Transportation Criteria Manual

SECTION 8 - BUS STOPS

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SECTION 8 – BUS STOPS

8.1 GENERAL

All bus stops shall be fully accessible with a concrete landing and access to a sidewalk or pathway. ADA accessibility standards require that each bus stop include a landing pad with a minimum width of sixty inches (60") and minimum depth of ninety six inches (96"). Bus stops shall also connect to adjacent sidewalks or pedestrian paths where they exist.

8.2 SPACING

8.2.1 Design Considerations

Bus stop spacing is based on several factors including customer convenience, ridership demand, and service type.

Customer convenience involves a tradeoff between proximity to stops and bus travel time. Closely spaced stops reduce customer walking distance but result in slower bus speeds. Few stops spaced further apart increase walking distance but result in faster, more reliable service.

Sufficient ridership demand is necessary to support the investment of stops. Details on ridership thresholds that warrant amenity investments are in Section 8.5, Amenities.

Specific service types such as limited stop, rapid, and express require increased stop spacing to maintain higher speeds, while radial and crosstown services have frequent stops to maximize ridership potential and convenient access to local activity centers and/or residences.

Table 8.1 lists recommended spacing for bus stops and is included to serve as a guide for planning bus routes. Spacing and location of bus stops shall be as approved by the Transportation Director.

Table 8.1: Recommended minimum distance between bus stops			
Area type:	Bus Stop spacing range (min-max):		
Regular local stops in Downtown or on arterial streets	800 - 1,600 feet		
Suburban and other low-density areas	1,200 - 2,500 feet		

8.3 PLACEMENT

8.3.1 Design Considerations

Bus stop placement involves a balance of customer safety, accessibility, and operational efficiency. All bus stops shall be fully accessible with a concrete landing and access to

sidewalk or pathway. Bus stops shall be compatible with adjacent land use and minimize adverse impacts on the built and natural environment.

Bus stops shall optimally be placed at intersections to maximize pedestrian safety; however, infrastructure considerations that can affect bus stop placement may include: right-of-way availability, cost of installation and maintenance, potential future changes to stop location, City, County, State or Federal laws and regulations, or other operational reasons. Infrastructure considerations for bus stop placement include lighting, topography, and roadside constraints such as driveways, trees, poles, fire hydrants, etc.

Near-side and far-side stops are generally preferred over mid-block stops. Specific ridership generators may determine the placement of a bus stop.

8.3.2 Near-Side Stops

Near-side stops, which are located immediately before an intersection, allow passengers to board and alight closer to intersection crosswalks, which may facilitate better transfers. Near-side stops also eliminate the potential of alighting passengers waiting through a red light.

8.3.3 Far-Side Stops

Far-side stops, which are located immediately after an intersection, are preferred at intersections in which buses make left turns and intersections with a high volume of right turning vehicles. Far-side stops are also preferred on corridors with transit signal priority. Far-side stops encourage pedestrians to cross behind the bus.

8.3.4 Mid-Block Stops

Mid-block stops shall be considered when pedestrian crosswalks are present. If pedestrian crossings are not present, the City of Round Rock will work with appropriate entities to address the potential of installing treatments like flashing pedestrian beacons to accommodate this issue. Mid-block stops may be the only option between major intersections with dedicated turn lanes.

8.4 SIGNAGE

8.4.1 Design Considerations

Well-designed bus stop signage has the opportunity to provide useful customer information while simultaneously marketing transit service. Route signage should be limited to one design to minimize inventory and materials costs.

8.4.2 Signage Requirements

Bus stop signage shall include the following:

- Round Rock Transit logo
- Unique panels or stickers with route number/name/endpoint
- Unique stop identification number, which can be used to access schedule information

- Appropriate sign color indicating route as provided by the City
- Route and schedule display panel

8.5 AMENITIES

8.5.1 Design Considerations

Bus stop amenities improve customer comfort, convenience, and safety. They also have the potential to increase ridership. Bus stop improvements promote system-wide equity. All amenities are considered optional; however, the City of Round Rock may require that the following amenities are included in design and construction scope of work and will determine this on a case-by-case basis.

8.5.2 Shelters

Bus stops generating at least twenty (20) daily boardings qualify for a shelter. Shelter size and type shall be determined by the City of Round Rock. Foundation design may be required depending on shelter type.

8.5.3 Benches

Bus stops generating at least fifteen (15) boardings per weekday qualify for a bench.

8.5.4 Waste Containers

All bus stops with shelters or benches should also have a waste container. Other stops may have a waste container installed upon request. Waste containers shall be engineered to withstand a high level of abuse and vandalism.

8.5.5 Bike Racks

Bike racks may be installed at stops in areas of high demand or in concert with other local entities.

8.5.6 Amenity Restrictions

Circumstances that might preclude installation of amenities at a bus stop that otherwise meets the threshold warrant are as follows:

- Amenities would threaten pedestrian or operational safety;
- Adequate right-of-way is not available;
- Regulations enforced by City, County, State, or Federal government;
- Service to the location is subject to potential changes;
- Installation and maintenance costs are excessive; and,
- Other circumstances that would negatively impact operations or service

It is the Project Engineer's responsibility to ensure that the design and placement of amenities will not restrict or obstruct pedestrian sidewalk flow. For minimum requirements on boarding and alighting areas, please refer to United States Access Board, Public Right-of-Way Accessibility Guidelines.