

BCDCOG

# Transit and Bus Stop Design Guidelines



October 2021

# APPENDIX F: BUS STOP MODIFICATIONS CHECKLIST

The following checklist will be used by CARTA upon receiving a bus stop modification request:

<b>Evaluating Bus Stop Requests</b>	
	Receive bus stop modification request via CARTA-led planning effort or by email/phone call to CARTA (directions to make requests to CARTA are described on Page 6-1).
	Determine typology category of affected bus stop (described in Chapter 4 Bus Stop Typologies)
	<p>Proceed to relevant checklist based on modification request type:</p> <ul style="list-style-type: none"> <li>▪ For requests to modify amenities at an existing bus stop, continue to Evaluating Modification Requests.</li> <li>▪ For requests to add a new bus stop to an existing bus route, continue to Evaluating Addition and Relocation Requests.</li> <li>▪ For requests to permanently move the location of an existing bus stop, continue to Evaluating Addition and Relocation Requests.</li> <li>▪ For requests to remove a bus stop, continue to Evaluating Removal Requests.</li> <li>▪ For temporary bus stop changes, continue to Temporary Bus Stop Changes.</li> </ul>
<b>Evaluating Modification Requests</b>	
	<p>Does affected stop meet bus stop spacing guidelines (described on Page 2-3)?</p> <ul style="list-style-type: none"> <li>▪ If yes (bus stop is within recommended spacing of adjacent stops), proceed below.</li> <li>▪ If no (bus stop if removed would maintain good bus stop spacing), continue to Evaluating Removal Requests</li> </ul>
	<p>Score bus stop using Bus Stop Amenities Scoring Rubric (Page 8-1)</p> <ul style="list-style-type: none"> <li>▪ If bus stop scores higher than other prioritized and funded bus stops, proceed to Implementing Bus Stop Changes.</li> <li>▪ If bus stop scores lower than other prioritized and funded bus stops, note request in inventory and notify requestor that other bus stops have received priority</li> </ul>
<b>Evaluating Addition and Relocation Requests</b>	
	<p>Evaluate potential new bus stop location based on Access, Safety, and Operational Efficiency guidelines (described on Page 6-4). Does bus stop location meet these guidelines?</p> <ul style="list-style-type: none"> <li>▪ If yes, proceed to next step.</li> <li>▪ If no, deny request.</li> </ul>

	<p>Does new bus stop location meet bus stop spacing guidelines (described on Page 2-3)?</p> <ul style="list-style-type: none"> <li>▪ If yes (bus stop will be within recommended spacing of adjacent stops), proceed to Implementing Bus Stop Changes.</li> <li>▪ If no (bus stop if added would result in poor bus stop spacing), is a bus stop still needed in the proposed location due to safety issues (e.g. existing bus stops do not allow for safe access to a destination)?             <ul style="list-style-type: none"> <li>– If yes, proceed to Implementing Bus Stop Changes</li> <li>– If no, deny request.</li> </ul> </li> </ul>
<b>Evaluating Removal Requests</b>	
	<p>If approved, will remaining bus stops meet bus stop spacing guidelines (described on Page 2-3)?</p> <ul style="list-style-type: none"> <li>▪ If yes (bus stop will be within recommended spacing of adjacent stops), proceed to next step.</li> <li>▪ If no (bus stop if removed would result in poor bus stop spacing), deny request.</li> </ul>
	<p>Evaluate the proposed stop based on its existing access, role as a transfer point, proximity to major destinations, existing ridership (see guidelines on page 6-7. Would the removal of this stop significantly and negatively affect access, transit operations, or stop spacing as described by these guidelines?</p> <ul style="list-style-type: none"> <li>▪ If yes, is bus stop removal request due to the existing stop being unsafe?             <ul style="list-style-type: none"> <li>– If yes, proceed to Evaluating Addition and Relocation Requests.</li> <li>– If no, deny request.</li> </ul> </li> <li>▪ If no, proceed to next step.</li> </ul>
	<p>Post a rider notice to notify transit users and the surrounding community of the proposed stop removal 15 days before stop is removed. See Figure 6-1 (Example Rider Notice at Modified Stop). Proceed to next step.</p>
	<p>Notify and coordinate with facilities staff and transit operator on removal plans and remove stop.</p>
<b>Temporary Bus Stop Changes</b>	
	<p>Identify primary point of contact with entity responsible for construction, DOT, property owner, and official of any involved municipalities.</p>
	<p>Review work zone traffic control plans to ensure that transit is accommodated within the limits of the construction project as described on Page 6-9.</p>
	<p>Post a rider notice to notify transit users and the surrounding community of the temporary bus stop change 15 days before stop is changed or as soon as possible. See Figure 6-1 (Example Rider Notice at Modified Stop).</p>
<b>Implementing Bus Stop Changes</b>	
	<p>If appropriate, bring the requester of the bus stop change as a partner in this process.</p>
	<p>Ensure that funding is available and committed to this project.</p>

