, past replies on similar size developments and/or trip generation data. The reply may simply be a suggestion to include internal sidewalks or request that the developer provide transit shelters at the pair of stops nearest their development.

It is important to be consistent in our requests so that one developer does not feel unfairly targeted to pay for transit improvements. Likewise, it acknowledges our ongoing interest and dedication to review all materials being sent to us by the local jurisdictions.



Basic Shelter Design

This appendix lists the basic design characteristics needed for Pierce Transit shelters. These characteristics were used for the latest shelter procurement that resulted in a contract with Daytech Manufacturing in 2002. Prior to 2002, shelters typically had solid kickpanels made of wood and glass top panels. Over the years, the wood rotted out and was replaced with plastic wood. For increased visibility and efforts to keep maintenance at a minimum, the move was made to all glass shelters in 2002.

OVERALL SIZE

There are two standard shelter sizes: full sized (8'9" X 4'6" X 7') and cantilever (8'9" X 2'6" X 7'). A doublewide version is also available, with a length of approximately 17', and similar depth as the standard shelters. Pierce Transit's standard green color was originally mixed by Sherwin-Williams. Its equivalent is Pantone PMS 5467. The Tacoma Business District's standard blue is RAL 5003 (by Drylac). The appropriate District must specify custom colors. The Meridian Corridor is black. (See also *Parts and Color Standards*)

CONSTRUCTION MATERIALS

Shelters will be made of materials that minimize visual obstruction of storefronts and street elements. Design typically includes a 3/8" clear glass panel on the bottom half of the shelter back and sides, topped by a 1/4" clear glass panel on the top half of back and side panels. Metal components should have a durable, vandal resistant finish, such as powder coating and should be easily replaced or repaired. Shelters are firmly anchored to the concrete pad with hardware that also permits easy installation and removal by Pierce Transit staff.

ROOF

The preferred style is made of corrugated polycarbonate or clear Plexiglas. The preference is a material that would be readily available at local home repair stores, to ensure availability and reasonable cost. Roof design should allow panel replacement on site and be steep enough to be self-cleaning, so that debris is washed into the gutters during rainfall, rather than accumulating on top of the roof. Roof should be designed to channel water/debris directly into gutters, and should incorporate the gutters and roofing into the structure of the shelter. Avoid horizontal support members within the shelter that may tempt shelter occupants to swing on or hang from supports. Arched roof supports that cannot be reached in casual play are essential.

GUTTERS

The gutters should be one piece, and be an integral part of the basic shelter design, not an additional piece. Gutters should be designed to direct water to the back of the shelter to allow the accumulated water to flow down the back legs, and out the back of the shelter, not drop water through the shelter, or on the sides or front. Gutters should be lined with "truck bed liner material" such as Line-x or Rhino to inhibit rust, and ensure durability.



Basic Shelter Design - continued

GLASS PANELS

Glass should be installed with an L groove, and rubber grommet material, for ease of installation and repairs. The preference is for a divided glass look, with an upper and lower glass panel. The lower glass panel should be at least 3/8" laminated glass for strength, and to discourage vandals from kicking it out.

COATING

For the metal parts of the shelter, powder coating is the preferred finish. It is harder and longer lasting than paint, and resists oxidation.

SUPPORT FRAME

Legs and Feet

Should have a drop-in design for ease of installation and repair

Frame

Should be constructed of 3" tubular aluminum or similar material. Preference is for a frame than can be bolted together to allow ease of installation and repairs on site.

LIGHT FIXTURE

Should provide 2-foot candles of illumination.* Most shelters are powered with 110 volts and use four 85W fluorescent bulbs. Fixture must be UL approved.

ELECTRICAL

2.7 amp ballast is typical. All fixtures must be UL approved.

ADVERTISING PANELS (cans/canister)

110 volts is typical. Most panels use (4) 72-watt bulbs with a 2.7 amp ballast. All fixtures must be UL approved.

^{*} Indiana Council on Outdoor Lighting Education (ICOLE), May 18, 2003 and I.E.S. Lighting Handbook

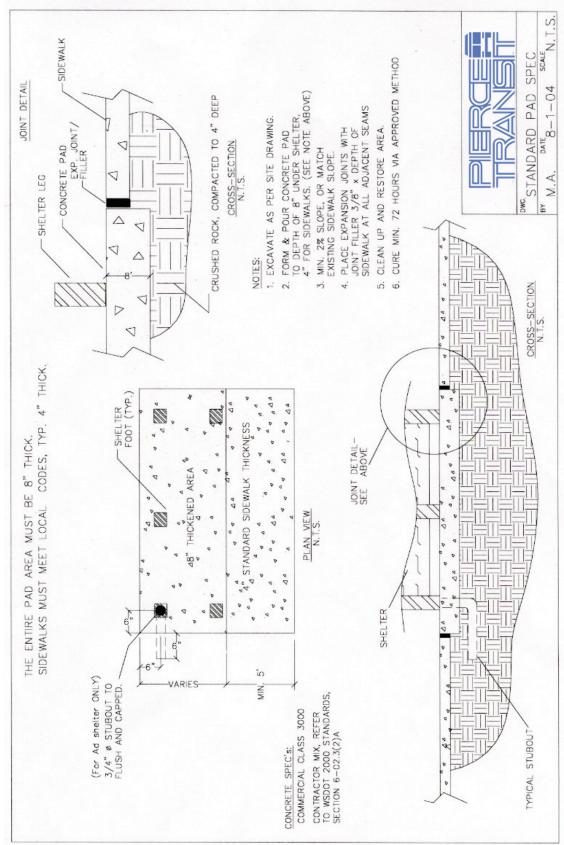
Shelters, Benches & Pads

Bench Design Characteristics

Benches should be designed to be comfortable for short periods of time. Arms to separate individual seating areas are recommended in some locations to discourage sleeping. Benches should be constructed of non-organic materials to prevent the growth of mold and slime, and should be durable enough to be pressure washed regularly. The seating should be designed to prevent standing water, and allow water to drip through, leaving a relatively dry seat for the customer.



Concrete Foundation Pad Specifications



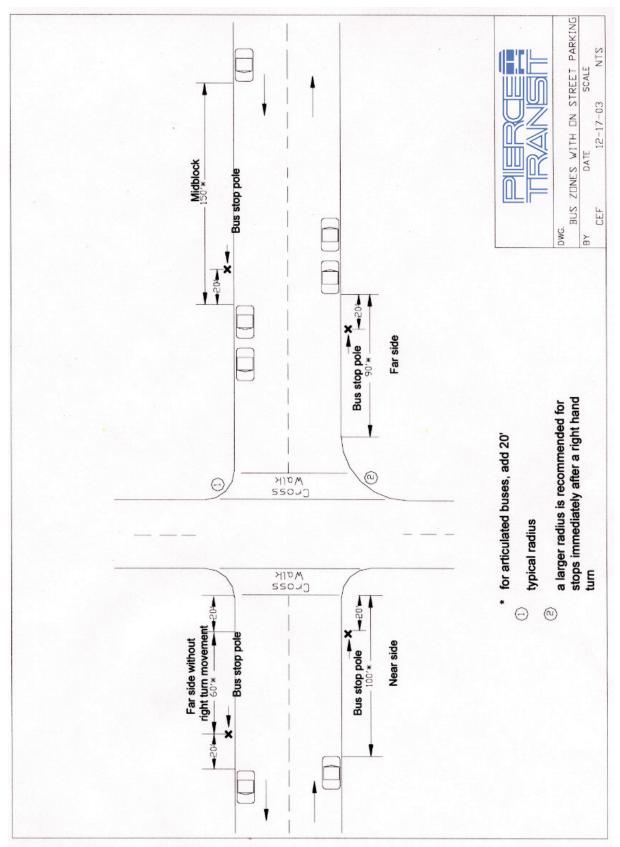
Location Guidelines & Pullout Characteristics

