# CONDUCTING PRE-AWARD AND POST-DELIVERY AUDITS FOR ROLLING STOCK PROCUREMENTS

Best practices handbook for recipients, auditors, manufacturers, and suppliers



Washington, D.C. 20590

# **DEDICATED**

......to our colleague, John G. Bell, who contributed his expertise, untiring resolve, and boundless passion about Buy America to the development of this handbook.

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## **Foreword**

The information contained in this Handbook is based on the 49 CFR part 663 Pre-Award and Post-Delivery Audits of Rolling Stock Purchases and 49 CFR part 661 Buy America Requirements.

The guidance in this Handbook does not constitute a determination of compliance with the Department of Transportation (DOT) standards and rules or with your rights or responsibilities under the rules and is not binding on the DOT.

This is a best practices Handbook (a non-binding guidance document) for use by auditors as well as recipients, vendors, and interested members of the public.

## 1. Introduction

The Federal Transit Administration's (FTA) objective in implementing 49 CFR part 661 Buy America Requirements and 49 CFR part 663 - Pre-Award and Post-Delivery Audits of Rolling Stock Purchases is to support U.S. jobs and the U.S. manufacturing industry.<sup>1</sup>

As part of the federal grant application for any revenue service rolling stock grant, an agency that uses federal funds (recipient) to procure vehicles "must certify to FTA that it will conduct or cause to be conducted pre-award and post-delivery audits" as prescribed by 49 CFR part 663. By signing the FTA Master Agreement, recipients have certified that they will conduct or cause to be conducted the requisite pre-award and post-delivery audits. However, 49 CFR part 663 imposes additional requirements on recipients in terms of ensuring and documenting that the rolling stock to be purchased (pre-award audit) and the rolling stock received (post-delivery audit) comply with FTA's Buy America requirements.<sup>2</sup>

The purpose of this Handbook is to assist recipients, auditors, rolling stock manufacturers (manufacturers), and subcontractors and suppliers (suppliers) in understanding and correctly applying FTA's pre-award and post-delivery audit requirements for rolling stock vehicle (vehicle) purchases.

The overall aim is to guide Handbook users through the necessary steps to meet the pre-award audit and post-delivery audit requirements as well as to bring greater uniformity to the way the industry conducts and documents pre-award and post-delivery audits of rolling stock purchases.

## 1.1. Scope

This Handbook applies only to the procurement of rolling stock used in revenue service, which includes new buses, vans, cars, railcars, locomotives, trolley cars, trolley buses, ferry boats, and vehicles used for guideways and incline planes, and intended for public transportation of passengers.<sup>3</sup> This Handbook does not apply to: used vehicles; non-revenue service vehicles; vehicle rehabilitations, rebuilds, repowers, or overhauls, undertaken on a recipient's existing vehicles; vehicle end products, such as traction power distribution, signal and control systems, and communications; or the provision of services.

<sup>&</sup>lt;sup>1</sup> These requirements are distinct from the Buy American Act of 1933, which governs procurements made directly by the Federal government.

<sup>&</sup>lt;sup>2</sup> See 49 CFR §§ 663.7, 663.21–27, 663.31–39.

<sup>&</sup>lt;sup>3</sup> FTA also defines rolling stock end products as off-vehicle train control, communication, and traction power equipment. See, e.g., Appendix A to 49 CFR § 661.3. This Handbook's guidance is limited to vehicles and does not address Buy America compliance for rolling stock end products (e.g., off-vehicle elements such as train control, communication, and traction power equipment) described in Buy America regulations in 49 CFR § 661.11 (t) through (w).

The Handbook describes approaches and recommends processes for recipients to consider in preparing to conduct pre-award and post-delivery vehicle audits from the solicitation phase through the final acceptance of vehicles. The Handbook also includes examples of how to calculate domestic content, and verify and document compliance for all participating parties. The Handbook is designed as a reference tool and a guide that includes recommendations on auditing and compliance topics. It also provides examples as well as sample forms and templates.

In 1995, FTA published two separate Handbooks on this subject, one for rail vehicles and one for buses. This Handbook replaces both of those documents.

Information in this Handbook is subordinate to the regulations in 49 CFR part 661 - Buy America Requirements and 49 CFR part 663 - Pre-Award and Post-Delivery Audits of Rolling Stock Purchases.

Recipients, auditors, manufacturers, and suppliers should all be familiar with the most current revision of both 49 CFR parts 661 and 663.<sup>4</sup> It is important to keep current on FTA guidance and final decisions affecting these regulations as published in the *Federal Register* or on the FTA website. The FTA website has links to the regulations, relevant *Federal Register* publications, waivers, and letters of interpretation, frequently asked questions, this vehicle Handbook, and related Dear Colleague letters.

In case of a conflict between the contents of this Handbook and FTA's Buy America regulations and decisions, the regulations and decisions shall control.

## 1.2. Background

FTA's Buy America requirements apply to third-party procurements by FTA grant recipients. The first Buy America provision was included in the Surface Transportation Assistance Act and is currently codified at 49 U.S.C. 5323(j) and implemented under 49 CFR part 661.<sup>5</sup> This provision prohibits FTA from obligating funds for a project unless the steel, iron, and manufactured products used in the project are produced in the United States. Recipients are required to conduct Pre-Award and Post-Delivery audits of rolling stock under 49 U.S.C. 5323(m), as implemented by 49 CFR part 663.

As a condition to receiving FTA grant funds for the purchase of rolling stock, recipients must certify compliance with Buy America and the pre-award and post-delivery audit requirements.

<sup>4</sup> The regulations can be found online on the FTA "Buy America" webpage in the "Regulations" Section. <a href="https://www.transit.dot.gov/regulations-and-guidance/buy-america/buy-ameri

<sup>&</sup>lt;sup>5</sup> 49 U.S.C. 5323(j) (formerly sec.165 of the Surface Transportation Assistance Act of 1982 (Pub. L. 97–424); as amended by sec. 337, Pub. L. 100–17; sec. 1048, Pub. L. 102–240; sec. 3020(b), Pub. L. 105–178; sec. 3023(i) and (k), Pub. L. 109–59; sec. 20016, Pub. L. 112-141; sec. 3011, Pub. L. 114-94); 49 CFR 1.91.

The recipient must either verify that the vehicles will contain the **required domestic content**, <sup>6</sup> by cost, or request a waiver from FTA. Also, if rolling stock frames or car shells are not produced in the U.S., but the steel or iron used is domestic, and the average cost of a rolling stock vehicle in the procurement is more than \$300,000, then the steel or iron in the frames or car shells shall be included in the domestic content calculation. <sup>7</sup> In addition, to comply with Buy America, **final assembly of the vehicles must take place in the United States** in accordance with 49 CFR § 661.11. At each phase in the vehicle procurement cycle, there are specific actions that a recipient must take to ensure compliance with 49 CFR part 661 Buy America Requirements and 49 CFR part 663 - Pre-Award and Post-Delivery Audits of Rolling Stock Purchases.

Recipients purchasing vehicles must ensure that a pre-award audit, as described in 49 CFR §§ 663.21 – 27, is completed **before the recipient enters into a formal contract** to purchase vehicles. Similarly, those recipients purchasing vehicles must also ensure that a post-delivery audit, as described in 49 CFR §§ 663.31 – 39, is completed **before the title to the vehicle is transferred** to the recipient or before the rolling stock is placed in revenue service, whichever comes first.

## 1.3. Organization of Handbook

This Handbook is divided into five major sections addressing the following areas:

- Section One Introduction
- Section Two Pre-Award Audit
- Section Three Post-Delivery Audit
- Section Four Domestic Content Calculations
- Section Five Frequently Asked Questions
- Appendices

Each major section presents guidance to recipients, auditors, manufacturers, and component/subcomponent suppliers.

<sup>6</sup> Effective October 1, 2015, Congress amended 49 U.S.C. 5323(j) to provide a phased increase in domestic content from more than 60 percent for FY16 & FY17, to more than 65 percent in FY18 & FY19 and more than 70 percent in FY20 and beyond. On September 1, 2016, FTA issued final policy guidance on implementing the phased increase in domestic content. This policy guidance is available at 81 FR 60278 and on FTA's website at <a href="https://www.transit.dot.gov/buyamerica">https://www.transit.dot.gov/buyamerica</a>.

<sup>7</sup> See 49 U.S.C. 5323(j)(5). Note that the general Buy America requirements for manufactured products in 49 CFR § 661.5 requiring 100% U.S. steel/iron and 100% of components to be manufactured in the United States are separate and apart from the 49 CFR § 661.11 requirements for rolling stock. Therefore, the structural steel requirements in § 661.5 do not apply to the vehicular steel used in rolling stock, as noted in § 661.5(c).

A brief overview of each section of the Handbook is provided below.

#### <u>Section 1 – Introduction</u>

Describes the objectives, purpose, and scope of the Handbook, background, definitions, relevant references, and acronyms.

#### Section 2 - Pre-Award Audit

Recommends processes to the recipient for conducting effective pre-award audits. It includes general guidance on best practices during the vehicle solicitation (i.e., source selection and contract award), and contract execution phases to facilitate verification of compliance. It also seeks to clarify requirements and provide guidance to manufacturers and its suppliers about how to prepare documentation to satisfy pre-award requirements.

#### Section 3 – Post-Delivery Audit

Provides recommended post-delivery audit processes, including a discussion about Post-Delivery Domestic Content Monitoring in Section 3.1.3.4. It includes guidance to clarify the post-delivery requirements of 49 CFR parts 661 and 663. This section includes guidance to assist recipients, auditors, vehicle manufacturers, and suppliers with various aspects of the post-delivery audits. It also describes the information necessary to substantiate compliance.

#### **Section 4 – Domestic Content Calculations**

Provides guidance and clarification on methods used to correctly calculate domestic content. This section discusses the distinctions in the treatment of domestic content for components and subcomponents and offers clarification on how to determine what is a component versus a subcomponent. Finally, this section provides an example of calculating domestic content with step by step instructions.

#### Section 5 – Frequently Asked Questions (FAQs)

Provides FTA responses to FAQs concerning the pre-award and post-delivery audits of rolling stock purchases. The responses also incorporate lessons learned from FTA Project Management Oversight Contractor's (PMOC's) oversight of federally funded projects.

#### **Appendices**

The appendices include process checklists, sample certification forms, Buy America waiver references, and sample Buy America audit reports.

#### 1.4. References

The principal references for FTA's Pre-Award and Post-Delivery Audit and Buy America regulations are:

#### <u>United States Code</u>

49 U.S.C. Chapter 53, Section 5323(j)

49 U.S.C. Chapter 53, Section 5323(m)

#### <u>Legislation</u>

Surface Transportation Assistance Act of 1978, Pub. L. 95-599

Surface Transportation Assistance Act of 1982, Pub. L. 97-424

Surface Transportation and Uniform Relocation Assistance Act of 1987, Pub. L. 100-17

Buy America Act of 1988, Pub. L. 100-418

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, (SAFETEA-LU), Pub. L. 109-59

The Moving Ahead for Progress in the 21st Century Act, (MAP-21), Pub. L. 112-141

Fixing America's Surface Transportation (FAST) Act, Pub. L. 114-94

#### Regulations

Buy America Requirements, 49 CFR part 661

Pre-Award and Post-Delivery Audits, 49 CFR part 663

Federal Acquisition Regulation; Foreign Acquisition, Exempted Articles, Materials and Supplies, 48 CFR part 25

**Auditor:** 

The definitions below are provided to assist the reader with terms used in the manual. Definitions from the Pre-Award and Post-Delivery Audits of Rolling Stock Purchases Rule (49 CFR part 663) and the Buy America Requirements Rule (49 CFR part 661) are identified in italics. Non-italicized definitions are provided for clarification to assist the reader in correctly implementing the requirements.

Audit: A review resulting in a report containing the necessary

certifications of compliance with Buy America standards, purchaser's requirements specifications, and, where appropriate, a manufacturer's certification of compliance with or inapplicability of the Endorch Motor Vehicle Sefety Standards (40 CER § 663.5)

of the Federal Motor Vehicle Safety Standards. (49 CFR § 663.5).

Person or persons who verify Buy America compliance and prepare pre-award and post-delivery reports. Pre-award and post-delivery audits may be performed directly by recipient staff or by qualified independent auditors. An auditor conducting the pre-award audit must be qualified and independent from the

manufacturer and the manufacturer's agents.

Component: Any article, material, or supply, whether manufactured or

unmanufactured, that is directly incorporated into the end product at the final assembly location (49 CFR § 661.11(c)). Appendices B and C to section 661.11 provide lists of typical components of

buses and rail rolling stock, respectively.

End product: Any vehicle, structure, product, article, material, supply, or system,

which directly incorporates constituent components at the final assembly location, that is acquired for public use under a federally-funded third-party contract, and which is ready to provide its intended end function or use without any further manufacturing or assembly change(s). A list of representative end products is

included in Appendix A to 49 CFR § 661.3 End Products.

Final assembly: Final assembly is the creation of the end product from individual

elements brought together for that purpose through application of manufacturing processes. If a system is being procured as the end product by the grantee, the installation of the system qualifies as final assembly. 49 CFR 661.11(r). Minimum final assembly

requirements are described in Appendix D to section 661.11.

FMVSS: Federal Motor Vehicle Safety Standards issued by the National

Highway Traffic Safety Administration under 49 CFR part 571.

Manufactured product: An item produced as a result of the manufacturing process

(49 CFR § 661.3).

Manufacturing process: The application of processes to alter the form or function of

materials or of elements of the product in a manner adding value and transforming those materials or elements so that they represent a new end product functionally different from that which would result from mere assembly of the elements or materials

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(49 CFR § 661.3).

**Post-delivery**: The time period in the procurement process from when the rolling

stock is delivered to the recipient until title to the rolling stock is transferred to the recipient or the rolling stock is put into revenue

service, whichever is first (49 CFR § 663.5).

**Pre-award:** That period in the procurement process before the recipient enters

into a formal contract with the supplier (49 CFR § 663.5).

**Recipient:** Any entity that is a recipient of Federal financial assistance from

FTA (49 CFR § 663.5).

Rolling stock: Buses, vans, cars, railcars, locomotives, trolley cars and buses,

ferry boats, vehicles used for guideways and incline planes. (49

CFR § 663.5).8

**Subcomponent:** Any article, material, or supply, whether manufactured or

unmanufactured, that is one step removed from a component in the manufacturing process and that is incorporated directly into a component, but does not include raw materials produced in the United States and then exported for incorporation into a

component. (49 CFR § 661.11(f) & (h)-(k)).

**Supplier:** Any entity that provides components or subcomponents which are

incorporated into the vehicle, either as part of the manufacturing

process or during final assembly.

**United States:** The several States, the Commonwealth of Puerto Rico, the District

of Columbia, Guam, American Samoa, the U.S. Virgin Islands, and the Commonwealth of the Northern Mariana Islands (49 CFR

§ 661.3)

<sup>8</sup> Note that section 661.3 defines rolling stock to include vehicles used for support services. However, pre-award and post-delivery audit requirements do not apply to vehicles used for support services.

CFR	Code of Federal Regulations
DOT	Department of Transportation
FAQ	Frequently Asked Questions
FAST	Fixing America's Surface Transportation Act
FMVSS	Federal Motor Vehicle Safety Standards
FTA	Federal Transit Administration
OEM	Original Equipment Manufacturer
QA/QC	Quality Assurance/Quality Control
U.S.	United States of America
U.S.C.	United States Code

## 2. Pre-Award Audit

A recipient purchasing revenue service rolling stock with FTA funds must ensure that a preaward audit under [49 CFR part 663] is complete before the recipient enters into a formal contract for the purchase of such rolling stock. 49 CFR § 663.21.

The Pre-Award Audit includes making and obtaining required certifications and reviewing the documentation provided by the manufacturer in support of its certification. The Pre-Award Audit is undertaken **before** contract award and is for the purpose of ensuring that the vehicles delivered by the manufacturer will comply with Buy America and the contract specifications.

This section addresses the requirements for a pre-award audit conducted pursuant to the Pre-Award and Post-Delivery Audits of Rolling Stock Purchases regulations. This section also provides some best practices for the recipient, auditor, manufacturer or supplier, when conducting or participating in a pre-award audit. While FTA does not require the use of these best practices, FTA does encourage all parties to adopt such procedures and processes to the extent they will help achieve compliance. Sample forms and certifications are provided in the appendices.

## 2.1. Requirements for the Pre-Award Audit

Recipients of FTA financial assistance purchasing rolling stock must complete a pre-award audit <u>before</u> entering into a formal contract with a manufacturer. Recipients may perform the audit processes using internal staff or hire third-party auditors to carry out all or some of the review functions on the recipient's behalf. In either case, the person(s) conducting the pre-award audit must be qualified and independent from the manufacturer and the manufacturer's agents.

Appendix A.2 provides useful pre-award checklists.

There are three certifications that must be included in the pre-award audit:

- Pre-Award Buy America Certification or Pre-Award Buy America Certificate of Non-Compliance
  - Note: To complete this Certification, the recipient must receive the Manufacturer's Certification of Compliance or Non-Compliance with Buy America Rolling Stock Requirements per 49 CFR § 661.12.
- Pre-Award Purchaser's Requirements Certification, and

<sup>&</sup>lt;sup>9</sup> 49 CFR part 663.

 Pre-Award Certification of Compliance with or Inapplicability of Federal Motor Vehicle Safety Standards (FMVSS).