	<p>Determine high-level design and bus stop amenities based on the following:</p> <ul style="list-style-type: none"> <li>▪ Includes all minimum amenities of relevant bus stop typology (described in Chapter 4 Bus Stop Typologies)</li> <li>▪ Includes any preferred or optional amenities that CARTA and partner(s) agree upon</li> <li>▪ Uses the approved amenities of the area where the bus stop is located (described in Appendix E),</li> <li>▪ Consistency with any corridor or street plans</li> <li>▪ ADA compliant (described in Appendix D)</li> <li>▪ Includes foundation under all amenities using material at standard depth specifications (as described in Chapter 5 Bus Stop Amenities. For example, all landing pads must be 4" deep of poured asphalt or concrete, and all benches must be secured to a foundation of at least 4" of depth)</li> </ul>
	<p>If needed due to amenities planned to be installed, enter into a cost sharing agreement and maintenance agreement:</p> <ul style="list-style-type: none"> <li>▪ Cost sharing agreement: As described on Page 8-2, at non-developer stops, CARTA will only pay for the amenities and baseline costs of its approved amenity package. Any costs above those base costs are known as a "betterment." CARTA is not responsible for betterment costs; these costs are borne by the entity requiring the betterment. Developers are responsible for all costs at their stops.</li> <li>▪ Maintenance agreement: In some cases, a developer, property owner, town, or business improvement district may take on maintenance of a particular bus stop and/or its amenities. If this will be the case, CARTA will enter into a maintenance agreement with the relevant entity.</li> </ul>
	<p>Determine location of bus stop and any relevant additional permits/approvals needed (described in detail on Page 6-10)</p> <ul style="list-style-type: none"> <li>▪ Will bus stop impact private property? If yes, seek a lease or ownership agreement with owner of the land that the bus stop will occupy and bring property owner on as a partner.</li> <li>▪ Will bus stop impact public property? SCDOT maintains a "Street Finder" to help determine if a road is under municipal or SCDOT jurisdiction:  <a href="https://ris.scdot.org/RoadwayInformationStreetFinder.aspx">https://ris.scdot.org/RoadwayInformationStreetFinder.aspx</a>. If yes, determine jurisdiction and apply for an encroachment permit from the relevant entity: <ul style="list-style-type: none"> <li>– SCDOT: <a href="https://www.scdot.org/business/permits.aspx">https://www.scdot.org/business/permits.aspx</a></li> <li>– County of Charleston: <a href="https://www.charlestoncounty.org/departments/public-works/index.php">https://www.charlestoncounty.org/departments/public-works/index.php</a></li> <li>– City of Charleston and City of Charleston Historic District: <a href="https://www.charleston-sc.gov/DocumentCenter/View/1336/DRC-process-and-application-form?bidId=">https://www.charleston-sc.gov/DocumentCenter/View/1336/DRC-process-and-application-form?bidId=</a>.</li> <li>– Town of Mt. Pleasant: <a href="http://www.tompssc.com/1170/Development-Review-Team">http://www.tompssc.com/1170/Development-Review-Team</a>.</li> <li>– City of North Charleston: <a href="https://www.northcharleston.org/business/construction-and-development/permits/encroachment-permit/">https://www.northcharleston.org/business/construction-and-development/permits/encroachment-permit/</a>.</li> </ul> </li> <li>▪ Work together with partners and relevant entities to finalize needed permits and approvals.</li> </ul>
	<p>Engage a private engineering firm to conduct surveys and draw up a set of bus stop plans that are in line with the identified requirements.</p>