On Street Parking

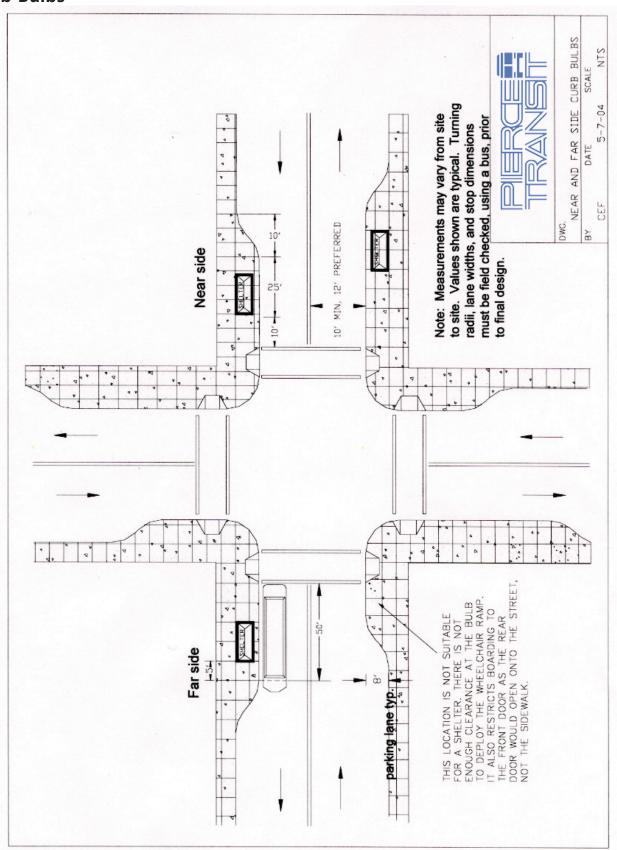
Bus zone locations are dictated by road conditions and parking arrangements.

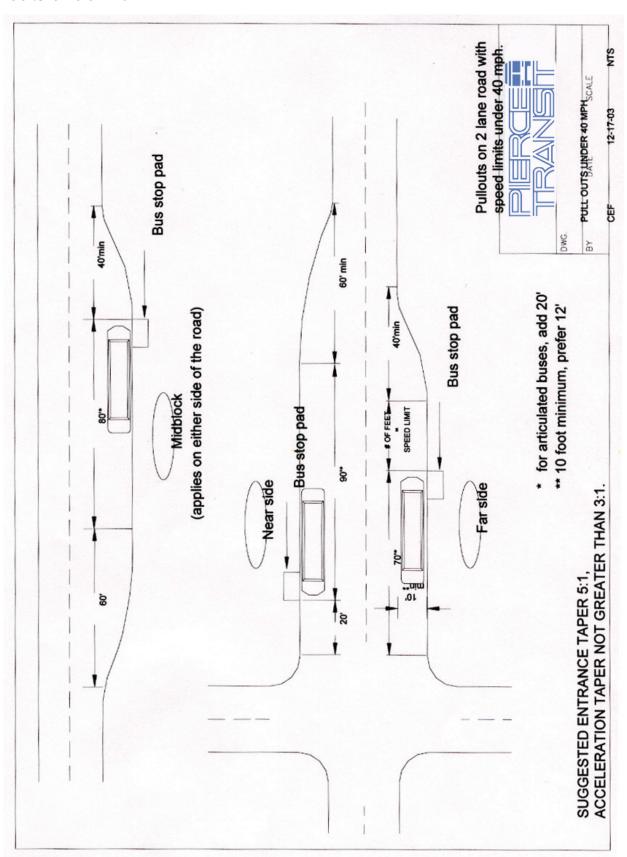
In general, Pierce Transit prefers not to use pullouts unless required by law or jurisdiction. Generally speaking, it takes more time to serve a pullout than by staying in the lane of travel. The bus may get trapped as cars queue at a traffic signal and fail to yield to the bus as it attempts to re-enter traffic.

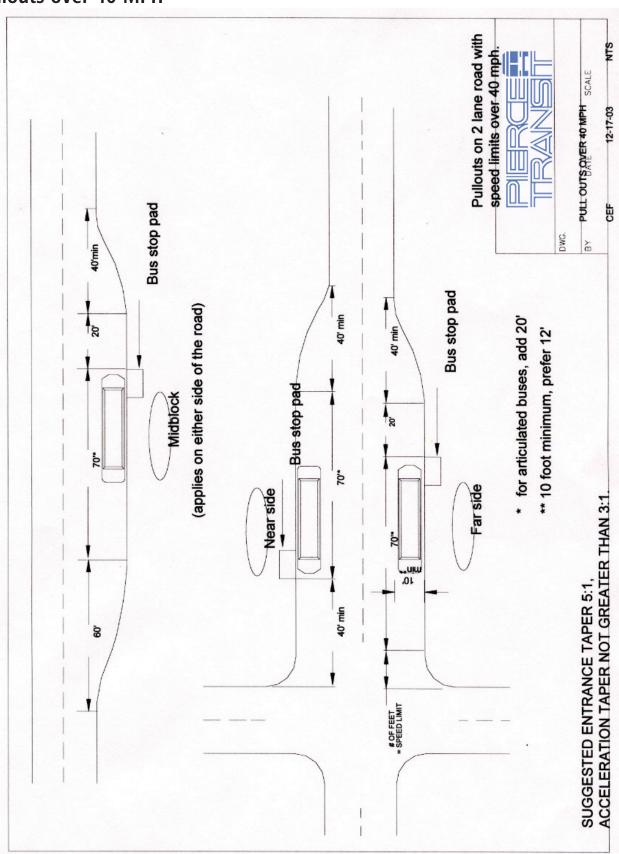
On Street Parking - continued



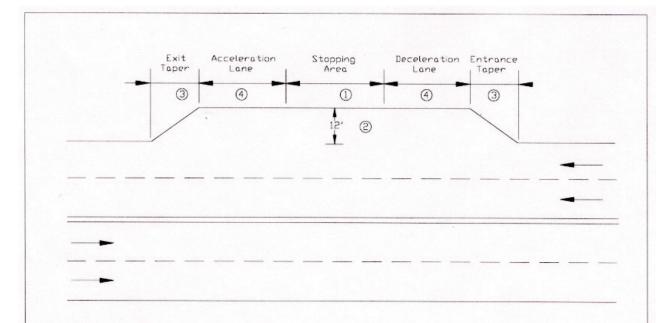
Curb Bulbs







Pullout Dimension Details



Notes:

- Stopping area length consists of 50 feet for each standard 40-foot bus and 70 feet for each 60-foot articulated bus expected to be at the stop simultaneously.
- ② Pullout width is 12 feet preferred. These dimensions do not include gutter width.
- ③ Suggested taper lengths are listed in the table below. Desirable taper length is equal to the major road through speed multiplied by the width of the pullout. A taper of 5:1 is a desirable minimum for an entrance taper to an arterial street bus pullout while the merging or re—entry taper should not be sharper than 3:1.
- Minimum design for a busy pullout does not include acceleration or deceleration lanes. Recommended acceleration and deceleration lengths are listed in the table below.

| Through Speed (mph) | Entering Speed* (mph) | Length of Acceleration lane (feet) | Length of Deceleration Lane** (feet) | Length of Toper (feet) |
|------------------------|-----------------------|--|--|---------------------------|
| 35 | 25 | 250 | 184 | 170 |
| 40 | 30 | 400 | 265 | 190 |
| 45 | 35 | 700 | 360 | 210 |
| 50 | 40 | 975 | 470 | 230 |
| 55 | 45 | 1400 | 595 | 250 |
| 60 | 50 | 1900 | 735 | 270 |

- * Bus speed at end of taper, desirable for buses to be within 10 mph of travel lane vehicle speed at the end of the taper.
- ** Based on 2.5 mph/sec deceleration rate.