Table 1. Pre-Award Audit Certification Responsibilities

	Recipient	Manufacturer
SOLICITATION		
Pre-Award Buy America Certification (49 CFR § 663.25)	✓	
Pre-Award Buy America Certificate of Non-Compliance (if applicable) (49 CFR § 663.25)	✓	
Certification of Compliance or Non-Compliance with Buy America Rolling Stock Requirements (49 CFR § 661.12)		<b>✓</b>
Pre-Award Purchaser's Requirements Certification (49 CFR § 663.27)	✓	
Pre-Award FMVSS Compliance Certification (49 CFR § 663.41)	✓	
Pre-Award Certification of FMVSS Inapplicability (49 CFR § 663.43)	✓	

The recipient is responsible for obtaining the Pre-award Buy America Certification, Purchaser's Requirement Certification, and the FMVSS Certification (if applicable) or the Pre-Award Certification of FMVSS Inapplicability. In order for the recipient to certify Buy America compliance or that it received a Buy America waiver, the recipient must obtain and keep on file the bidder's or the offeror's (the manufacturer or supplier) Certification of Compliance (or Non-Compliance) with Buy America Rolling Stock Requirements.<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> <u>See</u> 49 CFR § 663.25 and 49 CFR § 661.12.

#### 2.2. Pre-Award Buy America Certification

The recipient must keep on file a **Pre-Award Buy America Certification** that certifies that:

- There is a letter from FTA granting a waiver from the Buy America requirements for the vehicle procurement, or
- The recipient is satisfied that the rolling stock to be purchased meets the Buy America requirements after having reviewed itself or through an audit prepared by someone other than the manufacturer or its agent documentation provided by the manufacturer which lists—
  - (1) Component and subcomponent parts of the rolling stock to be purchased identified by manufacturer of the parts, their country of origin and costs; and
  - (2) The location of the final assembly point for the rolling stock, including a description of the activities that will take place at the final assembly point and the cost of final assembly.<sup>11</sup>

This subsection describes the **Pre-Award Buy America Certification** requirements and recommends best practices to facilitate compliance with the pre-award audit requirements.

# 2.2.1. Recipient's Pre-Award Certification of an Applicable Buy America Waiver

By statute, the procurement of rolling stock is subject to a waiver from the requirement that manufactured goods must contain 100 percent domestic content. Section 5323(j)(2)(C) allows FTA to waive Buy America requirements for rolling stock procurements by permitting domestic content less than 100 percent. The Buy America statute also includes three additional waivers: public interest waivers; non-availability waivers; and price differential waivers. The procedures for each of these statutory waivers are set forth in 49 CFR § 661.7. Only waivers based on public interest or non-availability may be granted for a component or subcomponent in the case of the procurement of rolling stock.

Generally, recipients, not the manufacturer, must apply for the Buy America waiver. <sup>15</sup> However, a potential bidder, offeror or supplier may seek a public interest or non-availability waiver for a component or subcomponent. <sup>16</sup> Waiver requests must be made before contract award and the process for obtaining a waiver is time-consuming. Therefore, recipients or manufacturers or

<sup>12</sup> 49 USC § 5323(j)(2)(C).

<sup>&</sup>lt;sup>11</sup> 49 CFR § 663.25.

<sup>&</sup>lt;sup>13</sup> 49 U.S.C. § 5323(j)(2)(A), (B), and (D).

<sup>&</sup>lt;sup>14</sup> See 49 CFR § 661.7(f).

<sup>&</sup>lt;sup>15</sup> 49 CFR § 661.9(c).

<sup>&</sup>lt;sup>16</sup> 49 CFR § 661.9(d).

suppliers who wish to seek a waiver from FTA are encouraged to apply for the waiver as early as possible in the procurement process.

# 2.2.2. Documentation for Pre-Award Buy America Certification (Pre-Award Audit Report)

A recipient's Pre-Award Audit Report will summarize the process the recipient has used to verify the proposed manufacturer's compliance with the Buy America requirements.

The recipient must maintain a file for FTA review that includes the following documentation:

- A copy of the Pre-Award Audit Report;
- The recipient's Pre-Award Buy America Certification;
- The manufacturer's certificate of compliance or non-compliance with Buy America rolling stock requirements (see Appendices B.1 and B.2 for certification templates);
- The pre-award purchaser's requirements certification; and
- The manufacturer's FMVSS certification, if appropriate.

A sample Pre-Award Audit Report is included in Appendix C.1.

The recipient, or an auditor acting on the recipient's behalf, will review the supporting cost documents in order to verify the estimated domestic content, especially if the manufacturer provides such domestic content only as a percentage. Manufacturers may provide estimated domestic content by cost either in dollar figures or as percentages of total materials cost. Therefore, auditors will verify that the manufacturer's pre-award audit documentation supports all costs used in developing the domestic content list (worksheet) and request any additional information necessary in order to verify and certify compliance with Buy America. In the absence of purchase orders or supplier quotes, this verification may be based on, among other things, estimates or other sources used in developing the bid.

Manufacturers may have concerns about recipients' review of cost data. The manufacturer and recipient may agree that the recipient will contract with an external auditor to conduct the manufacturer's Buy America certification review—and assure the manufacturer that the cost data will be kept confidential. Alternatively, a recipient may be able to keep its Buy America audit function independent by using a "firewall" and assuring the manufacturer that those employees of the recipient performing the Buy America audit are prohibited from disclosing any of the manufacturer's proprietary data. Further, the review of documents may occur at the manufacturer's place of business; there is no requirement that the recipient or its auditors obtain copies of the documents; they need simply to review them. Whether conducted by a contractor or the recipient's employees, the manufacturer may require the auditor to sign a non-disclosure agreement prior to reviewing the documents.

#### 2.2.3. Best Practices for Pre-Award Buy America Certifications

This subsection describes best practices to aid recipients, auditors, manufacturers, and suppliers in achieving compliance with the **Pre-Award Buy America Certification** requirements. This subsection includes descriptions of recommended processes and special considerations, beginning with key steps that recipients may take early in the solicitation process, as well as processes to verify compliance with domestic content and U.S. final assembly requirements.

Throughout the vehicle procurement process recipients should be alert to conditions that could pose challenges for Buy America compliance. Examples of these conditions include:

- Manufacturers who are inexperienced with the U.S. market and regulations.
- A new subcomponent/component supplier.
- Vehicles with the domestic content close to the minimum threshold.
- Components with the domestic content close to the minimum threshold.
- Manufacturers creating new U.S. final assembly facilities.
- Engineering changes, field modifications or contract change orders causing changes in project scope (completed projects must comply with Buy America requirements after all change orders have been implemented for all vehicles).

Recipients may adopt practices to lessen the risks of non-compliance. It is important to clearly define and communicate the recipients' processes and expectations about verifying compliance to manufacturers throughout the procurement and production periods. Another useful tool that recipients may use is intermediate audits (see Section 3.1.3.4 for a discussion of Post-Delivery Domestic Content Monitoring). Some recipients also consider a requirement that vehicles have domestic content percentages even greater than the required domestic content percentage for vehicles and/or components to prevent inadvertent noncompliance with Federal requirements. Further, recipients may provide incentives for bidders to increase domestic content as long as those incentives are consistent with Federal and local law.

The following are some recommended best practices for the pre-award audit stage.

#### 2.2.3.1 Solicitation Phase

As the pre-award audit must be completed prior to the recipient entering into a formal contract with a manufacturer or supplier, there are several steps that the recipient may take during the procurement process to help ensure Buy America compliance.

Table 2. Recommended Discussion Topics During the Solicitation Phase of the Procurement.

## Recommended Discussion Topics During the Solicitation Phase of the Procurement

Buy America requirements, *e.g.*, domestic content requirements, supply chain implications, manufacturer's certification, etc.

Recipient & Manufacturer or Supplier's (Bidder or Offeror) monitoring responsibilities of the status of compliance during production (e.g., the Resident Inspector program).

Recipient's processes for conducting Pre-Award, Intermediate and Post-Delivery Audit reviews.

Manufacturer's procedures for collecting, reviewing, and maintaining supporting documentation.

Recipient's procedures and requirements for collecting, reviewing, and maintaining supporting documentation.

Recipient's procedures for managing requests for waivers from Buy America requirements.

Recipient's process for selecting a Buy America auditor.

A pre-proposal conference is a good opportunity for recipients to highlight important Buy America requirements and identify specific Buy America related documentation that manufacturers will be expected to include in their bids or produce at the pre-award audit phase. For example, recipients may want to emphasize that in a competitive sealed procurement, a bidder must submit a signed certification with the bid. If a bidder submits the wrong certification, or certifies both compliance and non-compliance, the bid generally will be deemed non-responsive.<sup>17</sup>

Also during the solicitation period, recipients will communicate to manufacturers their expectations for periodic status reporting on Buy America compliance from the manufacturer(s), including if there are any changes to Buy America content or final assembly that may occur during vehicle production due to modifications or substitutes of component or subcomponent suppliers. Periodic reporting helps prevent post-delivery surprises in changes in domestic content and potential issues regarding compliance. For reference, a Proposal Compliance Checklist can be found in Appendix A.1.

<sup>&</sup>lt;sup>17</sup> 49 CFR § 661.13(b).

#### 2.2.3.2. Verifying Domestic Content Compliance

Preparing and verifying domestic content compliance is a key element of the pre-award audit process. Errors and misinterpretations during the calculation process can undermine the overall domestic content percentage and jeopardize the vehicle's compliance with Buy America requirements. Please see <u>Section 4</u>, <u>Domestic Content Calculations</u>, for detailed instructions on calculating domestic content.

While conducting a pre-award audit, auditors should pay close attention to components with the highest dollar or percentage values. The impact on the vehicle's overall domestic content may be impacted significantly if a high-dollar component is no longer considered to be of domestic origin under 49 CFR § 661.11(g). Section 661.11(g) provides that a component may be considered of domestic origin, if "more that 60 percent of the subcomponents of that component, by cost, must be of domestic origin, and the manufacture of the component must take place in the United States. If, under the terms of this part, a component is determined to be of domestic origin, its entire cost may be used in calculating the cost of domestic content of an end product." If a component's domestic content falls below the minimum threshold at any point during the production cycle, it could reduce the vehicle's domestic content percentage and potentially cause the entire vehicle to fall out of compliance. Therefore, components with domestic content percentages that are close to the minimum domestic content threshold should be noted and followed up with during and at the end of the production cycle.

Similarly, when reviewing the manufacturer's pre-award documentation, auditors should pay particular attention to vehicles that are expected to have a total domestic content that is close to the minimum domestic content threshold. Subsequent change orders or errors in the calculations or documentation (even to smaller value components) could potentially alter the total domestic content and result in noncompliance.

Finally, auditors should confirm that labor costs for final assembly are not included in the domestic content by cost calculations.<sup>19</sup>

#### 2.2.3.3. Verifying U.S. Final Assembly

Another essential step in the pre-award audit process is to verify that the proposed procurement would comply with the U.S. final assembly requirements. In order to verify that the proposed final assembly activities comply with Buy America requirements, the recipient must review documentation provided by the manufacturer to determine whether the manufacturer's planned final assembly activities in the United

<sup>&</sup>lt;sup>18</sup> Note that under the September 1, 2106 FTA Policy Guidance, increase in the required domestic content (i.e., more than 65% or 70%), requires a similar increase in domestic content under 49 CFR § 661.11(q).

<sup>&</sup>lt;sup>19</sup> 49 CFR § 661.11(p).

States are adequate to meet the requirements of 49 CFR § 661.11 and Appendix D to § 661.11 (required documentation is discussed in Section 2.2.2).

The specific scope of final assembly activities may vary from manufacturer to manufacturer and even from vehicle to vehicle. Therefore, in order to verify compliance, the auditor may perform due diligence through a variety of methods, including, among other things, reviewing:

- The manufacturer's flow chart(s) or detailed drawing(s) of the production work station,
- o The manufacturer's work instructions,
- The manufacturing plans, and
- The assembly drawings (usually kept or posted on a production (shop) floor).

Final assembly costs include the proposed direct labor associated with the U.S. final assembly production line. For the pre-award audit, costs may be established from the manufacturer's estimate of hours, subcontractors' labor quotes, and actual costs from similar projects. Auditors must collect as much information as needed to determine whether the final assembly costs reflect the minimum requirements for final assembly as described in Appendix D to 49 CFR § 661.11.

#### 2.2.3.4. Supplier Buy America Certificate at Pre-Award

The manufacturer is responsible for ensuring that suppliers and subcontractors comply with Buy America requirements. At the pre-award audit state, manufacturers will need to deomonstrate their process for verifying suppliers' compliance with Buy America. This may take the form of obtaining certifications and other documentation or information from suppliers.<sup>20</sup> A suggested template that captures relevant information is discussed in Section 4.5 and a sample is provided in <a href="Appendix B.6">Appendix B.6</a>, "Sample Supplier Buy America Certification."

In order to certify compliance, manufacturers and suppliers must be knowledgeable about the correct method of calculating a component's percentage of domestic content. Section 4, "Domestic Content Calculations," provides detailed instructions for calculating domestic content.

<sup>&</sup>lt;sup>20</sup> While not required, to verify compliance with the pre-award audit and Buy America requirements, the manufacturer may consider conducting supplier qualification reviews (e.g., via site visits), detailed reviews of supplier documents, first article inspections, qualification testing, and source/pre-shipment inspections to verify suppliers' certifications.

A recipient of FTA financial assistance purchasing revenue service vehicles must certify preaward that:

- (1) The rolling stock it is purchasing is the same product described in its solicitation specification, and
- (2) The proposed manufacturer is a responsible manufacturer with the capability to produce a vehicle that meets the recipient's specification (Purchaser's Requirements). <sup>21</sup>

A sample **Pre-Award Purchaser's Requirements Certification** is provided in Appendix B.5. This certification must be retained by the recipient and available for FTA inspection.

#### 2.3.1. Best Practices for Purchaser's Requirements Certification at Pre-Award

Verificiation of the information required in the **Pre-Award Purchaser's Requirements Certification** typically is conducted by the recipient's procurement office and the technical evaluation team before contract award.

To verify that the proposed manufacturer's bid complies with the recipient's specification, the recipient will compare the solicitation specification for the vehicle with the proposed manufacturer's technical bid. A manufacturer's technical information can include documentation submitted with the manufacturer's bid proposal, including, but not limited to, specifications, product brochures, technical data sheets, bills of material, drawings, etc.

Recipients also need to assess a proposed manufacturer's capacity and capability to produce the specific vehicles. The scope and depth of the assessment will vary depending on the size and complexity of the procurement and the past performance of the manufacturer. The solicitation should include requirements that bidders provide information about their manufacturing capacity and capability to produce the specified vehicles. This information may include the following:

- Past performance on previous vehicle orders;
- Qualifications of key personnel;
- Facility layouts/drawings, production line layout/flowchart;
- Plant output capacity (i.e., max. production rate per week);
- Staffing counts by craft;
- Readiness of fixtures for carbody construction;
- Quality assurance and control plan; and
- Other items necessary to execute the work.

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<sup>&</sup>lt;sup>21</sup> 49 CFR § 663.27.

Additionally, recipients should verify a manufacturer's financial viability as part of the review to certify compliance with the pre-award purchaser's requirements. At a minimum, recipients should review the proposed manufacturer's public financial statements (if available).

#### 2.4. Pre-Award Federal Motor Vehicle Safety **Standards** (FMVSS) Certification of Compliance or Inapplicability

The Pre-Award FMVSS Certification is a requirement for most, if not all, motor vehicle procurements. The National Highway Traffic Safety Administration (NHTSA) has a legislative mandate under title 49 U.S.C., chapter 301, Motor Vehicle Safety, to issue FMVSS regulations. The term "motor vehicle" is defined for the purpose of the statute and regulations that NHTSA administers as "a vehicle that is driven or drawn by mechanical power and manufactured primarily for use on public streets, roads, and highways, but does not include a vehicle operated only on a rail line." 22 These Federal safety standards are the minimum safety performance requirements for motor vehicles.

Recipients purchasing motor vehicles, such as buses, must keep on file its certification that it received, both at the pre-award and post-delivery stage, a copy of the manufacturer's selfcertification information that the vehicle complies with the relevant FMVSS or a copy of the manufacturer's self-cerfication that the vehicle is not subject to the FMVSS. 23 (See Appendix B.6 and B.7 for sample certifications).

<sup>&</sup>lt;sup>22</sup> See 49 U.S.C. § 30102(a)(7). <sup>23</sup> 49 CFR §§ 663.41, 663.43(a).

## 3. Post-Delivery Audit

A recipient purchasing revenue service rolling stock with FTA funds must ensure that a post-delivery audit under this part is complete before title to the rolling stock is transferred to the recipient, or before the rolling stock is put into service, whichever is first. 49 CFR § 663.31 and § 663.5(b).

This section describes the processes, certifications, and documentation required to validate the post-delivery audit. Appendix A.3 provides useful post-delivery checklists.

This section also provides best practices to assist in complying with the regulations.

The post-delivery audit is similar to the pre-award audit and follows the same multi-step process as the pre-award audit described in <u>Section 2</u>. In the post-delivery audit, however, recipients verify that the manufacturer complied with applicable Buy America requirements in the production of the rolling stock and this verification therefore must be based on actual data rather than plans and proposals. The conclusions of this review are captured in a Post-Delivery Audit Report.

