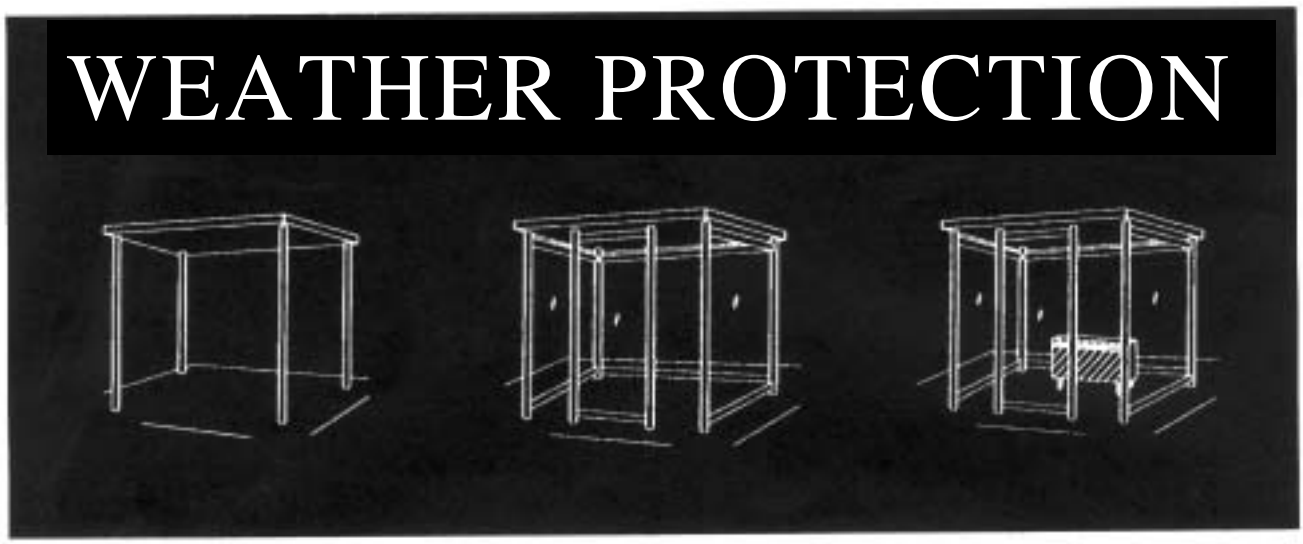
PART 3

GUIDE TO SELECTING FEATURES

To assist transit planners and managers in determining which amenities to test using the Transit Design Game, and the appropriateness of a particular amenity to their transit system, this "Guide to Selecting Features" describes and illustrates each of the passenger features tested in The Transit Design Game during the course of this study. The Guide provides an analysis of the potential impact of each amenity on transit ridership, furnishes estimated costs for each amenity and suggests ways to offset them, and presents a variety of passenger functional concerns and customer preferences for transit amenities. These concerns are presented as expressed by different types of riders during the focus groups conducted in each of the five case study cities: Rochester, New York; Portland, Oregon; San Francisco, California; Ann Arbor, Michigan; and Aspen, Colorado.

WEATHER PROTECTION



"Before the shelters [were provided] I would just walk home in the rain, because I was going to get wet anyway. Now I take the bus when it rains because I can wait in a shelter."

Impact on Ridership

"Going out in the cold stops me from catching the bus a lot. I'm not going to do it if it's really, really cold unless I have to. But if I knew that I could get out there and be warm, then I would definitely go more often."

Weather protection at the bus stop is of major concern to passengers. When asked whether having a particular amenity in place would cause them to ride more often, respondents in four out of five case study cities (Aspen being the notable exception) cited the bus shelter with walls, roof and seating as the amenity most likely to induce more trips, particularly in Rochester and Ann Arbor. In fact, shelters with heat were among the highest ranking feature in terms of their ability to induce additional transit rides, compared with shelters with just a roof or walls and a roof.

Comparative surveys in Rochester also showed that passengers notice when weather protection is adequate and when it is not. About 42% of passengers surveyed at the fully improved bus stops in Rochester (with shelters and indoor and outdoor waiting areas) rated their Weather Protection as good, compared with 17% of those waiting at shelters which are on narrow sidewalks and provide less waiting room and less weather protection.

Potential Customer Preferences

Although your local situation may differ, the following types of user groups may have a greater interest in shelters at the bus stop.

"Captive" Riders

"One thing that's hard to give up as a discretionary rider is your heated car and your garage door opener."

"Captive" riders who have no other transportation option may have great interest in shelters, more so than so-called "choice riders." This may be because in times of particularly bad weather, the choice rider does not head for the bus stop, regardless of the quality of the shelter; the captive rider has no alternative.

"In the summer it might not seem too important, but in the winter when I take my little son with me to the bus stop, I get cold."

Women

Women may have a somewhat higher preference for shelters than men.

"I have a stop near my house but my wait is long and the service is unreliable. I freeze, I get wet, the shelter is inadequate, it faces the wrong way for the wind. Rain comes in. No matter what clothes you wear, you're still cold."