Business District & Neighborhood Program

Pierce Transit works closely with local jurisdictions, business districts and neighborhoods to support or reinforce economic development activities, the unique identity of those areas, and to include transit in district and neighborhood enhancements. It also gives us the chance to provide high quality transit services and potentially attract new riders. The Business District and Neighborhood Program allow for the customization of Pierce Transit shelters and other stop amenities to contribute to the design direction already developed by these organizations.

PROGRAM PARAMETERS

Shelters and Associated Amenities

- a. Pierce Transit will contribute the equivalent of the cost of a Pierce Transit standard shelter unit toward the cost of a business district or neighborhood district style shelter. A shelter unit includes standard full sized shelter, a pole mounted trash can, a ride guide holder, a bench, and a shelter pad. The price for amenities established for the calendar year will apply to all agreements made in that year, and will not be dependant on the year of installation. Sales tax applies.
- b. If Pierce Transit intends to replace a standard shelter or bench within a business or neighborhood district, the appropriate representative should be consulted and given the opportunity to have a custom design shelter installed instead. Pierce Transit would then contribute the cost of the standard designs only. The business district would contribute the difference.
- c. Pierce Transit will assume ownership of, insure and maintain any shelter installed under this program, as we do for other shelters in the system.
- d. Before Pierce Transit installs a shelter within an existing business district or neighborhood where a shelter design has already been established, Pierce Transit will contact the representative of that organization to determine if they wish to contribute to the installation of a business district shelter. If an agreement cannot be reached by the time the shelter installation is ready to proceed, Pierce Transit will install a standard Pierce Transit shelter with standard amenities.

Custom Amenities not Installed with Shelter

- a. Pierce Transit will contribute the equivalent of the cost of Pierce Transit standard amenities toward the cost of business district or neighborhood amenities, when they are installed by or for Pierce Transit. Amenities include benches, pole mounted trash cans, ride guides and kiosks. Pierce Transit will determine annually what that value is, and it will be published as Tab A to this Appendix. In each case, the price for amenities established for the calendar year will apply to all agreements made in that year, and will not be dependant on the year of installation.
- b. In many business districts and neighborhoods, there is a designated style of street furniture that the business district or neighborhood wishes to use to create a distinct look for the area. In those cases where Pierce Transit is considering the installation of new benches or trash cans, Pierce Transit will contact the business district or neighborhood to determine if they wish to participate in the installation of amenities in order to provide non-standard amenities. If the business district or neighborhood has no desire, or does not have the funds to contribute to the upgraded amenities, Pierce Transit will install standard amenities.



Advertising Shelter Program

A BRIEF HISTORY OF THE ADVERTISING SHELTER PROGRAM

By 2001, Pierce Transit's Marketing Department had coordinated with many of the local jurisdictions about this project and the majority were supportive of it. We began the site selection process with an advertising company. Unfortunately, the advertising market sank near the end of 2001 and the Program vanished.

In Spring 2003, the State passed a bill granting us the right to install advertising shelters. This eliminated the concern that Pierce Transit wouldn't be able to install advertising shelters throughout the service area.

By Fall 2003, the Marketing department felt the economy was stable enough to entertain the Advertising Shelter Program again and began the Request For Proposal bid process. However, no responses were received.

In general, the concept of an Advertising Shelter Program is that an advertising company would coordinate with Pierce Transit to install advertising style shelters at the locations both parties agree upon, and that have been approved by the appropriate jurisdiction. At this time, there is no such program, but Pierce Transit is hopeful to enter into an agreement in the near future. In the meantime, we are installing up to 25 Ad Shelters per year at suitable locations. We will also be installing many on SR 161 and SR 7 in conjunction with WSDOT's improvement projects.

Some Possible Contract Elements

- A percentage of the profits are returned to Pierce Transit.
- A percentage of the profits are returned to the community.
- The advertising company maintains and repairs any damage to its shelters.
- Pierce Transit oversees construction of pads and coordinates with jurisdictions.
- The advertising company oversees the construction of the pads and coordinates with jurisdictions.
- The advertising company produces and installs the advertisements.

Benefits to Pierce Transit

- The public benefits by the increase in the number of shelters in our service area.
- The advertising shelters are likely to be installed at locations that were not on our improvement list.
- There is little or no cost to us.
- Revenue source for Pierce Transit.



Special Shelter Programs

Art Shelters

Art shelters provide a way for local communities and schools to contribute to the unique appearance of their neighborhood transit facilities and provide a way to involve the community in maintaining the appearance and cleanliness of the shelter.

Any unique art added to Pierce Transit shelters must be durable, vandal resistant, and tolerant of routine power washing of the shelters and the surrounding areas.

Any artwork applied to Pierce Transit shelters will be maintained by the organization responsible for the installation, and they will pay for any repairs or to refresh the coverings. A signed agreement, detailing who to contact and the response time for repairs must be in place.

Should the artwork be so damaged that routine maintenance will not restore it, Pierce Transit will notify the responsible organization that the artwork must be repaired or removed.

If at any time the condition of the artwork deteriorates or has been vandalized and is not repairable, or the repairs are prohibitively expensive, the artwork will be removed by Pierce Transit and offered to the responsible organization for disposal. If they do not want the artwork, or can no longer be located, Pierce Transit will dispose of the artwork.

Issues & Procedures

In most cases, complaints about activity and appearance of bus stops or shelters fall into one of the following categories:

- Trespassing
- Loitering
- Noisy or vulgar language
- · Damage to private or Pierce Transit property
- Trash
- Illegal activity

FACTS BEARING ON THE ISSUE

- Each year, we spend a significant amount of money on replacing broken or vandalized glass in our shelters. In some cases, removal of a bench or shelter has resulted in significantly reduced complaints and costs associated with maintenance.
- 2. Through 2002, Pierce Transit's standard shelter design consisted of a dark kickpanel that provided an obscured view into the shelter. Beginning in 2003 the shelter design was changed to a clear kickpanel. If security or complaints become a problem or if vandalism occurs at a solid kickpanel location, we will swap it out for a clear version.

STANDARD RESPONSE TO BROKEN SHELTER GLASS AND GRAFFITI

- Track all vandalism in the individual bus stop files. Identify problem areas for increased cleanup and attention during the routine maintenance cycle.
- Identify bus stops with a "high" number of incidents and begin an aggressive "watch" program. "High" is defined as more than one incident per month, or more than five per year. Facilities Maintenance will report problem bus stops to the Bus Stop Program.
- 3. Broken glass is replaced the first time with a new panel of glass. The second time it will be replaced with 3/8" thick glass. If the glass is broken a third time, it will be replaced with Plexiglas or similar material. Notify Service Supervisors and Security to request assistance in patrolling the area. If the shelter is vandalized more than once per month or five times per year, consider other tools from the Vandalism Toolbox.
- 4. Once graffiti has been reported to Facilities, it is removed within three days. If the graffiti is offensive, every effort will be made to remove it immediately.

Issues & Procedures - continued

PROCEDURE FOR DEALING WITH ILLEGAL ACTIVITY

- 1. Post an "Unlawful Bus Conduct" Sign inside the shelter or at the bus stop.
- 2. Encourage Operators and Service Supervisors to regularly check on shelters along their routes, and report developing problems.
- Track all correspondence in the bus stop file. It is particularly important for custodians to report if they notice any of the following, since they are in the shelters every week:
 - a. People are using the shelter as a toilet
 - b. Condoms, needles or syringes in or around the shelter
 - c. A significant increase in trash at or near the area of our bus stops that includes alcoholic beverages
 - d. Concerned neighbors are voicing their concerns about the shelter
- 4. Once a shelter has generated a number of complaints, or is on its way to becoming a "nuisance shelter," the Bus Stop Program will analyze the complaints and determine the primary nature of the complaint.