Recipients continue to have the ultimate responsibility for ensuring compliance with all Federal requirements, post-delivery. As discussed in Section 2, Buy America requirements flow down from the FTA recipients to the manufacturers through the contract documents.

In turn, the manufacturer has the responsibility to document the domestic content and the responsibility to maintain documentation that demonstrates compliance with Buy America regulations.<sup>24</sup>

Post-delivery, a manufacturer certifies that the requirements of the Buy America provisions were satisfied for the total vehicle(s) and all of its components, which includes collecting and evaluating suppliers' documentation. The manufacturer will ensure that any **Supplier Buy America Certificates** (See <u>Appendix B.6</u>) are valid and can provide to auditors the supplier information necessary to demonstrate compliance.

Because all parties have a responsibility to ensure compliance by verifying domestic content percentages and domestic manufacturing locations, manufacturers will communicate Buy America requirements to their component suppliers and expect suppliers to perform due diligence of their subcomponent suppliers.

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<sup>&</sup>lt;sup>24</sup> 49 CFR § 661.15(d).

#### 3.1. Requirements for the Post-Delivery Audit

The post-delivery audit period is the "time period in the procurement process from when the rolling stock is delivered to the recipient until title to the rolling stock is transferred to the recipient or the rolling stock is put into revenue service, whichever is first."<sup>25</sup> As in the preaward phase, recipients may perform the audit processes, or use third-party auditors to perform the review functions on the recipients' behalf.

The purpose of the post-delivery audit is for recipients to verify that the built vehicle(s) comply with Buy America requirements, meet the recipient's solicitation specification requirements, and if applicable, FMVSS.

Recipients must maintain contract files for the post-delivery phase that include certifications and supporting documentation. The required certifications are:

- Post-Delivery Buy America Certification;
- Post-Delivery Purchaser's Requirements Certification (based upon a review of the Resident Inspector's Report); and,
- Post-Delivery Certification of FMVSS Compliance or Inapplicability, when appropriate.

The findings of the post-delivery audit process must be described in the Post-Delivery Audit Report.

#### 3.1.1. Post-Delivery Buy America Certification Requirements

A review for the **Post-Delivery Buy America Certification** must be completed before the vehicle title is transferred to the recipient or before the rolling stock is placed in revenue service, whichever comes first.

A recipient's Post-Delivery Buy America Certification certifies either that the recipient:

- Obtained a letter from FTA granting a waiver from Buy America requirements for the vehicle procurement; or
- Confirmed, on the basis of an audit prepared by someone other than the manufacturer or the manufacturer's agent, that:
  - The vehicle(s) contain components that meet or exceed the required percentage of domestic content, by cost;
  - Final assembly of the vehicles took place in the U.S.; and
  - Final assembly activities were compliant with Buy America requirements.

The review period begins when the rolling stock is delivered to the recipient and ends before the title transfer or before the rolling stock is placed in revenue service, whichever comes first. If a

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<sup>&</sup>lt;sup>25</sup> 49 CFR § 663.5(b).

waiver was not requested, or the request was denied, the auditor will verify that the manufacturer has provided enough detail in its documentation to demonstrate that FTA's Buy America requirements have been met.

The recipient must confirm that the manufacturer has complied with U.S. final assembly requirements and that the cost of components and subcomponents is greater than the required domestic content percentage of the aggregate cost for all components. If the manufacturer does not provide sufficient information, the recipient must seek additional information.

Buy America-Exempt Rolling Stock Vehicles

If a vehicle is eligible for a waiver, the recipient must:

- o Obtain a Buy America waiver letter from FTA before a contract is awarded;
- Complete a Post-Delivery Buy America Certificate of Non-Compliance (see Appendix B.9 for sample certification); and
- Keep the Pre-Award Buy America Certificate of Non-Compliance on file for future FTA reviews.

#### 3.1.2. Documentation for Post-Delivery Buy America Certification

A recipient's Post-Delivery Audit Report summarizes the process the recipient used to verify the manufacturer's compliance with the Buy America requirements.

At the conclusion of the audit, the recipient must maintain a file for FTA reviews that includes:

- A copy of the Post-Delivery Audit Report;
- The recipient's Post-Delivery Buy America Certificate;
- o The post-delivery purchaser's requirement certification;
- o A manufacturer's FMVSS certification, when appropriate;
- The manufacturer's certificate of compliance or non-compliance with Buy America rolling stock requirements.

A sample Post-Delivery Audit Report is included in Appendix C.2.

The manufacturer provides the following documents for the **Post-Delivery Buy America** Certification:

- A detailed list of components and subcomponents which includes the manufacturer/supplier and country of origin;
- Cost of each component and corresponding subcomponents;
- Both domestic and foreign content, in dollars or as a percentage;
- The final assembly location;
- Description of all work performed at the final assembly location; and
- Cost of the work performed at the final assembly location.

Although the manufacturer can provide its domestic content worksheet in terms of percentages rather than dollars, the recipient or its auditor needs to review supporting actual cost documents in order to verify compliance. The manufacturer must be able to support all the costs depicted in the domestic content worksheet and final assembly scope of work. The Post-Delivery Audit Report should not include confidential data provided to the recipient or an auditor but should summarize the data reviewed to support the conclusions in the report.

Manufacturers may have concerns about recipients' review of cost data. The manufacturer and recipient may agree that the recipient will contract with an external auditor to conduct the manufacturer's Buy America certification review—and assure the manufacturer that the cost data will be kept confidential. Alternatively, a recipient may be able to keep its Buy America audit function independent by using a "firewall" and assuring the manufacturer that those employees of the recipient performing the Buy America audit are prohibited from disclosing any of the manufacturer's proprietary data. Further, the review of documents may occur at the manufacturer's place of business. There is no requirement that the recipient or its auditors obtain copies of the documents they review. Whether conducted by a contractor or the recipient's employees, the manufacturer may require the reviewer to sign a non-disclosure agreement prior to reviewing the documents.

# 3.1.3. Additional Information for Post-Delivery Buy America Certifications

This subsection provides guidance to assist recipients, auditors, manufacturers, and suppliers in achieving compliance with the post-delivery certification requirements.

#### 3.1.3.1. Verifying Domestic Content

As discussed for the pre-award audit, preparing and verifying domestic content compliance is fundamental to the audit process. Recipients will review and verify the stated domestic content, by cost; and verify that the final assembly location and costs confirm that the minimum activities for final assembly are performed in the U.S.

Auditors will obtain current information on the cost of components and subcomponents from manufacturers, as illustrated in Section 4. The manufacturers' worksheets will note any changes in component suppliers and component percent domestic content, by cost.

Auditors may validate manufacturers' worksheets by reviewing paid invoices, purchase orders, or other source documents. Auditors may link the costs presented by the manufacturer to the specific source documents. Some auditors find it useful to add a column to the domestic content worksheet and track costs associated with specific paid invoices or purchase orders so they can more easily monitor changes over time.

Auditors will verify that the manufacturer is accounting for all components in its domestic content calculation and that all components and subcomponents are properly classified. See Section 4.2.1, "Component/Subcomponent," for further discussion on classifying components and determining their classification as being of domestic or foreign origin.

# 3.1.3.2. Components with Domestic Content Percentages Close to the Minimum Threshold

During a post-delivery audit, auditors should direct specific attention to components with the highest dollar (or percentage) values as well as to components with domestic content percentages close to the minimum threshold. Similarly, auditors should also pay particular attention to vehicles with total domestic content that is very near the minimum threshold. Change orders and errors (even to smaller value components) could potentially slip the total domestic content percentage below the requirements.

As discussed in <u>Section 2 Pre-Award Audit</u>, auditors may also need to examine component suppliers to evaluate whether or not the suppliers have satisfied Buy America requirements.

## 3.1.3.3. Reasonableness of Component and Subcomponent Costs

Auditors should compare costs for components and subcomponents listed on the manufacturers' domestic content worksheet to comparable vehicle procurement costs. The purpose of this comparison is to check that the manufacturers' domestic content worksheet appropriately depicts costs, so that component costs are not under- or over-valued in an effort to meet the domestic content requirement for rolling stock procurements. Please see <a href="Section 4">Section 4</a> for more information on domestic content calculations.

#### 3.1.3.4. Verification of U.S. Final Assembly

In order to verify that final assembly activities comply with Buy America requirements, recipients must review documentation provided by the manufacturer that demonstrates:

- That the final assembly site is located in the U.S.;
- That the final assembly activities meet the minimum requirements listed in Appendix D to 49 CFR § 661.11; and
- The total cost of final assembly, including labor and overhead costs.

Appendix D to 49 CFR § 661.11 provides the minimum requirements for final assembly of vehicles that manufacturers must meet to comply with Buy America regulations. The manufacturer's documentation will provide enough detail to

allow a recipient to determine that its final assembly activities would constitute adequate final assembly under Buy America requirements.

The scope of final assembly activities may vary from manufacturer to manufacturer and even from vehicle to vehicle. During a post-delivery audit, auditors will review the manufacturer's activities and verify that the manufacturer performed the final assembly activities in the U.S. This may be accomplished by reviewing the Resident Inspector Report, when such a report is required.

An auditor may verify compliance through a variety of methods at the postdelivery stage, including, but not limited to:

- Reviewing the manufacturer's flow chart(s) of the production work station;
- Work instructions;
- QC/QA inspections (hold points);
- Manufacturing plans; and
- Assembly drawings (as would be kept or posted on a shop floor).

In the event an on-site inspector is not required by 49 CFR § 663.37, recipients will consider whether auditor(s) should make on-site visits to verify final assembly activities. Site visits may be merited if a final assembly facility is new or if there are concerns about the manufacturer's capacity.

If a recipient determines that a manufacturer's final assembly processes do not include all the activities that are typically considered the minimum requirements, it can request an FTA determination of compliance. FTA will review these requests on a case-by-case basis to determine compliance with Buy America.

Buy America regulations also require that the manufacturer provide the cost of U.S. final assembly. While reviewing a manufacturer's final assembly documentation, auditors consider the following:

- Whether the manufacturer has provided sufficient documentation for the cost of final assembly; and
- Whether the manufacturer's actual total cost for final assembly includes all costs consistent with the minimum requirements for final assembly contained in Appendix D to 49 CFR 661.11.

If necessary, auditors should obtain a breakdown of the labor hours and hourly rates by craft (or a composite rate based on the ratio of the associated skill sets and supervisory personnel). The auditor should verify that the information the manufacturer provided is commensurate with the labor actually employed for the final assembly activity.

# 3.1.3.5. Supplier Buy America Certificate Documentation for Buy America Certification at Post-Delivery

The manufacturer is responsible for ensuring that suppliers and subcontractors comply with Buy America requirements. Suppliers must provide sufficient documentation to manufacturers that demonstrates compliance with post-delivery audit requirements.

It also is recommended, but not required, that manufacturers obtain executed (signed and dated) certifications from all their suppliers for the post-delivery audit. A suggested template that captures the relevant information is provided in <a href="#">Appendix B.6, "Sample Supplier Buy America Certification."</a>

In order to certify compliance, manufacturers and suppliers must be knowledgeable about the correct method of calculating a component's percentage of domestic content. Section 4, "Domestic Content Calculations," provides detailed instructions for calculating domestic content.

Manufacturers will conduct due diligence when documenting the location of a supplier's manufacturing facility for each component (and ideally for each subcomponent). Manufacturers may perform supplier qualifications, which include site visits, detailed reviews of supplier documents, first article inspections, qualification testing, and source/pre-shipment inspection to verify suppliers' certifications. Component suppliers executing the certificate have additional responsibility to verify that subcomponents conform to specified standards.

#### 3.1.3.6. Post-Delivery Domestic Content Monitoring

Post-Delivery Domestic Content Monitoring, or intermediate review, is a recommended best practice that occurs after the vehicle manufacturer delivers the first vehicle to the recipient and until the vehicle manufacturer transfers title to the last vehicle to the recipient or the recipient puts the last vehicle into revenue service, whichever is first. The recipient will complete the Post-Delivery Audit as described in 49 CFR § 663.5(f) and 49 CFR § 663.33 on the first vehicle delivered.

The resident inspector, or an agent or employee of the recipient, would perform the Post-Delivery Domestic Content Monitoring. The purpose of the Post-Delivery Domestic Content Monitoring is to ensure that all vehicles after the first vehicle are compliant with the regulations.

The personnel performing the Post-Delivery Domestic Content Monitoring monitor all of the following for changes to determine that any changes detected do not affect the compliance of any vehicle:

- Change Orders
- Changes to the Bill of Materials

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- Changes to the assembly or manufacturing processes
- Changes to the final assembly location
- Any changes to the cost or origin of any components and subcomponents
- Any change that would affect the domestic content of the vehicle

If the recipient (or its agent) detects any changes, the recipient (or its agent) would perform an evaluation to determine if the domestic content of the vehicles has changed. If the domestic content is below the minimum requirement, then the recipient should notify the manufacturer of non-compliance and require the manufacturer to comply with Buy America. If the manufacturer is unable or unwilling to comply with Buy America on the production vehicles, the recipient should contact its Regional Office regarding the non-compliance.

# 3.2. Post-Delivery Purchaser's Requirements Certification – 49 CFR § 663.37

This subsection describes the process that recipients will follow in order to demonstrate compliance with the **Post-Delivery Purchaser's Requirements Certification** in 49 CFR § 663.37.

The **Post-Delivery Purchaser's Requirements Certification** certifies that the delivered vehicles meet the contract specifications, based on the recipient's visual inspections, road tests, monitoring of the final assembly process and the Resident Inspector's Report of manufacturing activities.

The intent of the **Post-Delivery Purchaser's Requirements Certification** is to safeguard recipients by ensuring that the delivered vehicles comply with contract specifications.

# 3.2.1. Post-Delivery Purchaser's Requirements Certification Requirements

Recipients must keep a **Post-Delivery Purchaser's Requirements Certification** on file that certifies:

- When required by 49 CFR § 663.37, a resident inspector (other than an agent or employee of the manufacturer) was at the manufacturing site throughout the period of manufacture and completed a report on the manufacture of the vehicles; AND
- After reviewing the **Resident Inspector's Report**, and visually inspecting and road testing the delivered vehicles, the vehicles meet the contract specifications.

With certain exceptions described below, recipients are required to have an on-site resident inspector at the manufacturing site throughout the manufacturing period. The resident inspector must:

- Remain full-time at, or periodically visit, the final assembly location during the period of manufacture; and
- Visually inspect, participate in, and witness performance tests of the vehicles.

Further, the resident inspector may visit component manufacturing sites, as necessary, during the period of manufacture of the rolling stock.

The resident inspector must prepare the Resident Inspector's Report that, at a minimum, provides:

- Accurate records of all vehicle construction activities (e.g., component manufacturing processes, final assembly activities, and collected quality control data); and
- A summary of how the construction and operation of the vehicles meet (or do not meet) the contract specifications. The report will reference the above cited manufacturing processes, final assembly activities, and quality control data.

It is the recipient's responsibility to verify that the vehicles comply with the contract specifications and to identify areas of noncompliance. The purpose of the Resident Inspector's Report is to assist the recipient in verifying that the vehicles meet the contract specifications.

Upon delivery of the vehicles and following receipt and review of the Resident Inspector's Report, the recipient must visually inspect and road test the vehicles to ensure the vehicles meet the contract specifications.

Exceptions for on-site resident inspector. An on-site resident inspector is <u>not</u> required for (1) procurements of 10 or fewer buses; or (2) procurements of 20 or fewer vehicles serving rural (other than urbanized) areas, or urbanized areas of 200,000 people or fewer; or (3) procurements of any number of primary manufacturer standard production and unmodified vans. 49 CFR § 663.37. For such procurements, only visual inspection and road testing upon delivery to the recipient are required to certify compliance with the contract specifications.

#### 3.2.2. Required Purchaser's Requirements Documentation at Post-Delivery

Once the recipient has reviewed the Resident Inspector's Report, successfully inspected and tested the delivered vehicles, and is satisfied the Purchaser's Requirements have been met, the recipient will then:

• Complete a **Post-Delivery Purchaser's Requirements Certification** (See Appendices B.10 and B.11 for sample certifications).

Recipients must maintain a file for future FTA reviews that includes:

- The Post-Delivery Purchaser's Requirements Certification,
- A copy of the Resident Inspector's Report and any associated supporting documentation,

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- The solicitation specification,
- The manufacturer's bid specification,
- Authorizations of approved equals, and
- Any other supporting documentation.

# 3.2.3. Best Practices for Purchaser's Requirements Certification at Post-Delivery

While various approaches can be used to verify and document compliance for the **Post-Delivery Purchaser's Requirements Certification**, the following best practices are presented to assist recipients.

# 3.2.3.1 Assignment of Resident Inspector to Manufacturing/Final Assembly Site

The intent of the regulation is to help recipients verify that the vehicles will comply with its contract specifications. It is not meant to require that a resident inspector remain "full-time" at the manufacturer's site throughout the period of manufacture. Although this may be recommended for some vehicle procurements, the resident inspector requirements may be fulfilled with periodic visits.

# 3.2.3.2. Resident Inspector's Report for Purchaser's Requirements at Post-Delivery

As previously mentioned, the Resident Inspector's Report includes, at a minimum, accurate records of all vehicle construction activities (e.g., component manufacturing processes, final assembly activities, and collected quality control data) and a description of how the construction and operation of the vehicles meet (or do not meet) the contract specifications. Manufacturers will provide the necessary documentation to complete the review.

