

BCDCOG

# Transit and Bus Stop Design Guidelines



October 2021

# 8 IMPLEMENTATION

This chapter explains how to prioritize bus stop investments and provides an overview of cost estimates, and oversight and maintenance responsibilities.

The information in the preceding chapters provides guidance to ensure that bus stops will be designed for safety, comfort, and accessibility. It is equally important to have a program for ongoing improvement and maintenance of bus stops, so that these high-quality designs can be implemented. This chapter discusses these topics.

## PRIORITIZING INVESTMENTS

While many bus stop improvements will occur because of roadway or development projects, some funding should be devoted to bus stop enhancements. For these projects, criteria to evaluate and prioritize investments is needed. This section includes a scoring rubric for prioritizing bus stops for capital investment.

### **Bus Stop Capital Improvement Scoring Rubric**

When considering a bus stop modification request, CARTA uses the following Basic Bus Stop Upgrade scoring rubric to determine whether further investment, usually in the form of additional amenities or relocation, is appropriate. CARTA will prioritize the highest scoring bus stops for capital investment.

Consideration should be given to implementing improvements at the same time for both halves of a bus stop pair, since most people need to make round trips. Exceptions to this rule might be made if one of the stops is already in relatively good condition (with only minor deficiencies) while the other is in poor condition.

Criteria	Responsibility
Passenger Activity – Sum of weekday boardings and alightings	<ul style="list-style-type: none"> <li>▪ 40 points if sum is greater than 50</li> <li>▪ 30 points if sum is between 25-50</li> </ul>
Existing Conditions	<ul style="list-style-type: none"> <li>▪ 20 points if rated as 1 (Very Poor)</li> <li>▪ 15 points if rated as 2 (Poor)</li> <li>▪ 10 points if rated as 3 (Fair)</li> </ul>
Zero-vehicle households and Environmental Justice Area	<ul style="list-style-type: none"> <li>▪ 10 points if zero-vehicle household population in the surrounding census block group is greater than CARTA service area average</li> <li>▪ 10 points if stop is located in an Environmental Justice Area</li> <li>▪ 20 points if both</li> </ul>
Significant Transfer Point	<ul style="list-style-type: none"> <li>▪ 10 points</li> </ul>
Near Medical Facility, Significant Civic Building or Educational Institution (1/4 mile)	<ul style="list-style-type: none"> <li>▪ 10 points</li> </ul>
Part of corridor or neighborhood initiative to strengthen identity	<ul style="list-style-type: none"> <li>▪ 10 points</li> </ul>

# CARTA-APPROVED AND -FUNDED AMENITIES

CARTA’s over 860 stops vary in terms of their ridership, existing condition, and level of service. These guidelines include the process for CARTA to prioritize capital improvements at stops. Importantly, they also describe the approved amenities for CARTA stops that the agency could fund for stops. The amenities and the baseline capital costs for each that CARTA could cover are summarized below. These amenities are described in detail in Chapter 5 Bus Stop Amenities.

## CARTA Approved and Funded Amenities



#	CARTA- Approved Amenity	Total Cost (see note)
1	Bus stop post and sign	\$150
2	ADA-compliant landing pad	\$4,825
3	Bike rack	\$168
4	Solar shelter lighting	\$1,550
5	Bench	\$906 - \$1,620
6	Trash can	\$105 - \$525
7	Shelter	\$12,495
8	Digital signage (not pictured)	\$8,515 - \$9,315

Notes:

Minimum amenities at all CARTA bus stops are a bus stop post, sign, and ADA compliant landing pad. If a municipality calls for additional amenities, CARTA would pay for the baseline cost of those amenities. Any additional costs due to upgraded or additional amenities, including variations in paint schemes, must be borne by the relevant municipality requesting that upgraded amenity. Developers would cover all costs of any new stop or stop improvements, including the installation.

The costs above for bus stop capital items do not include engineering or install fees. Those additional fees are below:






- Engineering fees ranging from \$10,000 to \$20,000 per shelter/bench
- Shelter installation at approximately \$6,500
- Bench installation at approximately \$1,500
- Digital signage installation at approximately \$750












LED signage installation at approximately \$1,100

Developers and local planners interested in coordinating with CARTA for bus stop improvements should refer to Chapter 6 – Bus Stop Modifications.

## AMENITY INSTALLATION AND MAINTENANCE

The installation of amenities at bus stops and their ongoing physical maintenance often involves both public and private partners. The table below shows the distribution of installation and maintenance responsibilities among the parties most commonly involved in bus stop installation and upgrades: (1) CARTA, and (2) the property owner who may be SCDOT, a municipality, or private land owner.

Amenity	 CARTA	 Other Agency Staff or Property Owner	Notes
	Installation Coordination	Maintenance	
	Installation Maintenance	Coordination	CARTA funds, installs, and maintains its bus stop signs.
	Installation Maintenance	Installation Maintenance	CARTA funds, installs, and maintains integrated bus shelter lighting and sign-mounted solar power lights. Overhead streetlamps and other forms of lighting can be installed at bus stops by local roadway authorities and adjacent property owners in coordination with CARTA.

	 CARTA	 Other Agency Staff or Property Owner	Notes
	Installation Maintenance	Coordination	CARTA funds, installs, and maintains its real-time information signs
	Installation Maintenance	Coordination	CARTA funds, installs, and maintains passenger information at its stops.
	Installation Maintenance	Installation Maintenance	At most stops, CARTA is responsible for installing and maintaining trash cans, but in certain cases, trash receptacles at bus stops are emptied by the municipality or business district in which they are sited.
	Installation Maintenance	Installation	Benches at bus stops may be funded and installed by CARTA, local jurisdictions, or private entities. CARTA funds and installs only standard benches attached to bus shelters, making seating at bus stops that do not have shelters the responsibility of local jurisdictions and private entities. CARTA is committed to maintaining all bus stop benches.
	Installation Maintenance	Installation	CARTA funds, installs, and maintains most shelters, except for shelters built by a developer.
	Installation Maintenance	Installation Maintenance	The funding, installation, and maintenance of bike racks are determined on a case by case basis.
	Installation Maintenance	Coordination	CARTA funds, installs, and maintains fare machines at its bus stops.
	Installation Maintenance	Coordination	CARTA funds, installs, and maintains electric bus charters at its bus stops.
 Safety & Security	Installation Maintenance	Installation Maintenance	At most stops, CARTA is responsible for installing and maintaining safety and security elements like cameras and emergency call boxes, but in certain cases, they may be installed and

Amenity	 CARTA	 Other Agency Staff or Property Owner	Notes
			maintained by the municipality or business district in which they are sited.

### CARTA Is Here to Help

CARTA receives requests year-round and implements modifications to bus stops on an as-needed and approved basis.

For bus stop amenity, procurement, and construction-related questions, email Transit Planning at [belenv@bcdco.com](mailto:belenv@bcdco.com) or call BCDCOG at (843) 529-0400.