VANDALISM TOOLBOX

Pierce Transit may draw from a "toolbox" of solutions to common vandalism and maintenance problems. Examples of some available tools are:

- Increase illumination
- Remove or install a different style bench
- Change shelter type
- Increase Supervisor surveillance
- Involve our Security staff
- · Involve the community
- Move or remove the shelter
- Move or remove the stop
- Play classical music

In unique circumstances, consider creating a Vandalism Task Force to develop mechanisms to discourage, catch and prosecute the vandals. At a minimum, the Task Force should include representatives from:

- Bus Stop Working Group
- Pierce Transit Security
- Local Police Liaison
- Cross District Association (in Tacoma)
- Safety & Training
- Marketing
- Citizens from the local neighborhood

Bus Stop Management Literature

Inventory of Forms, Formats & Samples

Hard copies of forms, formats and samples are included on the next few pages. Electronic templates of some forms are located in S:\PTStyles\Template Forms + E-Forms. Please call Admin Services for printed forms.

- Request for Bus Stop Change (printed on yellow paper)
- · Customer Service Inventory Bus stop change Memo
- · Work Order format
- Route Repair Slip format, padded and printed on white paper
- Bus Stop inventory worksheet
- Bus Stop Safety Checklist
- Bus Stop Review form
- · Adjacent Property Owner Notification
- Adjacent Property Owner Agreement
- Bus Shelter/Bus stop easement cover letter
- · Loop Adjacent Property Notification letter
- · Business District Agreement letter

Request for Bus Stop Changes

| REQUEST FOR BUS STOP CHANGE The Bus Stop Program | : |
|--|----------|
| Route # Inbound Outbound Bus Stop Planning # (if known): | |
| Street: Nearest Cross Street: Landmark/street address: Corner/Direction from Intersection: | |
| Request details: add a stop at the above location. move the current stop to: remove the stop. Reason: Improve the current stop as follows: add shelter add bench add garbage can improve wheelchair access other: Follow-up required? Comments: | sibility |
| Requestor's Name: Requestor's Phone #: | |
| P.T. Employee Name:Date: Please send to Bus Stop Program, 983-3309. S:\adminsvc\dev\request for bus stop change1.doc | |

Customer Service Inventory Change Memo

TO: Distribution

FROM: Monica Adams, Bus Stop Program

DATE: September 26, 2002

SUBJECT: CHANGES TO CSI, ROUTES 11, 13, 294, 500, 501, 585, 586, 601, 603

Route 11 and 13: extended to TDS

Route 204: now comes down 59th instead of Gravelly Lake

Route 500: extended to TDS, no more 500A

Route 501/586: new routes

Route 585: revoute to serve S. Hill Mall and Auburn Rail

601/603: reroute to serve Lacey, Quinalt and Martin Wy P&R's

If you have questions or find errors, please let me know. Thanks!

Distribution: (37 total)

Downtown Bus Shop (2) JoAnn Boring

Susan Allison Operator's Board (please pull old copies)

Lakewood Bus Shop (10) Monica Adams Commerce Facility (3) Jerry Wax

Rene Bartlett Dome Station Bus Shop Dave Carpenter (mail #313) SHUTTLE (Attn: Kim) Communications Center John Briley (mail #121)

Sandy Johnson Maint. (3) Brenda Jones, Kal K. & Larry Wallace

Jerry Lindsay Ozzie Rico Phil McVey Tim Renfro

Dixie Sciagua File

Facility HelpDesk Work Order

Work Order format, e-mail or hard copy to Facility HelpDesk

| Route# Direction | | Street/cross street | landing | type of work timeframe |
|-------------------------------------|--|---------------------|---------|------------------------|
| Bus stop number Requestor's name | | | | |

Route repair slip format, padded and printed on white paper

| streets: | |
|----------------------|---|
| | |
| e problem: | |
| | |
| | |
| | 1.1 |
| | |
| | |
| ng in a sign you pic | ked up on the street. |
| 0 0 1 . | |
| | • |
| | ng in a sign you pic nis slip to the sign. |

Bus Stop Inventory Worksheet

| BUS STOP INVE | NTOF | RY V | VORKSH | EET | | Date | | Original | Update |
|------------------------|-----------|-----------|----------|----------|----------|-----------|---------|-----------|--------|
| Bus Stop Numbe | r | | | Routes | Served | | | | |
| Stop Designation | 1 | | | | | | | | |
| Cross Streets | | | | | | | | | |
| Thomas Guide | | | | | | ROW | | | |
| Coordinates | 47 | | | N | | 122 | | W | |
| Location | Ne | ar | Far | Mid | Corner | NW | NE | SW | SE |
| Distance & Direc | tion 1 | from | Intersec | tion | | | | | |
| Adjacent Addres | s/Lar | ndm | ark | | | | | | |
| Jurisdiction | | | | | Zip | | Speed L | imit | |
| Pole Type | Plate | ed | Ground | Other | | Direction | 10 | Toward | Away |
| Landing Curb/Gutter | Υ | N | Width | Sidewalk | Dirt | Grass | Gravel | Asphalt | Other |
| Pad | Y | | Туре | Asphalt | Concrete | Location | Mono | Front | Back |
| Bench | Υ | N | Туре | Metal 6' | Metal-4 | Wood | Flip | Bus Dist | Other |
| Trash Can | Υ | Ν | Type | Role | Rbmaid | Ranger | Custom | Bus Dist | Other |
| Shelter | Υ | Ν | Туре | (1947) | DC | BDF | BDC | DBL | AD |
| # | | (| P (0) | VÁLF | ALC | NSF | NSC | OSF | osc |
| Pullout | Υ | Ŋ | Type | Asphalt | Gravel | Shoulder | | | |
| Right Lane Width | | | | | | Bike Lan | e Width | | |
| Passenger Info | Υ | Ν | Туре | Mini | Midi | Large | Kiosk | Tactile | Other |
| ADA Accessible | Υ | Ν | Sign | Y N | Safety D | evices | Y N | Signal | X Walk |
| Electricity | Υ | Ν | Public | Private | Туре | | | Distance |) |
| Passenger Amen | ities | | Phone | Store | Food | Church | Papers | Alternate | Cover |
| | | | Solar | Blinky | Light | Bike L | ocker | Bike | Rack |
| Adjacent Concer | ns | | Mailbox | Paperbox | Alcohol | School | Other: | | |
| Water Within 300 | Y Dist | N ance | Pond | Lake | Stream | River | Ditch | Catch | Basin |
| Comments | | | | | | | | | |
| | | | | | | | | | |

Bus Stop Safety Checklist

| BUS STOP SAFI | TTCHEC | KLIST | | | Date | | | |
|-------------------------|------------------|--------------|----------------------|---------------|--------------------|------------|----------------|--------|
| Bus Stop Numb | er | | Routes | Served | | | | |
| Stop Designatio | n | | | | | | | |
| Action Consider | ed | Add New | | Move | | Improve | | Remove |
| ADA Accessible | Y | N* | | Why not? | | | | |
| *if no, site must be im | proved before | adding stop. | All new, mo | oved or impre | oved stops i | must be AD | A accessible |). |
| Sight Distance | Hill | | Curve | | Speed | | Other | |
| Comments: | | | | | | | | |
| | | | | | 1 | | | |
| Visibility | Trees | | Signs | | Bldgs | 7. | Other | |
| Comments: | | | | (| HIII | | | |
| Traffic | Heavy Traffic | | Multiple Drivevax | 3 | Traffic Signals | | Lane Config | |
| Comments: | | 6 | (0) | | o.g.iaic | | | |
| Roadway/Shoul | der | 2) | Condition | 1 | Curb | | Sidewalk | |
| Comments: | 8 | | | | | | | |
| Location | Nearside | Farside | Midb | lock | Distance | from Left | Turn | |
| Comments: | | | | | | | | |
| Surroundings | Trees | | Shrubs | | Lighting | | Other | |
| Comments: | | | | | | | | |
| Safety & Trainin | g Commer | nts | | | | | | |
| Bus# | | | Date | | | Initials | | |