As a best practice, the Resident Inspector's Report and supporting documentation may include.

- A summary of the Resident Inspector's Report describing the scope of work performed on behalf of the recipient. The report would identify all activities that verify that the vehicle(s) comply with the contract specifications, and would include inspection qualification, and production testing.
- Recipient's independent inspections, in addition to the manufacturer's quality control (QC). This may be demonstrated by signed inspection reports (usually by

hold point inspections where the manufacturer cannot proceed with work until the resident inspector's approval is obtained).

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- The vehicle history books provided by the manufacturer and reviewed by the resident inspector prior to authorization for shipment of the vehicle(s). The resident inspector would briefly summarize the content of the vehicle history books provided by the manufacturer and include samples or excerpts that demonstrate accurate record of vehicle construction activities and adherence to quality control processes.
- Sample(s) of the Authorization-for-Shipment forms. The forms would include a sign-off signature by the resident inspector for each vehicle. The forms would list any open action items at the time of shipment.
- A summary describing how the manufacturer adequately implemented its QC processes throughout the manufacturing process. The summary would also address how the manufacturer adhered to appropriate FTA elements of quality.<sup>26</sup> For example, a sample Closed Nonconformance Report would be included that identifies any corrective rework/repairs that were made and approved by the recipient or its designated representative. Note that nonconforming material that was repaired (that is, not fully conforming to OEM/specification requirements), or that is permitted to be used "as is" must be approved by the recipient.
- Verification that the manufacturer has maintained complete records of construction for each vehicle. These documents (typically called car files) would likely contain details beyond the scope of the Resident Inspector's Report such as all of the manufacturer's quality control (QC) inspections.
- Evidence that delivered vehicles have been inspected and road tested to confirm they meet contract specifications. The report would include a summary list of static, dynamic, and performance tests performed on each vehicle. A sample of key test report results that show sign-offs for completed tests, failed tests, and any corrective action will also be included. This summary list of test results would be compared to the contract specifications to validate that the vehicles meet (or do not meet) contact specifications. Any elements that do not meet specification requirements must be accompanied by a contract modification approved by the recipient and identified in the Resident Inspector's Report summary.

<sup>&</sup>lt;sup>26</sup> See FTA Quality Management System Guidelines, https://www.transit.dot.gov/funding/procurement/project-management-oversight-pmo.

## 3.3. Post-Delivery Federal Motor Vehicle Safety Standards (FMVSS) Certification of Compliance or Inapplicability

Recipients purchasing motor vehicles must demonstrate that the vehicles comply with FMVSS as part of the requirement for the post-delivery audit. The recipient must keep on file the certification that it received a copy of the manufacturer's self-certification information that the vehicle complies with FMVSS.<sup>27</sup>

For FMVSS compliant motor vehicles, the recipient must:

- Obtain the FMVSS self-certification sticker information from the motor vehicle manufacturer:
- Confirm the manufacturer's FMVSS sticker is affixed to each motor vehicle. [The sticker is usually located in the interior front curbside of the motor vehicle (see Appendix B.15 -B.19 for sample FMVSS stickers)]; and
- Complete a Post-Delivery FMVSS Compliance Certification (see Appendix B.12 for a sample certification).

The recipient must keep the manufacturer's Post-Delivery FMVSS self-certification information with the FMVSS Compliance Certification in its file.

There are instances when motor vehicles are not subject to FMVSS. Consider, for example, 49 CFR § 571.7 (Applicability of FMVSS Regulation) and 49 CFR part 555 (Temporary Exemptions from Motor Vehicle Safety Standards). In such cases, recipients must keep on file certification that the contracted motor vehicles are not subject to FMVSS.<sup>28</sup>

If the contracted motor vehicles are not subject to FMVSS, the recipient must:

- Obtain the manufacturer's certified statement indicating that the contracted motor vehicles are not subject to FMVSS;
- Complete a Post-Delivery Certification of FMVSS Inapplicability (see Appendix B.14 for a sample certification).

The recipient must keep the manufacturer's Post-Delivery FMVSS exemption statement with the Pre-Award Certification of FMVSS Inapplicability in its file.

<sup>27</sup> 49 CFR § 663.41. <sup>28</sup> 49 CFR § 663.43.

## 4. Domestic Content Calculations

This section provides guidance and clarification on how to calculate domestic content correctly. It clarifies the distinctions in the treatment of domestic content for components and subcomponents and offers clarification on how to determine what is a component versus what is a subcomponent for rolling stock. The intent is to assist recipients in the verification and validation of domestic content calculations to verify compliance with the Buy America requirements.

In order to verify compliance with Buy America's domestic content requirements, the recipient will need to undertake an analysis that accounts for the costs of all components and subcomponents, both foreign and domestic, consistent with 49 CFR § 661.11and subcomponents. The Domestic Content Calculation must demonstrate compliance with the requirement that the <u>cost</u> of components and subcomponents produced in the United States equals or exceeds the required minimum percentage of the <u>cost</u> of all components and subcomponents.<sup>29</sup> Section 4.3.3 provides guidance to calculate the Vehicle Material Total Cost, which is the summation of all component costs and is the proper value that must be used in calculating the percentage of domestic content of the vehicle consistent with 49 CFR § 661.11.

FTA has observed that some recipients and vendors, or their agents or auditors, are calculating the domestic content amount by dividing the total costs of the domestic components by the estimated value of the vehicle, found by subtracting certain costs from the Contract Total Price of the vehicle. This calculation is not consistent with 49 CFR § 661.11 and fails to demonstrate compliance.

#### 4.1. Vehicle Level Domestic Content Calculations

Calculation of the domestic content is conducted at two levels: the vehicle level, and the component level. Each is somewhat different in nature.

- a) At the vehicle level The rolling stock manufacturer must demonstrate that the cost of components produced in the U.S. is equal to or more than the required minimum percentage of the cost of all components on the vehicle.<sup>30</sup> The recipient must verify the manufacturer's information.
- b) At the component level For a component to be of domestic origin, more than 60 percent<sup>31</sup> of its subcomponents, by cost, must be manufactured in the United States,

<sup>30</sup> 49 U.S.C. § 5323(j)(2).

<sup>&</sup>lt;sup>29</sup> 49 U.S.C. 5323(j)(2).

<sup>&</sup>lt;sup>31</sup> As the domestic content percentage increases in FY 2018 and FY 2020, the minimum domestic content of subcomponents will also increase, to more than 65 percent in FY 2018 and more than 70 percent in FY 2020.

and the manufacture of the component must occur in the U.S.<sup>32</sup> If the component is deemed to be of domestic origin, then the manufacturer receives credit for the entire cost of the component (including the foreign subcomponents). If a component contains less than the minimum domestic content percentage, i.e., is of foreign origin, then the manufacturer only receives domestic credit for those subcomponents manufactured in the U.S.

# 4.2. Domestic Content - Relevant Definitions

For vehicle components to be considered domestic, the subcomponents, by cost, must be the required minimum percentage of domestic origin, and manufacturing must occur in the U.S. Therefore, when evaluating domestic content, it is important to have a full understanding of the manufacturer of the component, its country of origin, and the percent cost of its **subcomponents** relative to the cost of the component.

# 4.2.1. Component/Subcomponent

A component, as defined in 49 CFR § 661.11(c), is any article, material, or supply, whether manufactured or unmanufactured, that is directly incorporated into an end product at the final assembly location. A component may be manufactured at the final assembly location if the manufacturing process to produce the component is an activity separate and distinct from the final assembly of the end product.<sup>33</sup> Typical components of buses and rail rolling stock are listed in Appendices B and C to 49 CFR § 661.11; these illustrative lists are not intended to be exhaustive. Also, 49 CFR § 661.11(t), (u), and (v) list specific components that make-up train control (t), communication equipment (u), and traction power equipment (v).

For a component to be of domestic origin, more that 60 percent of the subcomponents of that component, by cost, must be of domestic origin, and the manufacture of the component must take place in the United States. 34 Under FTA's September 1, 2016 policy guidance implementing the increased domestic content included in the FAST Act, the requirement for domestic subcomponents will increase accordingly. Therefore, if the domestic content for the vehicle is more than 65 percent, then a component must contain more than 65 percent of domestic subcomponents. If a component is determined to be domestic, its entire cost may be used in calculating the cost of domestic content of the vehicle.<sup>35</sup> If a component is determined to be foreign, only the cost of U.S. manufactured subcomponents, if any, may be used in calculating the cost of domestic content of the vehicle.

<sup>32 49</sup> CFR § 661.11(g).

<sup>33</sup> See 49 CFR § 661.11(d). 34 49 CFR § 661.11(g).

<sup>&</sup>lt;sup>35</sup> See 49 CFR § 661.11(g).

In contrast, a subcomponent is any article, material, or supply, whether manufactured or unmanufactured, that is one step removed from a component in the manufacturing process and that is incorporated directly into a component. 49 CFR § 661.11(f). A subcomponent need only be manufactured in the U.S. to be considered domestic. 49 CFR § 661.11(h). If a subcomponent manufactured in the U.S. is exported for inclusion in a component that is manufactured outside the U.S. and it receives tariff exemptions under the procedures set forth in 19 CFR 10.11 through 10.24, the subcomponent retains its domestic identity and can be included in the calculation of the domestic content of an end product even if such a subcomponent represents less than 60 percent of the cost of a particular component. 49 CFR §661.11(i)

If a subcomponent manufactured in the United States is exported for inclusion in a component manufactured outside the United States and it does not receive tariff exemption under the procedures set forth in 19 CFR 10.11 through 10.24, the subcomponent loses its domestic identity and cannot be included in the calculation of the domestic content of an end product. 49 CFR § 661.11(j)

Finally, except as provided in 49 U.S.C. § 5323(j)(5), raw materials produced in the United States and then exported for incorporation into a component are not considered to be a subcomponent for the purpose of calculating domestic content. 49 CFR § 661.11(k). The value of such raw materials is to be included in the cost of the foreign component.

# 4.2.2. Lists of Typical Components

The manufacturer's list of typical components for rail rolling stock is in Appendix C to 49 CFR part § 661.11, and includes:

car shells brake controls

engines foundation brake equipment

main transformer articulation assemblies

pantographs train control systems

traction motors window assemblies

propulsion gear boxes communication equipment

interior linings lighting, seating

acceleration and braking doors

resistors

propulsion controls

low voltage auxiliary power wheelchair lifts and ramps to make the vehicle accessible supplies to persons with disabilities

air conditioning equipment couplers and draft gear

air brake compressors trucks

door actuators and controls

journal bearings axles

diagnostic equipment third rail pick-up equipment

The manufacturer's typical list of components for buses is in Appendix B to 49 CFR part § 661.11:

car body shells

engines

transmissions

front axle assemblies

rear axle assemblies

drive shaft assemblies

front suspension assemblies

rear suspension assemblies

air compressor and pneumatic systems

generator/alternator and

electrical systems

steering system assemblies

front and rear air brake

assemblies

air conditioning compressor

assemblies

air conditioning evaporator/ condenser assemblies heating systems

passenger seats

driver's seat assemblies

window assemblies

entrance and exit door

assemblies

door control systems

destination sign assemblies

interior lighting assemblies

front and rear end cap

assemblies

front and rear bumper

assemblies

specialty steel (structural steel tubing, etc.) aluminum extrusions, aluminum, steel or fiberglass exterior panels

interior trim, flooring, and

floor coverings

At a minimum, the items listed in Appendices B and C of 49 CFR § 661.11 are components for domestic content calculation purposes. If there are new technologies that supersede the items in Appendices B and C of 49 CFR § 661.11, these should be reviewed to verify that the component/subcomponent designations applied for that project are consistent with the regulations. If there is any question of compliance, recipients should consult with FTA.

# 4.2.3. Calculating Costs of Components and Subcomponents

The domestic content calculation is based on *costs*, not the contract price. The total cost of all components of the rolling stock will not be a number that can be derived from the bidder's bid price or final contract price.

As part of the pre-award and post-delivery audit requirements, the recipient must certify that it "is satisfied that the rolling stock to be purchased" (pre-award audit) or "received" (post-delivery) "meets the requirements of [49 U.S.C. § 5323(j)(2)(C)] after having reviewed itself or through an audit prepared by someone other than the manufacturer or its agent documentation provided by the manufacturer, which lists:"

Pre-Award Audit Documentation	Post-Delivery Audit Documentation
(1) Component and subcomponent parts of the rolling stock to be purchased identified by manufacturer of the parts, their country of origin, and costs; and	(1) Components and subcomponent parts of the rolling stock identified by manufacturer of the parts, their country of origin, and costs; and
(2) The location of the final assembly point for the rolling stock, including a description of the activities that will take place at the final assembly point and the cost of final assembly.	(2) The actual location of the final assembly point for the rolling stock including a description of the activities which took place at the final assembly point and the cost of the final assembly.

The methodology for calculating the costs of components and subcomponets is set forth in FTA's Buy America regulation at 49 CFR § 661.11. Both manufacturers and Buy America auditers need to understand section 661.11 in order to calculate domestic content for rolling stock.

Rolling stock will include components and subcomponents from one of two sources: (1) outside suppliers; or (2) the bidder. Section § 661.11(m) sets forth the basic methodology for calculating costs for components or subcomponents received from suppliers or manfuctured by the bidder:

- (1) The cost of a component or a subcomponent is the price that a bidder or offeror must pay to a subcontractor or supplier for that component or subcomponent. Transportation costs to the final assembly location must be included in calculating the cost of foreign components and subcomponents.
- (2) If a component or subcomponent is manufactured by the bidder or offeror, the cost of the component is the cost of labor and materials incorporated into the component or subcomponent, an allowance for profit, and the administrative and overhead costs attributable to that component or subcomponent under normal accounting principles.

For the post-delivery audit, the actual cost, not the bid price, of a component is to be considered in calculating domestic content. Thus, the cost for the component would be the purchase price paid by the bidder (i.e., vehicle manufacturer) to the component or subcomponent supplier. Similarly, the cost for the subcomponent would be the actual purchase price paid by the component supplier to the subcomponent supplier. If the component is manufactured by the bidder, the cost of the component is calculated by adding the cost of labor and materials incorporated into the component or subcomponent, an allowance for profit, and the administrative and overhead costs attributable to that component or subcomponent under normal accounting principles.

# 4.2.4 Final Assembly

Manufacturing, as discussed above, refers to the activities that transform the subcomponents into a new and functionally different component.<sup>36</sup> A component may be manufactured at the final assembly location if the manufacturing process to produce the component is an activity separate and distinct from the final assembly of the end product.<sup>37</sup> The allowable costs for components manufactured by the bidder or offeror (i.e., the OEM) are set forth in 49 CFR § 661.11(m)(2).

Final assembly, in contrast, is the creation of the end product from individual elements brought together for that purpose through application of manufacturing processes. Final assembly activities for rail cars and buses are set forth in Appendix D to 49 CFR § 661.11. Labor costs involved in final assembly shall not be included in calculating component costs.

In the case of a rolling stock vehicle, while the car body is itself a component of the completed vehicle, it is also the component onto which the other components will be installed. Therefore, each item installed directly onto the car body is a component.

In the case of a railcar, the truck is likewise a component, as it is the structure onto which the individual components will be installed. Therefore, each item installed directly onto the truck (frame) would be a component.

The same rationale is applied for other equipment, such as propulsion equipment and communication equipment. In each case, the individual items that are installed on the vehicle are components.

## 4.3. Domestic Content Worksheet

This section illustrates one method for calculating domestic content of rolling stock. The sample spreadsheet is intended to allow a standard presentation of domestic content calculations for bus and rail vehicles, as well as facilitate verification that:

- All components are accounted for in the domestic content calculation and all of the vehicle's domestic and foreign content is accounted for.
- The cost of components and subcomponents are calculated in accordance with 49 CFR § 661.11.
- Each component has been correctly identified as either domestic or foreign based on the supplier identification and the manufacturing location.
- Each subcomponent has been correctly identified as either domestic or foreign based on the supplier identification and the manufacturing location.

<sup>36</sup> See 49 CFR § 661.11(e). <sup>37</sup> See 49 CFR § 661.11(d).