	Coordinate with local public works agencies for utility services and pavement markings, if necessary.
	Inform marketing in case customers and/or media should be notified of bus stop change.
	Following construction, inspect bus stop using Bus Stop Installation Inspection Checklist (next page)
	Update bus stop inventory
	<p>Notify the following CARTA departments or entities of modification completion:</p> <ul style="list-style-type: none"> <li>▪ Marketing</li> <li>▪ Finance</li> <li>▪ Maintenance</li> <li>▪ Transdev</li> </ul>

## Bus Stop Installation Inspection Checklist

TO: Project File

FROM:

SUBJECT: Bus shelter installation Inspection checklist

DATE:

Bus Stop Name:	ID Number:	Inspection Date:
Project Description:		
Inspection Performed By:		
Is the spatial location consistent with the design plans:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Bus stop sign installed:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Sign Orientation/Position Acceptable:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Correct Route Information/ID Number:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Sign/Post In Good Condition:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Concrete Pad poured to specification:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Concrete Expansion Joints Installed:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Any Concrete Cracking:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Curb Tie-in per Design Plans:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Sidewalk Tie-in per Design Plans:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Bench Installed:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
All side panels present and fastened:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Garbage installed:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Secured:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Map Holders Installed (3):	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Date Marketing Department Notified to Install map inserts:		
Date Finance Department Notified to Update Stop Database and GTFS:		
Drainage Sloped Away from Structure:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Sediment and Erosion Control devices:	Yes <input type="checkbox"/>	No <input type="checkbox"/>

Dimensions meet ADA Guidelines:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<ul style="list-style-type: none"> <li>▪ Landing area at least 5 feet wide and 8 feet deep</li> <li>▪ Wheelchair fits completely under the shelter (min. space of a common mobility device is 30 in. by 48 in.)</li> </ul>		
Sod Installation	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Accepted:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Comments:		
Corrective Action Requested:		

An inspection checklist, when used properly, is an assurance that a particular piece of equipment has been inspected. As each item on the checklist is ticked off, the person doing the inspection is verifying that each component of the equipment is in correct working order.

A grantee of the Federal Transit Administration (FTA) must ensure continuous management of grant projects. Capital projects, such as construction projects, rolling stock procurements, and technology projects, must have a mechanism for technical oversight of the projects.

The purpose of document is to describe the procedures and reporting requirements that the Federal Transit Administration (FTA) expects from the project manager (PM) with regard to the Sponsor’s management, organization, and capability to effectively and efficiently plan, develop, manage, and complete a Federally-assisted capital project.

When projects are implemented, the PM is ultimately responsible for, and must ensure technical oversight of, the project. Monitoring mechanisms may include:

- Contracting with a consultant to provide project management oversight
- Reviewing requests for proposals and construction contracts
- Reviewing plans and drawings
- Conducting periodic site inspections
- Requiring/Completing progress reports
- Attending project review meetings
- Withholding payment of a portion of the grant until final inspection and acceptance of the facility by the PM

Contractors and/or subrecipients are required to prepare a variety of reports on a quarterly basis. These include a project narrative, invoices, project performance measures (number of passenger trips provided, vehicle miles traveled, unit installed, project status etc. as appropriate based on the project).

Signature: \_\_\_\_\_