Bus Stop Review Form

| Гуре | of Work | |
|------|----------------------------------|-----------|
| Го В | e Done | Completed |
| | Operations Planning Input | |
| | Site Visit | |
| | Comments: | |
| | Safety & Training Review | |
| | Stake & Mark | |
| | Check Land Use Files | |
| | File Number: | |
| | Jurisdictional Permission | ~(D//)>) |
| | Jurisdiction | Approved |
| | Reason: | |
| | Permit | 9 🗆 |
| | Adjacent Property Agreement | |
| | Adjacent Property Owner Notifica | ation |
| | Locates / Tkt# | |
| | Facility Work Order | |
| | Request: | |
| | Inventory Sheet | |
| | Pictures | |
| | HASTUS | |
| | Bus Stop Database | |
| | Customer Service Inventory | |
| | Operations Memo | |
| | Print HASTUS Map | |
| | File | |
| | Return to: | |
| | | |

Adjacent Property Owner Notification

April 20, 2001

Mr. & Mrs. John Doe [name of business here] 0000 Main Street Anytown, USA 00000

RE: Proposed Bus Stop

0000 Main Street

Dear Mr. & Mrs. Doe:

In response to neighborhood requests, Pierce Transit will be adding a bus stop near your property located at 0000 Main Street, Anytown USA. The bus stop will be located within the existing right-of-way and will not encroach on the adjacent private property. Pierce Transit will install a metal pole and sign and maintain the stop.

Pierce Transit appreciates your support in improving your community's bus service.

If you have any questions or concerns about the stop, please contact me before May 15th, 2001 at (253) 581-8130 or madams@piercercansir.org.

Sincerely,

Monica Adams, Planner Construction Projects

ADJ OWNER NOTIFY RTE61-1.DOC



ADJACENT PROPERTY OWNER AGREEMENT BETWEEN

| | HOUSING AUTHORITY OF ANYTOWN |
|-----------------------|---|
| | AND |
| Pl | ERCE COUNTY PUBLIC TRANSPORTATION BENEFIT AREA CORPORATION |
| AUTHORITY O | made and entered into, this day of 2004, by and between the HOUSING F ANYTOWN, 0000, E. Main, Anytown, USA, hereinafter called "Owner" and PIERCE COUNTY PUBLIC FION BENEFIT AREA CORPORATION, 3701 96th St. SW, Tacoma, WA., a municipal corporation, "Pierce Transit". |
| using private prop | ~_///) / |
| WHER | EAS, Owner owns the property located adjacent to the proposed she has site described in Exhibit "A"; and |
| NOW, | THEREFORE, in consideration of the covenants and agreements of the parties hereinafter set forth, the |
| | parties do hereby agree to the following: |
| southeas installat | s. Owner grants to Pierce Transit the right to install and use a pad and shelter on their property located on the transit comer of Arlington Drive and Portland Ave as shown in Exhibit "A", as a passenger waiting area. The ion of this pad and shelter will be completed at no cost to Owner. |
| 2. Term. J | his agreement shall remain in street unless terminated by mutual consent or operation of law, whichever comes |
| and land shelter a | Owner authorizes Pierce Transit to access the shelter, and surrounding area via driveways, improved surfaces scaped areas surrounding the bench. Pierce Transit will repair any damage to the area caused by accessing the nd will restore the area to as good a condition, less reasonable wear and tear, as existed prior to accessing the hen said damage is caused by Pierce Transit accessing the shelter. |
| 4. Mainten | ance. Pierce Transit shall be responsible for maintenance of the shelter site and area as defined in Exhibits A. |

- 5. Insurance. Pierce Transit agrees to include the described bench site within Pierce Transit's self-insured general liability program. Owner will promptly report any accident and/or claim to Pierce Transit and will cooperate with Pierce Transit in defense of a claim or lawsuit.
- Indemnification. Pierce Transit shall indemnify and hold harmless Owner and its agents, employees and/or officers 6. harmless from and shall process and defend at its own expense any and all claims, of whatsoever kind or nature, brought against Owner arising out of, in connection with, or incident to the execution of this Agreement resulting from the sole negligence of Pierce Transit. Provided, however, that if such claims are caused by or result from the concurrent negligence of (a) Pierce Transit and (b) Owner, its agents, employees and/or officers, this indemnity provision shall be valid and enforceable only to the extent of the negligence of Pierce Transit, and provided further, that nothing herein shall require Pierce Transit to hold harmless or defend Owner, its agents, employees and/or officers from any claims arising from the sole negligence of Owner and/or its agents, employees, and/or officers. This indemnification shall survive any termination of this Agreement until all obligations under this agreement are fulfilled.

Adjacent Property Owner Agreement - continued

| 7. | other party of its intent to terminate the Agreement. this Agreement; will remove the shelter and pad; v | te this Agreement by providing sixty (60) days written notice to the Pierce Transit will discontinue its use of the site on termination of will repair any damage to the site caused by the removal; and will year and tear, as existed prior to the execution of this Agreement. | | | | | |
|------|--|---|--|--|--|--|--|
| 8. | Accommodation. The parties agree to make reasonable accommodations with and to work together to resolve proble that may arise from time to time. | | | | | | |
| 9. | Entire Agreement. This document contains the entire Agreement between the parties and supersedes all statements or understandings between the parties. | | | | | | |
| | ITNESS WHEREOF, Owner and Pierce Transit have rized, the day and year first herein above written. | executed this Agreement by their respective officers thereunto duly | | | | | |
| PIER | CE TRANSIT | HOUSING AUTHORITY OF ANYTOWN | | | | | |
| | S. Monroe Executive Officer | Name Title | | | | | |
| | e Fanshier President of Finance & Administration | | | | | | |
| ATTI | EST: | ATTEST: | | | | | |
| | Byers, CMC of the Board | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Bus Shelter/Stop Easement Cover Letter

December 4, 2003

Housing Authority of Anytown 1000 Main St. Tacoma. WA 98000

RE: Proposed Bus Stop Improvements at

0000 Main Street, Anytown USA

Dear Property Owner:

Pierce Transit wishes to add a passenger shelter adjacent to the property located at <u>0000 Main Street</u> in <u>Anytown</u>, USA. This is on the southeast corner, at our existing bus stop. Due to the lack of public right-of-way, we seek your authorization to place the concrete foundation and shelter on your property.

When placing a passenger amenity on private property, we ask our neighbors to participate in a Private Property Owner Agreement. This agreement outlines Pierce Transit's intent to maintain the bus stop and shelter and your willingness to participate in this needed passenger improvement. If at any time you request the removal of the shelter, it will be removed and the area will be returned to its former condition.

Enclosed are (3) copies of our agreement and a copy of the pad and shelter placement diagram. Please review the agreement and contact me if you have any questions. Otherwise, please sign and return (2) copies and keep the third for your records.

After the agreement has been finalized, and weather permitting, the installation should take place within the next 90 days.

Thank you for supporting public transportation in our community. I can be reached at 253.581.8130 or madams@piercetransit.org. I look forward to your prompt reply.