### 4.3.1. Domestic Content Worksheet Instructions

Below is a sample of a Domestic Content Worksheet with step-by-step instructions for filling in the worksheet.<sup>38</sup>

Component /Subcomponent		Manufacturing	Manufacturing Location	Component and Materia	d Subcomponent al Costs		% of Component onent Total %			Component % of Co	Vehicle Material sts
Component	Supplier Name	Location (U.S. or Foreign)	(if U.S City & State; if Foreign - City & Country)	U.S.	Foreign	U.S.	Foreign	U.S. Content by Cost	Foreign Content by Cost	U.S.	Foreign
Component 1											
Component 1	OEM	U.S.	Any town, State								
Subcomponent 1.1	OEM	U.S.	Any town, State	\$20,000.00	\$0.00	6.6%	0.0%				
Subcomponent 1.2	OEM	U.S.	Any town, State	\$30,000.00	\$0.00	9.9%	0.0%				
Subcomponent 1.3	Sub Supplier 1.3	U.S.	Any town, State	\$60,000.00	\$0.00	19.8%	0.0%				i
Subcomponent 1.4	Sub Supplier 1.3	Foreign	Any city, Country	\$0.00	\$85,000.00	0.0%	28.1%				i
Subcomponent 1.5	Sub Suppler 1.5	U.S.	Any town, State	\$105,000.00	\$0.00	34.7%	0.0%				i
OEM Labor/Overhead/profit	OEM	U.S.	Any town, State	\$3,000.00	\$0.00	1.0%	0.0%				i .
Component 1 - U.S. & Foreign Costs Subtotal				\$218,000.00	\$85,000.00	71.9%	28.1%				i
Component 1 Total Cost	per 49 CFR § 661.11(m,	(2)	\$303,000.00					\$303,000.00	\$0.00	48.48%	0.00%
Component 2											
Component 2	Component Supplier	Foreign	Any city, Country								
Subcomponent 2.1	Sub Supplier 2.1	U.S. w/tariff exempt	Any town, State	\$50,000,00	\$0.00	29.9%	0.0%				
Subcomponent 2.2	Sub Supplier 2.2	U.S. w/tariff exempt	Any town, State	\$10,000,00	\$0.00	6.0%	0.0%				
Subcomponent 2.3	Sub Supplier 2.3	Foreign	Any city, Country	\$0.00	\$55,000.00	0.0%	32.9%				
Subcomponent 2.4	Sub Supplier 2.3	Foreign	Any city, Country	\$0.00	\$25,000,00	0.0%	15.0%				
Subcomponent 2.5	Sub Supplier 2.4	Foreign	Any city, Country	\$0.00	\$8,000.00	0.0%	4.8%				
Subcomponent 2.6	Sub Supplier 2.5	Foreign	Any city, Country	\$0.00	\$9,000.00	0.0%	5.4%				
Foreign Component manuf cost	Component Supplier	Foreian	Any city, Country	\$0.00	\$7,000,00	0.0%	4.2%				
Foreign Component transp cost	Component Supplier	Foreign	Any city, Country	\$0.00	\$3,000.00	0.0%	1.8%				
Component 2 - U.S. & Foreign Costs Subtotal				\$60,000.00	\$107,000.00	35.9%	64.1%				
Component 2 Total Cost	per 49 CFR § 661.11(m	)(1)	\$167,000.00					\$60,000.00	\$107,000.00	9.60%	37.92%
Component 3											
Component 3	Component Supplier	U.S.	Any town, State								
Subcomponent 3.1	Sub Supplier 3.1	Foreign	Any city, Country	\$0.00	\$50,000.00	0.0%	32.3%				
Subcomponent 3.2	Sub Supplier 3.2	U.S.	Any town, State	\$15,000.00	\$0.00	9.7%	0.0%				
Subcomponent 3.3	Sub Supplier 3.3	Foreign	Any city, Country	\$0.00	\$55,000,00	0.0%	35.5%				
Subcomponent 3.4	Sub Supplier 3.4	Foreign	Any city, Country	\$0.00	\$25,000.00	0.0%	16.1%				
U.S. Component manufacturing costs	Component Supplier	U.S.	Any town, State	\$10,000.00	\$0.00	6.5%	0.0%				
Component 3 - U.S. & Foreign Costs Subtotal				\$25,000.00	\$130,000.00	16.1%	83.9%				
Component 3 Total Cost	per 49 CFR § 661.11(I)	and (m)(1)	\$155,000.00					\$25,000.00	\$130,000.00	4.00%	20.80%
Vehicle Material Subtotals U.S. & Foreign								\$388,000.00	\$237,000.00	62.08%	37.92%
Vehicle Material Total Cost (Total Cost of all Co	ehicle Material Total Cost (Total Cost of all Components)				00.00						

For simplicity, the vehicle consists of three components, one of which is manufactured by the bidder (i.e., the OEM), one is of foreign manufacture, and one is manufactured by a U.S. supplier. Those cells that are colored gray or white are intended for input based on documentation provided by the manufacturer. Other cells highlighted in yellow are calculated based on the information input to the worksheet.

Component 1 is manufactured by the OEM, contains more than 60% domestic content by cost, and is manufactured in the United States. Thus, the component is of domestic origin and the entire cost of the component may be used to calculate the domestic content of the vehicle. 49 CFR § 661.11(g). Because Component 1 is manufactured by the OEM, the cost of the component includes the labor and materials incorporated into the component, an allowance for profit and the administrative and overhead costs attributable to that component or subcomponent under normal accounting principles. 49 CFR § 661.11(m)(2)

<sup>&</sup>lt;sup>38</sup> The worksheet here reflects a domestic content requirement of more than 60%. Pursuant to 49 U.S.C. 5329(j)(2)(C), the domestic content percentage will increase starting in FY 2018. This worksheet provides an example of calculating the percentage of domestic content and uses the greater than 60% domestic content percentage requirement in place at the time of the FAST Act's passage. The worksheet can be modified to accommodate vehicles subject to higher domestic content.

Component 2 is manufactured overseas, contains less than 60% domestic content, and the U.S. subcomponents contained in the component received a tariff exemption. Thus, the U.S. subcomponents retain their domestic identity and can be included in the calculation of the domestic content of the vehicle. The manufacturing and transportation costs are included in calculating the cost of the foreign component. 49 CFR § 661.11(i), (m)(1).

Component 3 is manufactured in the U.S., but contains less than 60% domestic content. If a component is manufactured in the United States, but contains less than 60 percent domestic subcomponents, by cost, the cost of the domestic subcomponents and the cost of manufacturing the component may be included in the calculation of the domestic content of the end product. 49 CFR § 661.11(I).

### STEP 1

In Component/Subcomponent column, fill in all vehicle components. The list of items that typically would be considered components of rolling stock identified in Appendices B and C to 49 CFR part § 661.11 is not all-inclusive. Identify components and subcomponents by name and/or part number traceable to the procurement. For each component, fill in the corresponding subcomponents as applicable. Identify subcomponents as separate line items. For components manufactured by the OEM, include a line for OEM labor/overhead/profit per section 661.11(m)(2). In Supplier Name column, fill in supplier's name for each component and corresponding subcomponent(s).

Component /Subcomponent			Manufacturing	Component and	Subcomponent	Subcomponent	% of Component			Component % of	Vehicle Mater
omponent / Subcomponent		Manufacturing	Location	Materia	al Costs	and Compo	nent Total %			Co	osts
Component	Supplier Name	Location (U.S. or Foreign)	(if U.S City & State; if Foreign - City & Country)	U.S.	Foreign	U.S.	Foreign	U.S. Content by Cost	Foreign Content by Cost	U.S.	Foreign
Component 1											
Component 1	OEM	U.S.	Any town, State								
Subcomponent 1.1	OEM	U.S.	Any town, State	\$20,000.00	\$0.00	6.6%	0.0%				
Subcomponent 1.2	OEM	U.S.	Any town, State	\$30,000.00	\$0.00	9.9%	0.0%				
Subcomponent 1.3	Sub Supplier 1.3	U.S.	Any town, State	\$60,000.00	\$0.00	19.8%	0.0%				
Subcomponent 1.4	Sub Supplier 1.3	Foreign	Any city, Country	\$0.00	\$85,000.00	0.0%	28.1%				
Subcomponent 1.5	Sub Suppler 1.5	U.S.	Any town, State	\$105,000.00	\$0.00	34.7%	0.0%				
OEM Labor/Overhead/profit	OEM	U.S.	Any town, State	\$3,000.00	\$0.00	1.0%	0.0%				
Component 1 - U.S. & Foreign Costs Subtotal				\$218,000.00	\$85,000.00	71.9%	28.1%				
Component 1 Total Cost	per 49 CFR § 661.11(m)	(2)	\$303,000.00					\$303,000.00	\$0.00	48.48%	0.00%
omponent 2											
Component 2	Component Supplier	Foreign	Any city, Country								
Subcomponent 2.1	Sub Supplier 2.1	U.S. w/tariff exempt	Any town. State	\$50,000,00	\$0.00	29.9%	0.0%				
Subcomponent 2.2	Sub Supplier 2.2	U.S. w/tariff exempt	Any town, State	\$10,000.00	\$0.00	6.0%	0.0%				
Subcomponent 2.3	Sub Supplier 2.3	Foreign	Any city, Country	\$0.00	\$55,000.00	0.0%	32.9%				
Subcomponent 2.4	Sub Supplier 2.3	Foreian	Any city, Country	\$0.00	\$25,000.00	0.0%	15.0%				
Subcomponent 2.5	Sub Supplier 2.4	Foreian	Any city, Country	\$0.00	\$8,000.00	0.0%	4.8%				
Subcomponent 2.6	Sub Supplier 2.5	Foreign	Any city, Country	\$0.00	\$9,000.00	0.0%	5.4%				
Foreign Component manuf cost	Component Supplier	Foreian	Any city, Country	\$0.00	\$7,000.00	0.0%	4.2%				
Foreign Component transp cost	Component Supplier	Foreian	Any city, Country	\$0.00	\$3,000.00	0.0%	1.8%				
	Component Supplier	roreign	Any dry, country	,	7.7						
Component 2 - U.S. & Foreign Costs Subtotal				\$60,000.00	\$107,000.00	35.9%	64.1%				
Component 2 Total Cost	per 49 CFR § 661.11(m	(1)	\$167,000.00					\$60,000.00	\$107,000.00	9.60%	37.92%
omponent 3											
Component 3	Component Supplier	U.S.	Any town, State								
Subcomponent 3.1	Sub Supplier 3.1	Foreian	Any city. Country	\$0.00	\$50,000.00	0.0%	32.3%				
Subcomponent 3.2	Sub Supplier 3.2	U.S.	Any town, State	\$15,000.00	\$0.00	9.7%	0.0%				
Subcomponent 3.3	Sub Supplier 3.3	Foreian	Any city, Country	\$0.00	\$55,000.00	0.0%	35.5%				
Subcomponent 3.4	Sub Supplier 3.4	Foreign	Any city, Country	\$0.00	\$25,000.00	0.0%	16.1%				
U.S. Component manufacturing costs	Component Supplier	U.S.	Any town, State	\$10,000.00	\$25,000.00	6.5%	0.0%				
Component 3 - U.S. & Foreign Costs Subtotal	сотронен заррнег	0.5.	Any town, state	\$25,000.00	\$130,000.00	16.1%	83.9%				
Component 3 - 0.3. & Poreign Costs Subtotal	per 49 CFR § 661.11(I)	and (m)(1)	\$155,000.00	\$23,000.00	\$130,000.00	10.170	03.370	\$25,000.00	\$130,000.00	4.00%	20.80%
•											
chicle Material Subtotals U.S. & Foreign								\$388,000.00	\$237,000.00	62.08%	37.92%
hicle Material Total Cost (Total Cost of all Components)				\$625.0	00.00						

## STEP 2

In the first *Manufacturing Location* column, for each component enter U.S. or Foreign. For each subcomponent, enter U.S., U.S. with tariff exemption, or Foreign.

Component /Subcomponent		Manufacturing Location (U.S. or Foreign)	Manufacturing Location	Component and Subcomponent Material Costs			% of Component nent Total %			Component % of Vehicle Material Costs	
Component	Supplier Name		(if U.S City & State; if Foreign - City & Country)	U.S.	Foreign	U.S.	Foreign	U.S. Content by Cost	Foreign Content by Cost	U.S.	Foreign
Component 1											
Component 1	OEM	U.S.	Any town, State								
Subcomponent 1.1	OEM	U.S.	Any town, State	\$20,000.00	\$0.00	6.6%	0.0%				
Subcomponent 1.2	OEM	U.S.	Any town, State	\$30,000.00	\$0.00	9.9%	0.0%				
Subcomponent 1.3	Sub Supplier 1.3	U.S.	Any town, State	\$60,000.00	\$0.00	19.8%	0.0%				
Subcomponent 1.4	Sub Supplier 1.3	Foreign	Any city, Country	\$0.00	\$85,000.00	0.0%	28.1%				
Subcomponent 1.5	Sub Suppler 1.5	U.S.	Any town, State	\$105,000.00	\$0.00	34.7%	0.0%				
OEM Labor/Overhead/profit	OEM	U.S.	Any town, State	\$3,000.00	\$0.00	1.0%	0.0%				
Component 1 - U.S. & Foreign Costs Subtotal				\$218,000.00	\$85,000.00	71.9%	28.1%				
Component 1 Total Cost	per 49 CFR § 661.11(m)	(2)	\$303,000.00					\$303,000.00	\$0.00	48.48%	0.00%

### STEP 3

In the second *Manufacturing Location* column for each component and corresponding subcomponent(s), fill in the City and State for U.S. or the City and Country for Foreign.

Component /Subcomponent		Manufacturing	Manufacturing Location	Component and Materia			% of Component nent Total %			Component % of	Vehicle Material sts
Component	Supplier Name	Location (U.S. or Foreign)	(if U.S City & State; if Foreign - City & Country)	U.S.	Foreign	U.S.	Foreign	U.S. Content by Cost	Foreign Content by Cost	U.S.	Foreign
Component 1											
Component 1	OEM	U.S.	Any town, State								
Subcomponent 1.1	OEM	U.S.	Any town, State	\$20,000.00	\$0.00	6.6%	0.0%				
Subcomponent 1.2	OEM	U.S.	Any town, State	\$30,000.00	\$0.00	9.9%	0.0%				
Subcomponent 1.3	Sub Supplier 1.3	U.S.	Any town, State	\$60,000.00	\$0.00	19.8%	0.0%				
Subcomponent 1.4	Sub Supplier 1.3	Foreign	Any city, Country	\$0.00	\$85,000.00	0.0%	28.1%				
Subcomponent 1.5	Sub Suppler 1.5	U.S.	Any town, State	\$105,000.00	\$0.00	34.7%	0.0%				
OEM Labor/Overhead/profit	OEM	U.S.	Any town, State	\$3,000.00	\$0.00	1.0%	0.0%				
Component 1 - U.S. & Foreign Costs Subtotal				\$218,000.00	\$85,000.00	71.9%	28.1%				
Component 1 Total Cost	per 49 CFR § 661.11(m)	(2)	\$303,000.00					\$303,000.00	\$0.00	48.48%	0.00%

#### STEP 4

In Component Total Cost row, fill in the component total cost. If the component was manufactured by the OEM, the cost of the component will include an allowance for profit and the administrative and overhead costs attributable to that component under normal accounting principles. 49 CFR § 661.11(m)(2). If the component was manufactured by a third-party supplier, then the component total cost is the actual cost of component. If the component is manufactured overseas, the cost of the component is what the OEM pays for it, plus transportation costs to the final assembly location. 49 CFR § 661.11(m)(1). If a component is manufactured in the United States, but contains less than the minimum domestic content, by cost, the cost of the domestic subcomponents and the cost of manufacturing the component may be included in the calculation of the domestic content of the end product. 49 CFR § 661.11(l).

Component /Subcomponent		Manufacturing	Manufacturing Location	Component and Materia			% of Component nent Total %			Component % of Cos	
Component	Supplier Name	(U.S. or Foreign)	(if U.S City & State; if Foreign - City & Country)	U.S.	Foreign	U.S.	Foreign	U.S. Content by Cost	Foreign Content by Cost	U.S.	Foreign
Component 1											
Component 1	OEM	U.S.	Any town, State								
Subcomponent 1.1	OEM	U.S.	Any town, State	\$20,000.00	\$0.00	6.6%	0.0%				
Subcomponent 1.2	OEM	U.S.	Any town, State	\$30,000.00	\$0.00	9.9%	0.0%				
Subcomponent 1.3	Sub Supplier 1.3	U.S.	Any town, State	\$60,000.00	\$0.00	19.8%	0.0%				
Subcomponent 1.4	Sub Supplier 1.3	Foreign	Any city, Country	\$0.00	\$85,000.00	0.0%	28.1%				
Subcomponent 1.5	Sub Suppler 1.5	U.S.	Any town, State	\$105,000.00	\$0.00	34.7%	0.0%				
OEM Labor/Overhead/profit	OEM	U.S.	Any town, State	\$3,000.00	\$0.00	1.0%	0.0%				
Component 1 - U.S. & Foreign Costs Subtotal				\$218,000.00	\$85,000.00	71.9%	28.1%				
Component 1 Total Cost	per 49 CFR § 661.11(m)	(2)	\$303,000.00					\$303,000.00	\$0.00	48.48%	0.00%

### STEP 5

In Component and Subcomponent Material Costs columns:

a) For each component, enter the dollar amount of the corresponding subcomponent(s) under the *U.S. and Foreign* sub-columns, on the designated row(s). The cost of each subcomponent is the price the OEM must pay to a subcontractor or supplier for that subcomponent. Transportation costs to the final assembly location must be included in calculating the cost of foreign subcomponents. 49 CFR § 661.11(m)(1). If a component or subcomponent is manufactured by the bidder or offeror, an allowance for profit, and the administrative and overhead costs attributable to that component or subcomponent under normal accounting principles may be included. 49 CFR § 661.11(m)(2)

Component /Subcomponent		Manufacturing Location (U.S. or Foreign)	Manufacturing Location	Component and Materia		Subcomponent 9	% of Component nent Total %			Component % of	
Component	Supplier Name		(if U.S City & State; if Foreign - City & Country)	U.S.	Foreign	U.S.	Foreign	U.S. Content by Cost	Foreign Content by Cost	U.S.	Foreign
Component 1			_								
Component 1	OEM	U.S.	Any town, State								
Subcomponent 1.1	OEM	U.S.	Any town, State	\$20,000.00	\$0.00	6.6%	0.0%				
Subcomponent 1.2	OEM	U.S.	Any town, State	\$30,000.00	\$0.00	9.9%	0.0%				
Subcomponent 1.3	Sub Supplier 1.3	U.S.	Any town, State	\$60,000.00	\$0.00	19.8%	0.0%				
Subcomponent 1.4	Sub Supplier 1.3	Foreign	Any city, Country	\$0.00	\$85,000.00	0.0%	28.1%				
Subcomponent 1.5	Sub Suppler 1.5	U.S.	Any town, State	\$105,000.00	\$0.00	34.7%	0.0%				
OEM Labor/Overhead/profit	OEM	U.S.	Any town, State	\$3,000.00	\$0.00	1.0%	0.0%				
Component 1 - U.S. & Foreign Costs Subtotal				\$218,000.00	\$85,000.00	71.9%	28.1%				
Component 1 Total Cost	per 49 CFR § 661.11(m)	(2)	\$303,000.00					\$303,000.00	\$0.00	48.48%	0.00%

b) Compute the material subtotal cost for each component by adding the cost of all of its U.S. and Foreign corresponding subcomponents, and enter on the row designated *Component Material Subtotal* under the *U.S. and Foreign* sub-columns as applicable.