Customers with Longer Waits

Customers who have longer times to wait for the bus may also prefer shelters than those with shorter waits.

"I think that heated shelters are a godsend. I used to fight the crowds standing in the doorways to get in the stores. You can wait a long time for a bus--if the schedule is wrong or you made a mistake or the buses are off schedule--and you get cold. I think the shelters matter a lot."

Colder Climate Patrons

The colder the winter climate, the more likely that customers will probably rate heating in the shelter as important.

"I'm really tired of getting drenched by rain and the cars driving by. We need enclosed shelters, but not heat."

Wet Climate Patron

In communities with more rain than cold weather, shelters with walls are more likely, than those with just a roof, to induce transit rides.

Potential Passenger Functional Concerns

Convenient Access

"The shelters on Clinton and St. Paul (in Rochester) are the stupidest things I've ever seen and the biggest waste of money. They have a wall facing the bus and it's open in the back. It looks dumb."

Bus shelters should not block pedestrian flow along a sidewalk, and should offer easy, convenient access for bus riders.

Adequate Size

"The sidewalk area is small on St. Paul. Pedestrians can't get by. I get anxious with people crowding in."

Bus shelters need to be large enough to hold the number of people waiting. Bus waiting areas include both indoor and outdoor areas: people will spread out in nice weather, but are willing to cluster more closely inside in inclement weather--space permitting.

Visibility

"I'm glad that they used clear glass instead of tinted glass. Tinted glass or glass covered with advertising makes me nervous."

The shelter should not block visibility so patrons can see the bus approaching and feel safe while waiting. Shelters should feel bright and well-lit day and night.

Maintenance

"I think the shelters need to be maintained better. In some of them, the heat is broken or the TV monitors are broken."

Well-used bus shelters need to be maintained, with graffiti removed and vandalism repaired quickly.

"I like that the roof extends so that you can stand out of the rain without being in the shelter."

Really Works

The shelter needs to offer real protection from the weather. Shelters should be designed so that they work year-round; for example, a cold-climate shelter should not be so confined as to be stifling in summer.

$$$$$$$$$$$$$$$$$$
Approximate Price of Shelters
$$$$$$$$$$$$$$$$$$

Level 1 - $1,000
Level 2 - $5,000
Level 3 - Note: Custom shelters can cost up to $250,000 for major downtown locations

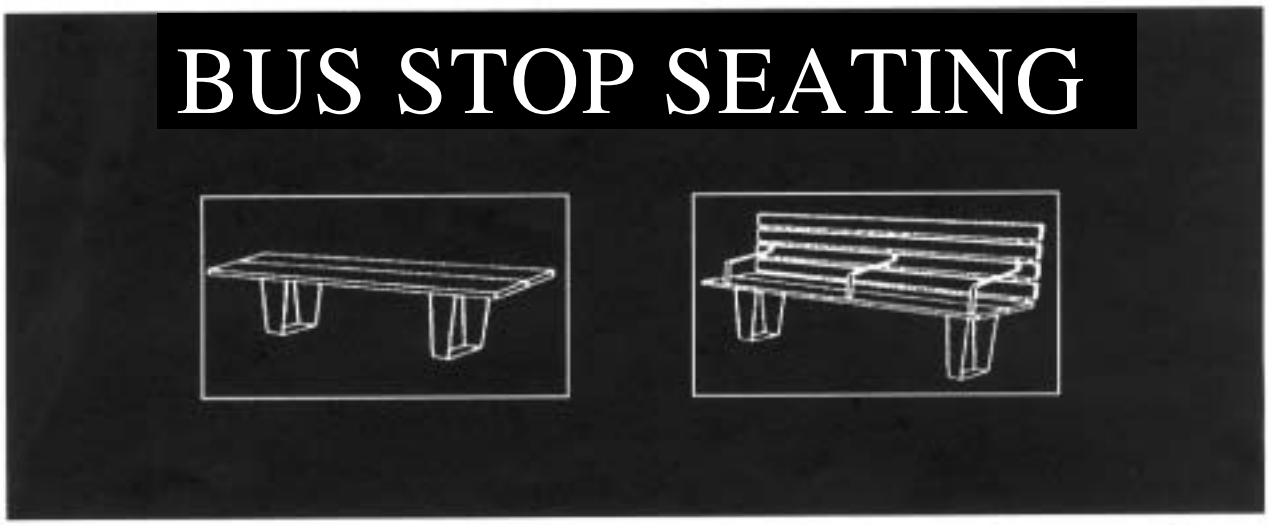
$$$$$$$$$$$$$$$$$$
Ways to Offset Costs
$$$$$$$$$$$$$$$$$$
- Adopt-a-Shelter programs
- Advertising
- Business Improvement Districts/business partner-ships
- "Bulk" purchases/ quantity orders

Types of Weather Protection to Test with Transit Design Game

Level	Transit Feature	Estimated Points
No Frills	No Shelter	0
1	Simple shelter: roof, but no walls	1
2	Improved shelter: roof and walls	4
3	Improved shelter: roof, walls, and heating	9

These three shelters do not represent all the possible configurations of this amenity, but they are representative of consumer choices. The game does not assess custom shelters which might be developed for major or publicly visible locations, such as in a downtown. While the costs of these shelters can be high, generally there are a limited number of them. In addition, the game does not assess other more major facilities, such as bus transfer centers, which might have indoor heated and cooled waiting areas. Interest in these more elaborate weather protection facilities could be tested in focus groups, however.