Sincerely,

Monica Adams, Planner Construction Projects

Bus Shelter/Stop Easement Cover Letter

Mr. and Mrs. John Doe 0000 Main Street Anytown, USA 00000

Dear Mr. and Mrs. Doe,

On Monday, September 18, Pierce Transit started operating a reservation only dial-a-ride service between the Key Center area and Purdy Park & Ride called "Key Loop." This special service brings public transportation access back to the Key Peninsula and restores a missing transportation link.

To use the Key Loop service, passengers call Pierce Transit to make a reservation and our SHUTTLE van picks them up at a prearranged time at the nearest Key Loop stop. A SHUTTLE van rather than a large 40-foot bus operates the new Key Loop service. Service is by reservation only and is available Monday through Friday, from 6 a.m. to 6 p.m.

One of the Key Loop stops we are proposing is adjacent to your property at 0000 Main Street, Anytown, USA. This site was selected because it provides an accessible boarding location under the Americans with Disabilities Act (ADA).

The Key Loop stop we are proposing is different from one of our typical bus stops. The site will not have a bus stop sign or pole; instead, it will be a designated "community stop." We will direct passengers to the site during the reservation process. The Key Loop SHUTTLE will only board passengers at this stop if a reservation has been prearranged. SHUTTLE vans typically pull over to the shoulder to pick up passengers. However, with the narrow roadways and limited number of sidewalks in the area, we often use driveways or pullouts along the road to board passengers.

We look forward to bringing improved transportation service to your community. If you have questions or comments about this new service or community stops please call our Specialized Transportation Manager at (253) 984-8217.

Sincerely,

Monica Adams, Planner Construction Projects

cc: Specialized Transportation Manager

Relevant WSDOT Rules, Codes & Guidelines

WSDOT Transit Zone Stopping Rules and Specific codes and guidelines relevant to Pierce Transit operations:

Washington Administrative Code 468-46

Requires WSDOT, upon receipt of a request for approval of a transit stop on a state highway outside an incorporated area, to attempt to find a suitable location at which transit vehicles may stop wholly off the roadway (WAC 468-46-010). It allows WSDOT to approve a temporary in-lane stop if a suitable location cannot be found within a reasonable and practical distance from the proposed location (WAC 468-46-020). It requires an advance transit vehicle stop sign installed in all locations where the transit vehicle stop is not visible for 500' in advance of the stop. This sign is installed by WSDOT (WAC 468-46-040).

Revised Code of Washington RCW 46.61.560

Allows transit vehicles on a state highway outside an incorporated area to temporarily stop upon the roadway for the purpose of discharging and receiving passengers at a marked transit stop approved by the WSDOT (RCW 46.61.560). Requires drivers to yield the right of way to a transit vehicle that has signaled and is reentering the traffic flow (RCW 46.61.220).

Revised Code of Washington RCW 46.61.570

Prohibits parking in a designated bus zone.

WSDOT Design Manual, Division 6, Division 10

Recommends pullouts when curb lane traffic volume exceeds 250 vehicles during the peak hours, traffic speed is 45 MPH or greater, passenger volume at the stop exceeds 20 boardings per hour, or there is a history of accidents at the proposed location.

Transportation Research Board Transit Cooperative Research Program, Report 19-Guidelines for Design and Construction of Bus Stops.

This report offers guidelines on various issues including bus stop placement, safety checklists, amenity layout, etc.

List of Miscellaneous Resources

ADA Guidelines

Minimum 5' X 8' boarding area at bus stops Maximum 2% slope for sidewalk construction Maximum 8% slope for ramps

Bike Lanes

Pierce Transit's policy is that the bus will pull to the curb even if a bike lane is present. This prevents a bicyclist from trying to pass on the right while passengers are boarding/alighting.

(1) Highway Capacity Manual, 2000.

(2) <u>Guidelines for the Location and Design of Bus Stops</u>, prepared for review by: Transit Cooperative Research Program, Transportation Research Board, National Research Council. Distributed by the Texas Transportation Institute, 1996.

Metro Transportation Facility Design Guidelines, 1991.

Puget Sound Regional Council (PSRC) Web site, www.psrc.org.

Title 6, Civil Rights Act of 1964, equality in level of service among different segments of the community.

WSDOT Transit Vehicle Stop Zone Guidelines.

As of 2003, these guidelines have not been fully implemented equally within all regions. It is possible that the guidelines are being enforced improperly.

WSDOT Transit Zone Stopping Rules Manual. (no published date)

<u>WSDOT Transit Guidelines for Signage and Delineation</u> (p. 17-20) have been adopted for pullout construction.

Additional References

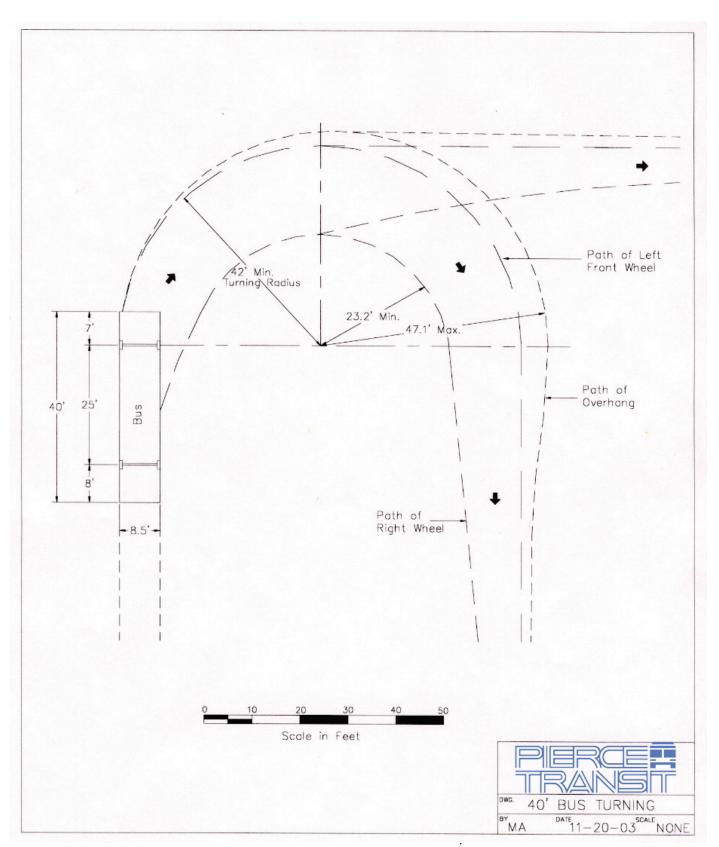
Facilities Maintenance Task Timelines

| Task | Timeline | Notes Plated or in ground |
|--------------------------|-------------------------|-------------------------------------|
| Install pole | 30 minutes | riated of ill glound |
| Install blinky light | 1 hour | |
| Install bike rack | 1 hour | |
| Install bike locker | 8 hours | |
| Install solar lighting | 2-6 hours | |
| Print/apply sign letters | 30 minutes | |
| Assemble shelter | 2 hours | |
| Install shelter | 2-4 hours + 2 for glass | |
| Paint a bus zone | 2-3 hours | Includes cleaning/prep |
| Replace a shelter pane | 1-2 hours | |
| Power wash a shelter top | 20 minutes | |
| Empty a trash can | 2 minutes | |
| Remove graffiti | 24 hours or less | Sooner if offensive |
| l | I | |

30' (Short) Bus

No template available at this time.