Component /Subcomponent		Manufacturing Location (U.S. or Foreign)  Manufacturing Location (if U.S. ~ City & State; if Foreign ~ City & Country)	Component and Materia		Subcomponent 9	% of Component nent Total %			Component % of Vehicle Material Costs		
Component	Supplier Name		if Foreign - City &	U.S.	Foreign	U.S.	Foreign	U.S. Content by Cost	Foreign Content by Cost	U.S.	Foreign
Component 1											
Component 1	OEM	U.S.	Any town, State								
Subcomponent 1.1	OEM	U.S.	Any town, State	\$20,000.00	\$0.00	6.6%	0.0%				
Subcomponent 1.2	OEM	U.S.	Any town, State	\$30,000.00	\$0.00	9.9%	0.0%				
Subcomponent 1.3	Sub Supplier 1.3	U.S.	Any town, State	\$60,000.00	\$0.00	19.8%	0.0%				
Subcomponent 1.4	Sub Supplier 1.3	Foreign	Any city, Country	\$0.00	\$85,000.00	0.0%	28.1%				
Subcomponent 1.5	Sub Suppler 1.5	U.S.	Any town, State	\$105,000.00	\$0.00	34.7%	0.0%				
OEM Labor/Overhead/profit	OEM	U.S.	Any town, State	\$3,000.00	\$0.00	1.0%	0.0%				
Component 1 - U.S. & Foreign Costs Subtotal				\$218,000.00	\$85,000.00	71.9%	28.1%				
Component 1 Total Cost	per 49 CFR § 661.11(m)	(2)	\$303,000.00					\$303,000.00	\$0.00	48.48%	0.00%

## STEP 6

In Subcomponent % of Component and Component Total % columns:

a) For each component, compute the material cost percentage of each of its U.S. and Foreign corresponding subcomponents, and enter on the designated rows under *U.S.* and *Foreign* sub-columns as applicable. This percentage is calculated by taking the cost of the subcomponent and dividing it by the total cost of the component.

Subcomponent Domestic Content Calculation	Subcomponent Foreign Content Calculation
\$20,000 (Subcomponent 1.1)	\$85,000 (Subcomponent 1.4)
\$303,000 (Component 1 Material Subtotal)	\$303,000 (Component 1 Material Subtotal)
6.6% U.S. Domestic Content	28.1% Foreign Content

b) Calculate the total percentage by cost of U.S. content by dividing the *U.S.* Subcomponents Subtotal into Component Total Cost. Calculate the total percentage by cost of foreign content by dividing the Foreign Subcomponents Subtotal into Component Total Cost. These two numbers should total 100%.

Total Domestic Content Calculation	Total Foreign Content Calculation
\$218,000 (U.S. Subcomponents Subtotal)	\$85,000 (Foreign Subcomponents Subtotal)
\$303,000 (Component 1 Material Subtotal)	\$303,000 (Component 1 Material Subtotal)
71.9% U.S. Domestic Content	28.1% Foreign Content

Component /Subcomponent		Manufacturing	Manufacturing Location	Component and Materia		•	% of Component nent Total %			Component % of Cos	
Component	Supplier Name	Location (U.S. or Foreign)	(if U.S City & State; if Foreign - City & Country)	U.S.	Foreign	U.S.	Foreign	U.S. Content by Cost	Foreign Content by Cost	U.S.	Foreign
Component 1											
Component 1	OEM	U.S.	Any town, State								
Subcomponent 1.1	OEM	U.S.	Any town, State	\$20,000.00	\$0.00	6.6%	0.0%				
Subcomponent 1.2	OEM	U.S.	Any town, State	\$30,000.00	\$0.00	9.9%	0.0%				
Subcomponent 1.3	Sub Supplier 1.3	U.S.	Any town, State	\$60,000.00	\$0.00	19.8%	0.0%				
Subcomponent 1.4	Sub Supplier 1.3	Foreign	Any city, Country	\$0.00	\$85,000.00	0.0%	28.1%				
Subcomponent 1.5	Sub Suppler 1.5	U.S.	Any town, State	\$105,000.00	\$0.00	34.7%	0.0%				
OEM Labor/Overhead/profit	OEM	U.S.	Any town, State	\$3,000.00	\$0.00	1.0%	0.0%				
Component 1 - U.S. & Foreign Costs Subtotal				\$218,000.00	\$85,000.00	71.9%	28.1%				
Component 1 Total Cost	per 49 CFR § 661.11(m)	(2)	\$303,000.00					\$303,000.00	\$0.00	48.48%	0.00%

## STEP 7

In *U.S. Content by Cost* column and on the row designated *Component 1 Total Cost* for each component, enter the total U.S. and Foreign material costs for that component.

a) If the component is of domestic origin (manufactured in the U.S.) and its subcomponents equal the required minimum percentage (U.S. content >60% (or 65% in FY 18 and 19, or 70% in FY20), the whole component by cost is domestic.

Component /Subcomponent	Supplier Name	Manufacturing	Manufacturing Location	Component and Materia			% of Component nent Total %			Component % of Vehicle Material Costs	
Component	Supplier Name	Location (U.S. or Foreign)	(if U.S City & State; if Foreign - City & Country)	U.S.	Foreign	U.S.	Foreign	U.S. Content by Cost	Foreign Content by Cost	U.S.	Foreign
Component 1											
Component 1	OEM	U.S.	Any town, State								
Subcomponent 1.1	OEM	U.S.	Any town, State	\$20,000.00	\$0.00	6.6%	0.0%				
Subcomponent 1.2	OEM	U.S.	Any town, State	\$30,000.00	\$0.00	9.9%	0.0%				
Subcomponent 1.3	Sub Supplier 1.3	U.S.	Any town, State	\$60,000.00	\$0.00	19.8%	0.0%				
Subcomponent 1.4	Sub Supplier 1.3	Foreign	Any city, Country	\$0.00	\$85,000.00	0.0%	28.1%				
Subcomponent 1.5	Sub Suppler 1.5	U.S.	Any town, State	\$105,000.00	\$0.00	34.7%	0.0%				
OEM Labor/Overhead/profit	OEM	U.S.	Any town, State	\$3,000.00	\$0.00	1.0%	0.0%				
Component 1 - U.S. & Foreign Costs Subtotal				\$218,000.00	\$85,000.00	71.9%	28.1%				
Component 1 Total Cost	per 49 CFR § 661.11(m)	(2)	\$303,000.00					\$303,000.00	\$0.00	48.48%	0.00%

b) If the component is domestic and its subcomponents contain less than the required domestic minimum percentage, then add the total of only U.S. subcomponent material costs as well as the cost to manufacture the component, on the row *Component 3-U.S.* & Foreign Costs Subtotal to the column U.S. Content by Cost;

Component /Subcomponent		Manufacturing	Manufacturing Location		d Subcomponent al Costs		% of Component nent Total %				Component % of Vehicle Material Costs	
Component	Supplier Name	Location (U.S. or Foreign)	(if U.S City & State; if Foreign - City & Country)	U.S.	Foreign	U.S.	Foreign	U.S. Content by Cost	Foreign Content by Cost	U.S.	Foreign	
Component 3												
Component 3	Component Supplier	U.S.	Any town, State									
Subcomponent 3.1	Sub Supplier 3.1	Foreign	Any city, Country	\$0.00	\$50,000.00	0.0%	32.3%					
Subcomponent 3.2	Sub Supplier 3.2	U.S.	Any town, State	\$15,000.00	\$0.00	9.7%	0.0%					
Subcomponent 3.3	Sub Supplier 3.3	Foreign	Any city, Country	\$0.00	\$55,000.00	0.0%	35.5%					
Subcomponent 3.4	Sub Supplier 3.4	Foreign	Any city, Country	\$0.00	\$25,000.00	0.0%	16.1%					
U.S. Component manufacturing costs	Component Supplier	U.S.	Any town, State	\$10,000.00	\$0.00	6.5%	0.0%					
Component 3 - U.S. & Foreign Costs Subtotal				\$25,000.00	\$130,000.00	16.1%	83.9%					
Component 3 Total Cost	per 49 CFR § 661.11(I)	and (m)(1)	\$155,000.00				$\rightarrow$	\$25,000.00	\$130,000.00	4.00%	20.80%	

c) If the component is foreign and the U.S. subcomponents being incorporated into the foreign component receive a tariff exemption, <sup>39</sup> then add the total of only U.S. subcomponent material costs on the row *Component 2 Material Subtotal*, to the column *U.S. Content by Cost*.

Component /Subcomponent		Manufacturing	Manufacturing Location	Component and Materia			% of Component nent Total %			Component % of Vehicle Costs	
Component	Supplier Name	Location (U.S. or Foreign)	(if U.S City & State; if Foreign - City & Country)	U.S.	Foreign	U.S.	Foreign	U.S. Content by Cost	Foreign Content by Cost	U.S.	Foreign
Component 2											
Component 2	Component Supplier	Foreign	Any city, Country								
Subcomponent 2.1	Sub Supplier 2.1	U.S. w/tariff exempt	Any town, State	\$50,000.00	\$0.00	29.9%	0.0%				
Subcomponent 2.2	Sub Supplier 2.2	U.S. w/tariff exempt	Any town, State	\$10,000.00	\$0.00	6.0%	0.0%				
Subcomponent 2.3	Sub Supplier 2.3	Foreign	Any city, Country	\$0.00	\$55,000.00	0.0%	32.9%				
Subcomponent 2.4	Sub Supplier 2.3	Foreign	Any city, Country	\$0.00	\$25,000.00	0.0%	15.0%				
Subcomponent 2.5	Sub Supplier 2.4	Foreign	Any city, Country	\$0.00	\$8,000.00	0.0%	4.8%				
Subcomponent 2.6	Sub Supplier 2.5	Foreign	Any city, Country	\$0.00	\$9,000.00	0.0%	5.4%				
Foreign Component manuf cost	Component Supplier	Foreign	Any city, Country	\$0.00	\$7,000.00	0.0%	4.2%				
Foreign Component transp cost	Component Supplier	Foreign	Any city, Country	\$0.00	\$3,000.00	0.0%	1.8%				
Component 2 - U.S. & Foreign Costs Subtotal				\$60,000.00	\$107,000.00	35.9%	64.1%				
Component 2 Total Cost	per 49 CFR § 661.11(m)	(1)	\$167,000.00					\$60,000.00	\$107,000.00	9.60%	37.92%

### STEP 8

In *Component % of Vehicle* columns under *U.S.* and *Foreign* sub-columns, for each component, enter its U.S. and Foreign material cost percentage in relation to the total vehicle content percentage on the row designated *Vehicle Material Total Cost* under *U.S.* and *Foreign* sub-columns as applicable. Calculate the percentage as follows:

a) If the component is of domestic origin and the minimimum percentage of the subcomponents of that component by cost are domestic, then divide the cost on the row designated *U.S. Content* into the row designated *Vehicle Material Total Cost.* There will only be an entry for the *Component % of Vehicle* columns under the *U.S.* sub-column. The *Foreign* sub-column should record zero percentage.

	Component 1Total Cost	\$303,000
÷	Vehicle Material Total Cost	\$625,000
=	U.S. Component % of Vehicle	48.48%

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<sup>&</sup>lt;sup>39</sup> For more information on tariff exemptions see 49 CFR § 661.11(i).

Component /Subcomponent		Manufacturing	Manufacturing Location	Component and Materia			% of Component nent Total %		Foreign Content by Cost		Component % of Vehicle Materia Costs	
Component	Supplier Name	Location (U.S. or Foreign)	(if U.S City & State; if Foreign - City & Country)	U.S.	Foreign	U.S.	Foreign	U.S. Content by Cost		U.S.	Foreign	
Component 1												
Component 1	OEM	U.S.	Any town, State									
Subcomponent 1.1	OEM	U.S.	Any town, State	\$20,000.00	\$0.00	6.6%	0.0%					
Subcomponent 1.2	OEM	U.S.	Any town, State	\$30,000.00	\$0.00	9.9%	0.0%					
Subcomponent 1.3	Sub Supplier 1.3	U.S.	Any town, State	\$60,000.00	\$0.00	19.8%	0.0%					
Subcomponent 1.4	Sub Supplier 1.3	Foreign	Any city, Country	\$0.00	\$85,000.00	0.0%	28.1%					
Subcomponent 1.5	Sub Suppler 1.5	U.S.	Any town, State	\$105,000.00	\$0.00	34.7%	0.0%					
OEM Labor/Overhead/profit	OEM	U.S.	Any town, State	\$3,000.00	\$0.00	1.0%	0.0%					
Component 1 - U.S. & Foreign Costs Subtotal				\$218,000.00	\$85,000.00	71.9%	28.1%					
								\$303,000.00	\$0.00	48.48%	0.00%	

b) If the component is domestic and contains less than the required minimum domestic components by cost, you will need to calculate the total percentage of domestic and foreign content. divide the cost on the row designated *U.S. Content* into row designated *Vehicle Material Total Cost*.

Total Domestic Content Calculation	Total Foreign Content Calculation
\$25,000 (U.S. Subcomponents Subtotal)	\$130,000 (Foreign Subcomponents Subtotal)
<b>÷</b>	÷
\$625,000 (Vehicle Material Total Cost)	\$625,000(Vehicle Material Total Cost)
4.0% U.S. Domestic Content	20.80% Foreign Content

Component /Subcomponent		Manufacturing	Manufacturing Location	Component and Materia			% of Component nent Total %		Foreign Content by Cost	Component % of Vehicle Materia Costs	
Component	Supplier Name	Location (U.S. or Foreign)	(if U.S City & State; if Foreign - City & Country)	U.S.	Foreign	u.s.	Foreign	U.S. Content by Cost		U.S.	Foreign
Component 3											
Component 3	Component Supplier	U.S.	Any town, State								
Subcomponent 3.1	Sub Supplier 3.1	Foreign	Any city, Country	\$0.00	\$50,000.00	0.0%	32.3%				
Subcomponent 3.2	Sub Supplier 3.2	U.S.	Any town, State	\$15,000.00	\$0.00	9.7%	0.0%				
Subcomponent 3.3	Sub Supplier 3.3	Foreign	Any city, Country	\$0.00	\$55,000.00	0.0%	35.5%				
Subcomponent 3.4	Sub Supplier 3.4	Foreign	Any city, Country	\$0.00	\$25,000.00	0.0%	16.1%				
U.S. Component manufacturing costs	Component Supplier	U.S.	Any town, State	\$10,000.00	\$0.00	6.5%	0.0%				
Component 3 - U.S. & Foreign Costs Subtotal				\$25,000.00	\$130,000.00	16.1%	83.9%				
Component 3 Total Cost	per 49 CFR § 661.11(I)	and (m)(1)	\$155,000.00					\$25,000.00	\$130,000.00	4.00%	20.80%

# STEP 9

Add up all the percentages in the column *Component % of Vehicle Material* and the corresponding *U.S.* and *Foreign* sub-columns to determine the overall domestic content of the vehicle.