BUS STOP SEATING



"I'd be mad if I had to wait on St. Paul Street, since the shelters on Main Street have seats and the ones on St. Paul don't."

Impact on Transit Ridership

"The shelter with heat and benches ... would get me to take the bus."

"I picked the standard bench because this should be at a lot of stops so you can sit down -- the cheaper they are, the more we can get. As long as you have something to sit on."

Like shelters, seating at bus stops was desired by most of the passengers surveyed, particularly in Portland, San Francisco and Ann Arbor. By far, the most popular type of seating selected was a "standard" bench, that is with no backs and arms. The "deluxe" seating at bus stops, however, with back and armrests was second only to bus stop shelters in inducing transit trips in at least three of the case study cities.

Most respondents to the transit design game chose the more modest "one point" standard bench. This may indicate that while deluxe benches may induce more trips, passengers find the simpler benches "worth the price."

Potential Customer Preferences

Unlike some other features, customers of all types have an interest in seating, but especially:

Women

"I think if you're tired or sick or you have kids with you or you just want to rest, it would be nice to have a bench."

Female passengers may have a stronger preference than male passengers for seating at bus stops.

Customers with Longer Waits

"I put extra points for the deluxe bench, because there's nothing like waiting there for an hour for a bus to come."

"A deluxe bench, because you do end up waiting a lot during weekends and nights."

Customers who wait longer for the bus, or bus systems with longer headways between buses, may have a stronger interest in seating.

Potential Passenger Functional Concerns

The types, design, materials and arrangement of seating at bus stops can vary tremendously. Unfortunately, decisions regarding provision of seating are based less on the size of a particular shelter and the number of patrons using that shelter and more on other, sociological issues such as the fear that benches will be used by non-riders or undesirable persons. This fear of who might use a bench has had an enormous impact upon how, when, and whether or not seating is deployed.

Decisions by a transit agency to provide seating could be made more easily if consideration were given to the context in which the bench was located. For example, the presence of a management or business district to help maintain seating, the existence of lively adjacent uses or activities near the shelter so that benches served a variety of users, and the existence of alternatives that provide ways for passengers to rest, like leaning rails.

Enough Places to Sit

"Look, there is seating all the way around. That's good."

How much seating to provide at a bus shelter is as much of an issue as whether to provide it at all. Many passengers prefer to stand or lean, even when seating is provided and available for use. While there are many variables, transit agencies should set a minimum standard for the number of riders at major bus stops who should have a place to sit.

Choice to Lean, Instead of Sitting

"I like the leaning rail. I'm not a sitter, but I like the rail. It takes a load off my feet, or you can set things on it."

Both Rochester and Portland bus shelters provide leaning rails, which are well-used but almost subconsciously so, by passengers. Leaning rails, which are very low in cost, provide support for passengers while also offering a place to rest packages while waiting for buses.

Seating Outdoors

"There are benches outside the shelters, but they're useless when it's raining."

Nonetheless, if a shelter is provided, seating should be available both inside and outside the shelter. In nice weather, people prefer to spread out beyond a bus shelter and sit in the "open air." In commercial districts, these benches can also be used by shoppers and other passers-by, in addition to bus riders.

Visibility to the Arriving Bus

Placement of the seating within the shelter should be arranged so that seated passengers do not have to crane their necks to see the buses approaching.

Enough Space

"The bumpouts allow space for a shelter [and seating]; otherwise, the sidewalk would get too crowded."

Distance from the curb and maintaining circulation space within the shelter and around the benches are also important to consider. As another rider put it, "I get anxious with people crowding in."

Maintenance

Keeping benches in "working order" involves both design and maintenance. Portland is experimenting with creating benches out of recycled plastic and aluminum, which are more durable and less costly to maintain than wood benches. Cleaning benches regularly is also necessary.

$$$$$$$$$$$$$$$$$
Approximate Price of Benches
$$$$$$$$$$$$$$$$$

Level 1 - $300
Level 2 - $800
Note: These types of benches are simply reflective of standards throughout the country. Custom benches are not included here.

$$$$$$$$$$$$$$$$$
Ways to Offset Costs
$$$$$$$$$$$$$$$$$
- Adopt-a-Bench programs
- Business Improvement Districts/business partnerships

Types of Seating to Test with Transit Design Game

Level	Transit Feature	Estimated Points
No Frills	No Bus Stop Seating	0
1	Standard Bench	1
2	Bench with Back and Armrests	3