40' (Standard) Bus

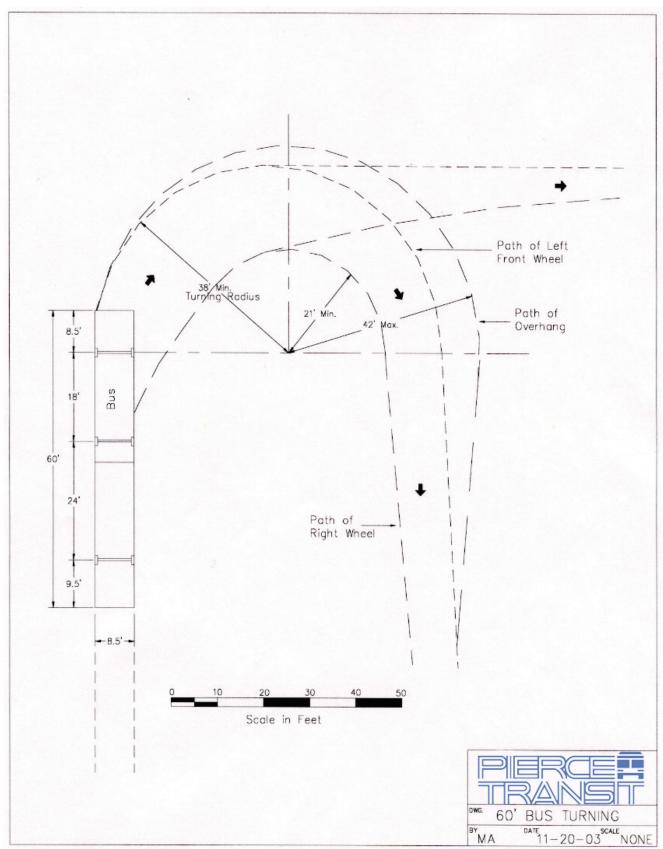


45' MCI Bus

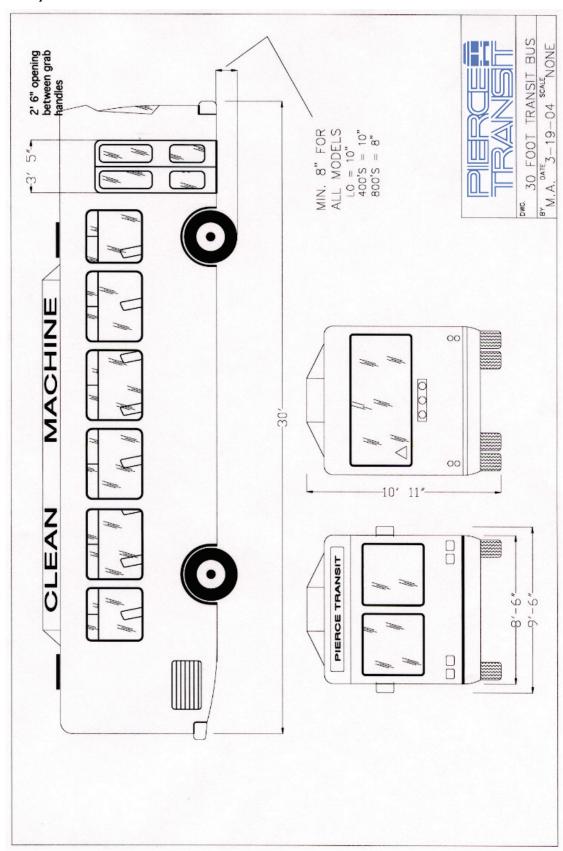
No template available at this time.



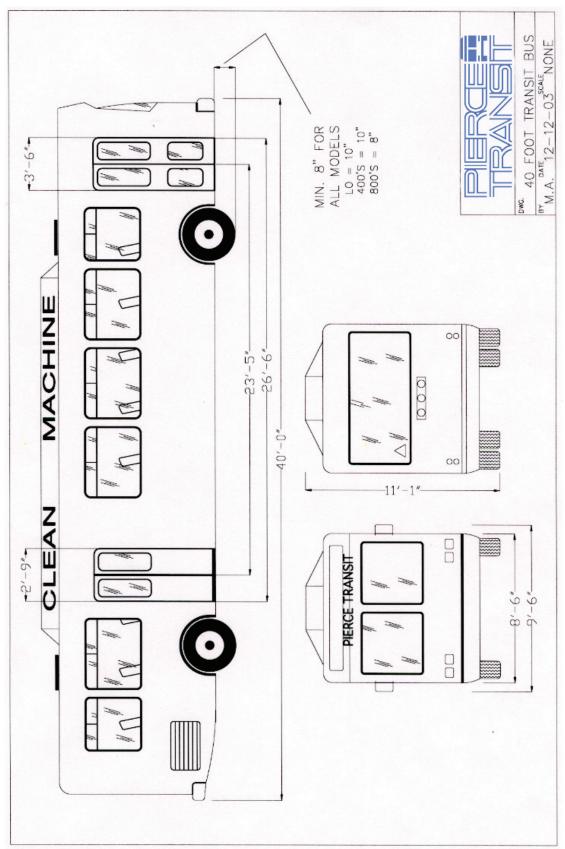
60' (Articulated) Bus



30' (Short) Bus



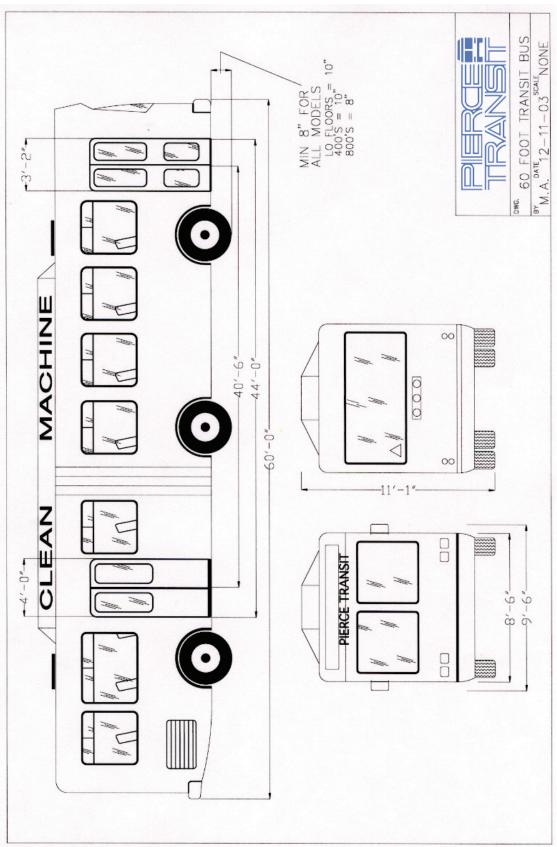
40' (Standard) Bus



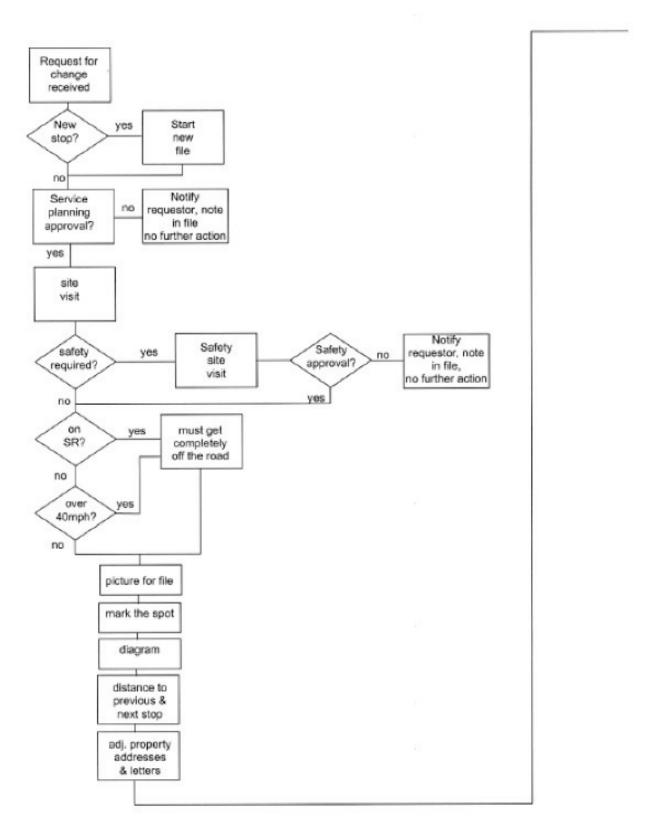
45' MCI Bus Bus Dimensions & Clearances

No template available at this time.