Component /Subcomponent		Manufacturing	Manufacturing Location	Component and Materia	Subcomponent al Costs		% of Component nent Total %				Vehicle Material sts
Component	Supplier Name	Location (U.S. or Foreign)	(if U.S City & State; if Foreign - City & Country)	U.S.	Foreign	U.S.	Foreign	U.S. Content by Cost	Foreign Content by Cost	U.S.	Foreign
Component 1											
Component 1	OEM	U.S.	Any town, State								
Subcomponent 1.1	OEM	U.S.	Any town, State	\$20,000.00	\$0.00	6.6%	0.0%				
Subcomponent 1.2	OEM	U.S.	Any town, State	\$30,000.00	\$0.00	9.9%	0.0%				
Subcomponent 1.3	Sub Supplier 1.3	U.S.	Any town, State	\$60,000.00	\$0.00	19.8%	0.0%				
Subcomponent 1.4	Sub Supplier 1.3	Foreign	Any city, Country	\$0.00	\$85,000.00	0.0%	28.1%				
Subcomponent 1.5	Sub Suppler 1.5	U.S.	Any town, State	\$105,000.00	\$0.00	34.7%	0.0%				
OEM Labor/Overhead/profit	OEM	U.S.	Any town, State	\$3,000.00	\$0.00	1.0%	0.0%				
Component 1 - U.S. & Foreign Costs Subtotal				\$218,000.00	\$85,000.00	71.9%	28.1%				
Component 1 Total Cost	per 49 CFR § 661.11(m)	(2)	\$303,000.00					\$303,000,00	\$0.00	48.48%	0.00%
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	. 7	, ,				•	, ,	,		
Component 2											
Component 2	Component Supplier	Foreign	Any city, Country								
Subcomponent 2.1	Sub Supplier 2.1	U.S. w/tariff exempt	Any town, State	\$50,000,00	\$0.00	29.9%	0.0%				
Subcomponent 2.2	Sub Supplier 2.2	U.S. w/tariff exempt	Any town, State	\$10,000,00	\$0.00	6.0%	0.0%				
Subcomponent 2.3	Sub Supplier 2.3	Foreign	Any city, Country	\$0.00	\$55,000.00	0.0%	32.9%				
Subcomponent 2.4	Sub Supplier 2.3	Foreign	Any city, Country	\$0.00	\$25,000.00	0.0%	15.0%				
Subcomponent 2.5	Sub Supplier 2.4	Foreign	Any city, Country	\$0.00	\$8,000.00	0.0%	4.8%				
Subcomponent 2.6	Sub Supplier 2.5	Foreign	Any city, Country	\$0.00	\$9,000.00	0.0%	5.4%				
Foreign Component manuf cost	Component Supplier	Foreign	Any city, Country	\$0.00	\$7,000.00	0.0%	4.2%				
Foreign Component transp cost	Component Supplier	Foreign	Any city, Country	\$0.00	\$3,000.00	0.0%	1.8%				
Component 2 - U.S. & Foreign Costs Subtotal			, ,,	\$60,000.00	\$107,000.00	35.9%	64.1%				
Component 2 Total Cost	ner 49 CFR & 661 11/m	(1)	\$167,000,00	\$00,000.00	\$107,000.00	33.370	04.170	\$60,000,00	\$107.000.00	9.60%	37.92%
Component 2 Total Cost	per 45 cm 3 001.11(m)	(1)	\$107,000.00					\$00,000.00	\$107,000.00	3.00%	37.32/0
Component 3											
Component 3	Component Supplier	U.S.	Any town, State								
Subcomponent 3.1	Sub Supplier 3.1	Foreign	Any city, Country	\$0.00	\$50,000.00	0.0%	32.3%				
Subcomponent 3.2	Sub Supplier 3.2	U.S.	Any town, State	\$15,000.00	\$0.00	9.7%	0.0%				
Subcomponent 3.3	Sub Supplier 3.3	Foreign	Any city, Country	\$0.00	\$55,000.00	0.0%	35.5%				
Subcomponent 3.4	Sub Supplier 3.4	Foreian	Any city, Country	\$0.00	\$25,000.00	0.0%	16.1%				
U.S. Component manufacturing costs	Component Supplier	U.S.	Any town, State	\$10,000.00	\$0.00	6.5%	0.0%				
Component 3 - U.S. & Foreign Costs Subtotal	сотролен заррнег	0.0.	rany town, State	\$25,000.00	\$130,000,00	16.1%	83.9%				
	per 49 CFR § 661.11(I)	and (m)(1)	\$155,000.00	420,220.00	, 200,200			\$25,000.00	\$130,000.00	4.00%	20.80%
,											
Vehicle Material Subtotals U.S. & Foreign		•						\$388,000.00	\$237,000.00	62.08%	37.92%
Vehicle Material Total Cost (Total Cost of all Cor	mponents)			\$625.0	00.00						
,	· ·										

# 4.4. Special Considerations

This section discusses the best practices for special considerations encountered in the domestic content calculations.

# 4.4.1. Exchange Rates

The Buy America rule 49 CFR § 661.11(n) states "The cost of a component of foreign origin is set using the foreign exchange rate at the time the bidder or offeror executes the appropriate Buy America certificate." The manufacturer will also use the same exchange rate(s) to calculate the foreign component cost for the post-delivery audit and submit to the recipient's auditor for verification.

# 4.4.2. Transportation Costs

Transportation costs to the U.S. final assembly location must be included in calculating the cost of foreign components and foreign subcomponents. For components/subcomponents manufactured outside the U.S., the cost for transportation must be included in the foreign content total (even if a U.S. shipping company or vessel is used).<sup>40</sup>

# 4.4.3. Tariff Exemptions

<sup>&</sup>lt;sup>40</sup> 49 CFR § 661.11(m)(1).

If a tariff exemption is claimed for U.S. subcomponents of foreign manufactured components, the manufacturer must keep on file, for review by an auditor, proof of the tariff exemption for such items, in accordance with 49 CFR § 661.11(i) and (j). In turn, this requirement refers to the U.S. Code Harmonized Tariff Schedule in 19 U.S.C. 1202, which requires specific declarations/ forms.

In the event these declarations and/or forms may be difficult to acquire for a Buy America audit, the auditor may accept alternate form(s) of documentation, which proves that the duty was not paid. These may include NAFTA affidavits, Purchase Orders, or letters/emails from responsible parties.

## 4.5. Manufacturer Documentation

The recipient's final pre-award and post-delivery audit reports will not include confidential and proprietary information shared with the recipient or its auditor. Rather, the report is likely to include a list of components and their domestic content as a percentage. However, manufacturers should be mindful that FTA may audit a rolling stock's procurment's compliance with Buy America. Therefore, it is a best practice for manufacturers to maintain detailed records of the information and documentation shared with the recipient, particularly for the post-delivery audit.

Another best practice is for the manufacturer to require its suppliers to complete a Buy America Supplier Certificate for any item for which domestic content is being claimed. Appendix B.5 provides a sample Supplier Buy America Certification template for bus and rail vehicles. The Buy America Supplier Certificate is the supplier's certification of its domestic content and U.S. manufacturing for the products being provided for this procurement.

The instructions for completing the certification are as follows:

### STEP 1

Fill in the supplier's contact information in the designated space at the top part of the form.

	SAMPLE BUY AMERICA SUPPLIER CERTIFICATION
Supplier: Address:	
Phone: Email:	Fax:

#### STEP 2

Fill in the vehicle manufacturer's name and vehicle/contract/purchase order number that connects this certificate to the specific procurement project.

Vehicle Manufacturer:	
Vehicle/Contract/Purchase Order:	

#### STEP 3

Identify which of the three calculation scenarios apply for each component by checking the respective box.

- a) Check the first box if the component is manufactured in the U.S. and the required percentage of its subcomponents, by cost, are manufactured in the U.S. In this case, 100% of the cost of the component is domestic content.
- b) Check the second box if the component is manufactured in the U.S. and less than the required percentage of its subcomponents, by cost, are manufactured in the U.S. In this case, the cost of the U.S. subcomponents and the manufacturing costs of the component (considered to be the difference between the cost of the foreign subcomponents and the total cost of the component) are included in the domestic content calculation.
- c) Check the third box if the component is NOT manufactured in the U.S. but does contain U.S. subcomponents for which the supplier has documentation showing tariff exemption. In this case, the cost to manufacture the component and transportation costs to the final assembly location must be included in the foreign content calculation.

Calculate the cost of U.S. subcomponents by dividing the cost of U.S. subcomponents by the cost of all subcomponents for each component. Use extra pages as needed to cover all components and subcomponents in the supplier's scope of provision.

	certifies the Supplier's status of compliance with FTA Buy America Regulations set forth in F.R § 661.11.
For ea	ach component supplied for the Contract, the Supplier attests that (CHECK ONE BOX):
	More than the required percentage of the subcomponents, by cost, are of U.S. origin/manufacture, and the component is manufactured in the U.S. The Supplier attests that the U.S. content of subcomponents, by cost, is as indicated below.
	Less than the required percentage of the subcomponents, by cost, are of U.S. origin/manufacture, and the component is manufactured in the U.S. (in such case, the cost of U.S. subcomponents and cost of U.S. manufacturing labor are eligible for inclusion towards domestic content calculations). The Supplier attests that the U.S. content of subcomponents, by cost, is as indicated below.
	The component contains subcomponents of domestic origin, the component is NOT manufactured in the U.S., and the supplier has documentation showing a tariff exemption (in such case, the cost of U.S. subcomponents are eligible for inclusion towards domestic content calculations). The Supplier attests that the U.S. content of subcomponents, by cost, is as indicated below.

### STEP 4

List each component and its subcomponents on the designated rows. Identify Components by name and part number traceable to the subject procurement.

- a) Indicate the manufacturing location for each component and subcomponent in the designated space;
- b) Indicate the component's percentage of domestic subcomponents for each component in the designated space;
- c) Indicate each subcomponent's percentage of the component's domestic content in the designated space; the sum of the domestic content percentages of all subcomponents will add up to the total domestic content percentage of the component.

	MANUFACTURING LOCATION	% DOMESTIC CONTENT	% FOREIGN CONTENT
[COMPONENT NAME]	[Location of individual component]	[Total domestic content % of all subcomponents]	[Total content % of all subcomponents]
[SUBCOMPONENT NAME] (use separate row for each subcomponent)	[Location of individual subcomponent]	[Total domestic content % of individual subcomponent]	[Total U.S. content % of all subcomponents]
Attach additional sheets as neede	ed		

# STEP 5

Sign and date the form by an authorized official of the supplier. Print the name and title of the signatory beneath the signature line.

Information on this form is subject to audit by the Purchaser (i.e., recipient of federal funds, and/or by the FTA and/or its agents).

Date:
Supplier Authorized Signature:
Print Name:
Title:

# 5. Frequently Asked Questions

This section addresses some of the most frequently asked questions about pre-award and postdelivery audit. This guidance is for information only. The responses do not constitute a determination of compliance with the Department of Transportation (DOT) rules and standards.

## 5.1. General

## 5.1.1. Who must conduct the pre-award and post-delivery audits?

The recipient, or auditor appointed by the recipient, must conduct the audits. The auditor may not be an employee of the manufacturer or its agent. In many instances, a recipient will retain the services of a consultant to conduct the audit.

## 5.1.2. When will the Buy America pre-award audit be conducted?

The law requires that the recipient must conduct a pre-award audit to confirm compliance with Buy America regulations prior to award of the contract. The recipient's executed Pre-award Buy America certificate and Pre-award Purchaser's Requirements certificate must be signed and dated prior to contract award.

# 5.1.3. When will the Buy America post-delivery audit be conducted?

The recipient must conduct a post-delivery audit prior to transfer of title of the rolling stock, or prior to the rolling stock being put into revenue service, whichever is first. The timing of the post-delivery audit is typically identified in the contract documents. "A recipient purchasing revenue service rolling stock with FTA funds must ensure that a post-delivery audit ... is complete before title to the rolling stock is transferred to the recipient." The post-delivery audit will be performed on the first vehicle so as to quickly remedy any potential compliance problems.

The recipient should consider several factors in determining the appropriate time to verify that all material and work performed for the entire contract (including the last vehicle and all change orders) meets the Buy America requirements. A post-delivery audit is performed just prior to the transfer of title or entry into revenue service of the first vehicle, whichever comes first. For small procurements with short post-delivery periods, an audit conducted at that time may be sufficient. However, the recipient may consider whether an audit conducted on the first vehicle is sufficient

<sup>&</sup>lt;sup>41</sup> 49 CFR § 663.31. In the definitions section, § 663.5 defines "post-delivery" as "the time period in the procurement process from when the rolling stock is delivered to the recipient until title to the rolling stock is transferred to the recipient or the rolling stock is put into revenue service, whichever is first."

to verify the actual domestic material content for the entire order. Because the post-delivery audit is conducted on the first vehicle, the recipient may need to conduct additional verifications to confirm that the full order satisfies the Buy America requirements, particularly if there are changes made in materials or scope after the first post-delivery audit. In certain cases, particularly on large orders with multi-year delivery schedules, recipients may find it appropriate to conduct Post-Delivery Domestic Content Monitoring as described in Section 3, to minimize the risk that subsequent vehicles in the order do not meet Buy America Requirements.

# 5.1.4. Do pre-award and post-delivery audits have to be conducted for procurements of support vehicles and wayside equipment?

No. The requirement to conduct pre-award and post-delivery audits only applies to rolling stock intended to carry passengers in revenue service, which include buses, vans, cars, railcars, locomotives, trolley cars and buses, ferry boats, and vehicles used for guideways and incline planes (49 CFR §§ 663.3 and 663.5(e)). Support vehicles and wayside equipment must comply with Buy America, but there is no requirement for pre-award and post-delivery audits.

# 5.1.5. Do support vehicles have to meet the minimum domestic content requirement and final assembly in U.S.?

Yes. All rolling stock, including support vehicles, must meet the requirements of the Buy America regulation, namely that final assembly of the rolling stock takes place in the United States, and that greater than 60% (65% in FY18 and FY19, 70% in FY20) of the cost of all components be U.S. manufactured.

# 5.2. Buy America Certification

# 5.2.1. Does a Buy America certification need to be conducted for every procurement, 42 even if identical vehicles are being purchased from the same contractor year after year?

Yes. A manufacturer's past compliance with the Buy America rule does not mean that the manufacturer's products will always be compliant. Changes in design and technical developments, as well as changing suppliers and scope of manufacturing and/or final assembly, may make new products noncompliant. In the case that pre-award and post-delivery audits have been conducted for a given vehicle, the same information may be used to demonstrate compliance at a later date as long as it is verified and documented that there have been no changes made affecting compliance since the last certification.

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<sup>&</sup>lt;sup>42</sup> Refers to a single procurement (even if multi-year), a multi-state procurement, and/or multiple individual procurements by several recipients or subrecipients.

# 5.2.2. Is the domestic content threshold calculated as a percentage of the total vehicle price?

No. The domestic content threshold is calculated as a percentage of the total cost of all components, excluding the cost for final assembly of the vehicle. The cost of an individual domestic component is the price a vehicle manufacturer pays a supplier for that domestic component. For foreign components, the cost of the individual foreign component is the price a vehicle manufacturer pays the foreign supplier for that individual foreign component, plus transportation costs. 49 CFR § 661.11(m)(1).

All non-recurring expenses such as engineering, mockups, fixtures/tooling, spare parts, manuals, and training also are excluded from the Buy America component calculations.

# 5.2.3. How is the origin of a component determined?

A component is considered to be of domestic origin if more than the required percentage, by cost, of the subcomponents of that component are of domestic origin, and component manufacturing takes place in the United States. If the component meets these requirements, the entire cost of the component may be counted as domestic content in the Buy America calculation of the vehicle.

The cost of an individual domestic subcomponent is the price a subcomponent manufacturer pays a supplier for that domestic subcomponent. For foreign subcomponents, the cost of the individual foreign subcomponent is the price a manufacturer pays the foreign supplier for that foreign subcomponent plus transportation costs. 49 CFR § 661.11(m)(1).

A component may be manufactured at the final assembly location if the manufacturing process to produce the component is an activity separate and distinct from the final assembly of the end product. 49 CFR § 661.11(d).

# 5.2.4. How is the origin of a subcomponent determined?

Subcomponents manufactured in the United States are considered to be domestic.

Subcomponents manufactured in the United States and exported for inclusion in a component manufactured outside the United States are considered to be of domestic origin if they received a documented tariff exemption for importation back into the United States. If this is the case, then the cost of the subcomponent may be included in the component's domestic content calculation. The cost of the subcomponent at the time of export is the cost that should be used in the calculation. If the subcomponent has not received a tariff exemption, then it may not be included in the domestic content calculation, and will be counted as foreign content.

Raw materials exported for use in a component manufactured outside the United States, are not considered to be a subcomponent for the purpose of calculating domestic content. The value of those raw materials is included in the cost of the foreign component. 49 CFR § 661.11(k).

# 5.2.5. Do the subcomponents have to be broken down into subsubcomponents?

No. The Buy America regulation does not extend down to the sub-subcomponent level for Buy America calculation purposes.

# 5.2.6. Are the costs of both domestic and foreign subcomponents used in the Buy America Domestic Content Calculation for Components?

The entire cost of a component is used in its content calculation. A component is considered domestic if it is manufactured in the United States and its subcomponents have the required domestic content percentage<sup>43</sup> by cost. 49 CFR § 661.11(g). If this is so, then the entire cost (selling price) of the component can be claimed as domestic content, including its foreign subcomponents.

# 5.2.7. Do only components of domestic origin contribute towards the domestic Buy America calculations?

No. Domestic subcomponents of components manufactured in the United States that do not contain the required minimum percentage of domestic subcomponents, by cost, and domestic subcomponents incorporated into foreign-manufactured components that received a tariff exemption for importation back into the United States, also may be used in the Buy America domestic content calculation. For example, if a component manufactured in the U.S. contains 20 percent of its subcomponents manufactured in the U.S. and 80 percent of its subcomponents manufactured outside the U.S., the manufacturer receives credit for the cost of the 20 percent of U.S. subcomponents.

# 5.2.8. If a component contains less than the required minimum percentage of domestic subcomponents, how would it be used in the calculation?

If a component is manufactured in the U.S., only the cost of the domestic subcomponents and the cost of manufacturing the domestic component are included in the calculation of the domestic content of the end product. 49 CFR § 661.11(I). The cost of its foreign subcomponents must be counted as foreign content.

# 5.2.9. Can components from foreign sources with domestic subcomponents be used in the calculation?

<sup>&</sup>lt;sup>43</sup> Minimum threshold is more than 60% for FY16 and FY17, more than 65% for FY18 and FY19, and more than 70% for FY20.