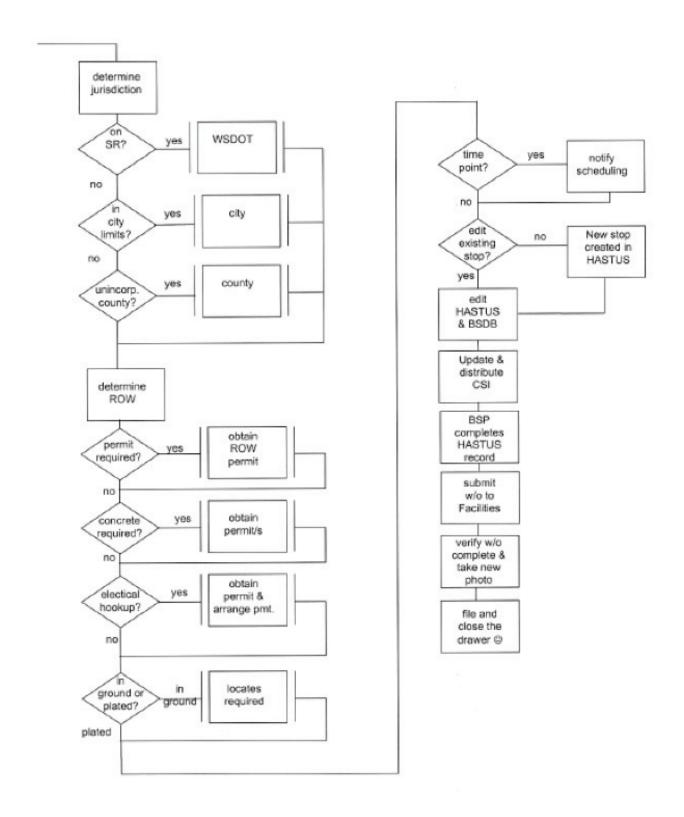
60' (Articulated) Bus



Flow Chart



Flow Chart - continued



ADA or Americans with Disabilities Act: The Act, adopted in 1990, establishes guidelines to ensure accessibility to those with disabilities. It suggests that all transit stops meet minimum accessibility guidelines, among other topics. The key areas Pierce Transit must be cognizant of are: letter height on signage, slope of bus stop pads, ramps and sidewalks, maneuverable area at the bus stop and sign placement. Since 1994 Pierce Transit's policy is firm that no new bus stop may be added unless it meets minimum ADA quidelines.

Bus or Coach: Interchangeable terms for the transit vehicle.

BSP or the Bus Stop Program: This is a group of several members of Construction Projects who administer bus stop related issues.

The Bus Stop Database: Written by our I/S department in 2002. It combines information from HASTUS, physical inventory and Marketing. It stores digital photos of each bus stop and can produce various reports.

Butterfly/Butterflied: When two flags or trash cans are mounted on the same pole, facing opposite one another.

Concrete Cure Time: The amount of time it takes concrete to cure to the point of being usable. For bus stop pads without a shelter, 24 hours. For bus stop pads with a shelter, 7 days. For transit pullouts, 14 days is the minimum, 28 days is preferable. These times may be shortened if special concrete mixes are used.

CSI or Customer Service Inventory: A report sorted by route listing all of the active stops in sequential order. Primarily used by Customer Services and The Bus Stop Program.

Curb Setback: All jurisdictions within our service area require an 18" horizontal clearance between the curb face and the leading edge of the shelter roof (or any street furniture). Pierce Transit increased that to 2' to reduce the possibility of the shelter being hit by truck or transit mirrors. In 2002, Tacoma began suggesting a 3' setback, which Pierce Transit adheres to whenever possible.

Dwell Time: The length of time the coach is stationary while serving a stop.

Environmental Justice: Pertains to providing equal level of service regardless of income level. For example, having a disproportionate number of shelters in a midhigh income community and providing fewer shelters in a low-income area.

HASTUS: A transit vehicle and crew scheduling software package used to support transit scheduling, daily operations and customer information. Some of the features and functions of the program are used to support, create and maintain all bus stop records, manage itineraries, show bus stops and routing information (both visually and in text form), produce Customer Service Inventory pages and various reports.



In-ground Bus Stop Pole: When there are no sidewalks, or where sidewalks are less than 6' wide, an in-ground bus stop pole is used. A typical installation requires a hold approximately 20" in depth and 6" in diameter, which should allow a breakaway hole to be level with the top of the concrete when poured.

Pass-by or Pass-up: When a passenger gets driven past and therefore misses the bus.

Plated Pole: This is a bus stop pole with a metal plate, approximately 1' square, welded to the bottom of the pole. It is drilled with 2 or 4 holes, which are used to install bolts and secure the pole to the sidewalk. This installation is preferred for a number of reasons: more flexibility for future relocation/replacement, less time consuming, less labor intensive, no destruction of landscaping and utility locates are not required.

Procedures Binder: A binder maintained by the Bus Stop Program which details the process for operating transit service within each of the jurisdictions we serve.

PSRC or Puget Sound Regional Council: An association of cities, towns, counties, ports, and state agencies that serves as a forum for developing policies and making decisions about regional growth and transportation issues in the central Puget Sound region.

Pullout or Turnout: An area specially constructed or designated for the purpose of transit vehicle stopping. The area is separated from the traveled lanes.

RTA or Regional Transit Authority: Sound Transit is the local regional public transportation agency, delivering a mix of rail and mass transit to King, Pierce and Snohomish Counties.

Service Change or Shakeup: A predetermined date when route changes and Operator assignments are made. It happens three times a year. The RTA and the ATU agree upon the actual dates.

SHUTTLE: Specialized transportation for elderly and disabled. Minimum criteria must be met to qualify and there are varying levels of service (door-to-door, door-to-transit center) depending on need.

ST or Sound Transit: The local regional transit agency. See RTA.

The Styles Manual: A comprehensive guide for all Pierce Transit's publications, correspondence and signage. It dictates logo, color, font style, font color, and signage layout. It is maintained by Marketing.

Transit Vehicle: Refers to a van, minibus, or bus operated by a transit authority for public transportation.



TRIPPS or Transit Ridership Program System: A program written by George Patton in the mid 1990's. It was intended as a stopgap until HASTUS came online. Until Summer 2002, it was used to store all bus stop information including trip data and to produce CSI pages and a variety of other reports. After Summer 2002, it was maintained in the most minimal sense for tracking ride counts. In the near future, HASTUS should be able to track this data as well, retiring TRIPPS. The TRIPPS Operational Manual was written internally and is stored and maintained by Operations Planning.

Transit Signal Priority or TSP: A system comprised of an electronic receiver mounted on traffic signals at key intersections, and a transmitter mounted inside the bus. The cycle or timing of the traffic signal is altered to allow the bus to proceed through the intersection. The idea is that by allowing the bus to make it to the far side of the intersection to board/alight passengers, traffic won't be delayed twice: both as the bus performs its functions near side and then being stopped by the traffic signal. There is significant time and money saving for bus operations when TSP is utilized.

WSDOT: Washington State Department of Transportation.