Yes. If foreign-manufactured components have domestic subcomponents that received a tariff exemption for importation back into the United States, then the cost of those domestic subcomponents may be used in the domestic content calculation. The cost of manufacturing the component, and the overhead costs associated with manufacturing that component, plus the cost of transporting the component, may not be used in the domestic content calculation, because it has been manufactured outside of the United States.

# 5.2.10. How are currency exchange rates addressed for Buy America audits?

The cost of a component of foreign origin is set using the foreign exchange rate at the time the bidder or offeror executes the Buy America certificate. 49 CFR § 661.11(n). However, large projects with long post-delivery periods and economic fluctuations can affect material costs between the times of the pre-award and post-delivery audits. In all cases, component and subcomponent costs paid in other than U.S. currency must use exchange rates as of the date of the supplier's executed supplier Buy America certificate. The post-delivery audit needs to verify the actual costs paid to suppliers for all components and subcomponents.

# 5.2.11. Can systems be components for domestic content calculations? (Examples would be air compressor and pneumatic systems, electrical systems, and train control systems.)

Yes. Pursuant to Appendix B to § 661.11, "Typical Components of Buses," the following systems are identified as components: air compressor and pneumatic systems, generator/alternator and electrical systems, steering system assemblies, heating systems, and door control systems. In addition, pursuant to Appendix C to § 661.11, "Typical Components of Rail Rolling Stock," the following systems are identified as components: train control systems.

# 5.2.12 What if the manufacturer is concerned about releasing proprietary information?

If the manufacturer is concerned about releasing proprietary information, the manufacturer and recipient may agree that the recipient will contract with an external auditor to conduct the manufacturer's Buy America certification review—and assure the manufacturer that the cost data will be kept confidential. Alternatively, a recipient may be able to keep its Buy America audit function independent by using a "firewall" and assuring the manufacturer that those employees of the recipient performing the Buy America audit are prohibited from disclosing any of the manufacturer's propriety data. Further, the review of documents may occur at the manufacturer's place of business; there is no requirement that the recipient or its auditors obtain copies of the documents; they need simply to review them. Whether conducted by a contractor or the recipient's employees, the manufacturer may require the reviewer to sign a non-disclosure agreement prior to reviewing the documents.

# 5.3. Purchaser's Requirements Certification

## 5.3.1. What is the responsibility of the resident inspector?

A resident inspector is required to visit the manufacturer's final assembly facility during the manufacturing period for purchases of more than 10 buses intended for revenue passenger service. The inspector must prepare a report summarizing how the construction and operation of the vehicles meet (or do not meet) the terms of the contract and provide accurate records of all vehicle construction activities. The intent of the requirement<sup>44</sup> is to help recipients ensure that the vehicles will comply with their contract specifications.

The recipient must ensure that the resident inspector's report satisfies all requirements of the regulations. It is the recipient's responsibility to ensure the vehicles comply with contract specifications, and the purpose of the resident inspector's report is to assist the recipient in verifying that the vehicles meet the required specifications.

# 5.3.2. Where the contract provides for more than one post-delivery period, must the recipient conduct a post-delivery audit for each delivery period?

Yes. When a contract provides for multiple deliveries and the post-delivery periods are scheduled at substantially different time intervals, such as 6 months or 1 year apart, the recipient must complete a post-delivery audit for each period. This does not mean that a separate audit is required for each vehicle within a post-delivery period.

# 5.4. FMVSS Certification

# 5.4.1. Which FMVSS certifications are required?

Title 49 CFR part 571 covers all Federal Motor Vehicle Safety Standards. Examples of the types of FMVSS certifications are included in this Handbook in Appendices <u>B.7</u>, <u>B.8</u>, <u>B.13</u>, and <u>B.14</u>

# 5.4.2. Must ADA compliant vehicles be FMVSS certified?

Yes. All motor vehicles subject to the FMVSS regulations must be certified to meet the applicable standards.

<sup>&</sup>lt;sup>44</sup> 49 CFR § 663.37(a).

# Appendix A Checklists

# A.1 Proposal Compliance Checklist

KEY TRANSIT AGENCY SOLICITATION REQUIREMENTS	CHECK OF ROLLING STOCK MANUFACTURER'S COMPLIANCE	KEY COMMENTS	
COMPLIANCE WITH KEY FEDERAL REQU			
Buy America	YES	Pre-Award Certificate on file	
Pre-Award and Post-Delivery Audit	YES	Pre-Award Audit underway	
Lobbying	YES	No exceptions taken	
Providing Fraudulent Information, False Statements and Related Acts	YES	No exceptions taken	
Civil Rights	YES	No exceptions taken	
Disadvantage Business Enterprises (i.e., Transit Vehicle Manufacturer <sup>45</sup> requirement)	YES	No exceptions taken	
Americans with Disability Act	YES	No exceptions taken	
Compliance with <b>ALL</b> other required federal provisions	YES	No exceptions taken	
<b>COMPLIANCE WITH ALL TRANSIT AGEN</b>	COMPLIANCE WITH ALL TRANSIT AGENCY SPECIAL PROVISIONS		
Terms of schedule and liquidated damages	YES	No exceptions taken	
Shipment and delivery	YES	No exceptions taken	
City Inspection and testing	YES	No exceptions taken	
Acceptance	YES	No exceptions taken	
Payment provisions	YES	Agreed to additional payment item for completion of Pilot Car Testing.	
Spare parts	YES	Negotiated Spare parts items	
Warranty terms	YES	Negotiated terms for extended warranties of components	
COMPLIANCE WITH ALL TECHNICAL SP	<b>ECIFICATIONS REQUI</b>	REMENTS	
Carbody/bus body/trucks and axles	YES	No exceptions taken	
Cab/drivers area and controls	YES	No exceptions taken	
Passenger doors	YES	No exceptions taken	
HVAC	YES	No exceptions taken	
Auxiliary electric equipment	YES	No exceptions taken	
Propulsion	YES	Agreed to Addendum 2.	
Brakes	YES	No exceptions taken	
Communications	YES	No exceptions taken	
Train control (rail vehicles only)	YES	No exceptions taken	
Monitoring and diagnostics	YES	No exceptions taken	
Materials and overall work quality	YES	No exceptions taken	
Software	YES	No exceptions taken	
Manuals and training	YES	Manuals and Training hours and terms negotiated.	

<sup>&</sup>lt;sup>45</sup> See 49 U.S.C. §26.49.

# A.2 Pre-Award Checklists

# A.2.1 Recipient at Pre-Award Audit

	Buy America Certification
	A.   Reviewed and Verified Minimum Domestic Content; AND
	□ Reviewed and Verified Proposed U.S. Final Assembly,
Pre-Award Audit	Location, Operations, and Total Cost
(Before signing	OR
Contract with Bidder)	B. □ Requested and Received Buy America Waiver
	Purchaser's Requirements Certification
	A. ☐ Checked Bid Specification Compliance with Solicitation
	Specifications; AND
	□ Completed a Manufacturer Capability and Capacity Review
	FMVSS Certifications (IF APPLICABLE): Requested and Received
	Manufacturer's letter stating:
	A. ☐ The information to be included on the FMVSS Stickers
	OR
	B. ☐ The Vehicles Are Not Subject to FMVSS

# A.2.2 Manufacturer at Pre-Award Audit

	Buy America Certification
Pre-Award Audit (Before signing Contract with Bidder)	<ul> <li>A.          Prepared and provided to recipient documentation, including but not limited to, documentation from suppliers sufficient for recipient to verify domestic content of vehicle; AND         Provided documentation of U.S. Final Assembly, Location, Operations, and Total Cost OR     </li> <li>B.          Submitted a Buy America Waiver     </li> </ul>
	Purchaser's Requirements Certification
	A.   Responded to recipient solicitation clearly indicating Bid Specification Compliance with Solicitation Specifications; AND
	<ul> <li>Responded to sections in the Solicitation regarding</li> <li>Manufacturer Capability and Capacity Review</li> </ul>
	FMVSS Certifications (IF APPLICABLE): Prepared letter stating:
	<ul><li>A. □ The information to be included on the FMVSS Stickers OR</li></ul>
	B. □ The Vehicles Are Not Subject to FMVSS

# A.2.3 Pre-Award Audit Purchaser's Requirements Certification for Recipients

For Pre-award Purchaser's Requirements Certification, the recipient must verify that the rolling stock the recipient is contracting for is the same product described in the purchaser's solicitation

specification, and the proposed manufacturer is a responsible manufacturer with the capability to produce a vehicle that meets the recipient's solicitation specification. Recipients may employ a combination of different departments or third parties to conduct these verifications. In such case, the party responsible for verification will sign/initial the items in their scope. The following items represent a checklist of the tasks to complete the pre-award purchaser's requirements audit.

Activity	Supporting Document	Verified
Part 1	• • •	
Comparison of rolling stock manufacturer's specification with purchaser's solicitation specification	<ul> <li>Recipient's checklist for comparison of man specification with solicitation specification;</li> </ul>	ufacturer's
	<ul> <li>Manufacturer's supporting documents such proposal, manufacturer and supplier specific product brochures, technical data sheets, dr and bills of material.</li> </ul>	cations,
Part 2		
Assessment of manufacturer's capability	<ul> <li>Recipient's checklist for manufacturer's capa assessment;</li> </ul>	ability
	<ul> <li>Manufacturer's supporting documents such descriptions of facilities and equipment, plar capacity, facility layout drawing/flow diagram production line layout/flow diagram, staffing craft, QA/QC Plan, mobilization plan, list of work, list of past performance on similar pro- financial records, and other documents;</li> </ul>	nt output n, counts by concurrent
	<ul> <li>Major supplier/subcontractor supporting doc same as described in previous bullet above;</li> </ul>	
	<ul> <li>Manufacturer's project level plans such as C plan, schedule, supplier management plan, document/configuration control plan.</li> </ul>	
Reviewed and accepted by:		
Signature		Date
	Title	

# A.2.4 Comparison of Manufacturer's Specification with Purchaser's Solicitation Specification

As part of the Pre-award Purchaser's Requirements Certification process, the recipient shall verify that the rolling stock the recipient is contracting for is the same product described in the purchaser's solicitation specification. The following items would typically be considered for this review.

		Manufacture	r's
Soli	citation Specification Item	Remark	
1.	Carbody: structure, high/low boarding, diaphragm		
2.	Windows: windshield, passenger side windows, emergency windows, door windows, sliding sash		
3.	Interior: flooring, seats, wheelchair securement, bicycle storage, luggage racks, exit path marking (as applicable)		
4.	Trucks/axles, sanding equipment (if required)		
5.	Propulsion equipment		
6.	Brake equipment; wheel slip/slide, parking brake		
7.	Auxiliary electrical equipment		
8.	Cab/driver's area controls and equipment		
9.	HVAC		
10.	Doors and door control system with ADA audible alarm and warning lights		
11.	Lighting: interior, emergency, exterior		
12.	Communications		
13.			
14.			
15.	Intercar trainlines/receptacles (rail vehicles only)		
16.	Train control/cab signal equipment (rail vehicles only)		
17.	Monitoring and diagnostics		
18.	Materials and workmanship standards		
19.	Software		
20.	Manuals and training		
	Other Provisions		
21.	Compliance with applicable Federal, State, local regulations		
22.	Buy America		
23.	Warranty terms		
Revi	ewed and accepted by:		
Sign	Signature Date		
	Title		

# A.3 Post-Delivery Checklists

# A.3.1 Recipient at Post-Delivery Audit

	Buy America Certification
	A. Reviewed and Verified the amount of Domestic Content; AND Reviewed and Verified Proposed U.S. Final Assembly, Location, Operations, and Total Cost OR
	B.   Requested and Received Buy America Waiver
	Purchaser's Requirements Certification
Post-Delivery Audit (Before using the Rolling Stock in Transit Service or Before Transfer of Title, Whichever Occurs First)	<ul> <li>A. For Procurements of Rail Vehicles and More than 10 Buses or Modified Vans (and More than 20 Buses in Rural Areas and Small UZAs)</li> <li>Completed Resident Inspector's Report; AND</li> <li>Completed Visual Inspections and Road Tests OR</li> <li>B. For Procurement of 10 or Fewer Buses or Modified Vans, any Number of Unmodified Vans, and 20 or Fewer Buses in Rural Areas and Small UZAs</li> <li>Completed Visual Inspection and Road Test</li> </ul>
	FMVSS Certifications (IF APPLICABLE)
	<ul> <li>A.   Verified FMVSS Sticker is Affixed to Each Vehicle OR</li> <li>B.   Requested and Received Manufacturer's Letter Stating that the</li> </ul>
	Vehicles Are Not Subject to FMVSS.

# A.3.2 Manufacturer at Post-Delivery Audit

	Buy America Certification
	A. Prepared and provided to the recipient the Domestic Content Worksheet based on actual cost; AND
Post-Delivery Audit (Before using the	<ul> <li>□ Provide actual U.S. Final Assembly Total Cost</li> <li>OR</li> <li>B. □ Submitted a Buy America Waiver prior to award</li> </ul>
Rolling Stock in	Purchaser's Requirements Certification
Transit Service or Before Transfer of	C.   Completed Visual Inspections and Road Tests and Provide reports to the Resident Inspector.
Title, Whichever	FMVSS Certifications (IF APPLICABLE)
Occurs First)	C. ☐ Affixed FMVSS Stickers to Each Vehicle OR
	<ul> <li>D.                Provided letter stating that the Vehicles Are Not Subject to FMVSS.     </li> </ul>

# A.3.3 Supplier at Post-Delivery Audit

Post-Delivery Audit
(Before using the
Rolling Stock in
Transit Service or
Before Transfer of
Title, Whichever
Occurs First)

## **Buy America Certification**

A. Prepared and provided to Rolling Stock Manufacturer the Component Supplier Buy America Certification including any updates from the Pre-Award Audit on the location of component manufacture and the percent domestic and foreign content of each subcomponent.

# A.3.4 Resident Inspector's Report for Post-Delivery Purchaser's Requirements Certification

For the Post-delivery Purchaser's Requirements Certification, the recipient shall review and retain the resident inspector's report of the recipient's oversight of the period of manufacture of the rolling stock being purchased. The following items would typically be included in the resident inspector's report documentation, as applicable.

Resident Inspector's Report Contents		Verified
<ol> <li>Description of recipient's overall program to oversee manufacture of the ridentifying all activities that verify compliance of product with co specifications including pilot car program, FAI, qualification testing, inspection and production testing.</li> </ol>	ntract and	
<ol> <li>Description of activities performed by recipient's resident inspection staff of at manufacturer's site(s) including pilot car inspection, qualification to article inspections, source inspections, production in-process inspections, inspections and final static and dynamic functional testing.</li> </ol>	esting, first	
<ol><li>Description of final assembly activities performed by manufacturer at assembly site.</li></ol>	U.S. final	
<ol> <li>Reference that vehicle history books were provided by the manufactor recipient and reviewed prior to authorization for shipment briefly summon contents of the vehicle history books and providing samples of critical such as final test results.</li> </ol>	arizing the	
<ol><li>Include sample authorization for shipment form for each vehicle showir record open items and resident inspector signature and date.</li></ol>	ng place to	
6. Include sample documents demonstrating the manufacturer's implement quality program; for example, a completed Nonconformance Report for included that identifies the deficiency and corrective action that was menonconforming material that was repaired (to other than full conform specification) or deemed usable as is must be approved/signer recipient/resident inspector.	orm will be nade. Any nance with	
<ol> <li>Reference that manufacturer maintained complete records of constructive vehicle containing details beyond the scope of the resident inspector's reas the manufacturer's QA/QC inspections.</li> </ol>		
8. Confirmation that delivered vehicles have been inspected and road tested that they meet contract requirements including a summary of static, dy performance tests performed on each vehicle and a sample of key test reshowing sign-offs for completed tests, failed tests and any corrective actions ample documents.	namic and port results	
9.		
Reviewed and accepted by:		
Signature	Date	е
Title		

# Appendix B Certificates and Forms

The forms provided in this Appendix are samples only, intended to provide guidance to recipients. The first two forms, B.1 and B.2, track the regulation and therefore the format is required. The other forms may be modified to suit the needs of the recipient, as long as the form developed by the recipient includes the information required by the regulations.

# B.1 Certificate of Compliance with Buy America Rolling Stock Requirements

CERTIFICATE OF COMPLIANCE WITH
BUY AMERICA ROLLING STOCK REQUIREMENTS
The bidder or offeror hereby certifies that it will comply with the requirements of 49 U.S.C. 5323(j), and the applicable regulations in 49 CFR § 661.11.
Date:
Signature:
Company:
Print Name:
Title:

# **B.2 Certificate of Non-Compliance with Buy America Rolling Stock Requirements**

# **CERTIFICATE OF NON-COMPLIANCE WITH**

# **BUY AMERICA ROLLING STOCK REQUIREMENTS**

DOI 7 INVENTOR TO DE RECORDE DE LA CONTRE DEL CONTRE DE LA CONTRE DEL CONTRE DE LA CONTRE DEL CONTRE DE LA CO
The bidder or offeror hereby certifies that it cannot comply with the requirements of 49 U.S.C.
5323(j), but may qualify for an exemption to the requirement consistent with 49 U.S.C.
5323(j)(2), as amended, and the applicable regulations in 49 CFR § 661.7.
Date:
Signature:
Company:
D: (N
Print Name:
Title:

# **B.3 Sample Pre-Award Buy America Certification**

PRE-AWARD BUY AMERICA CERTIFICATION
As required by 49 CFR part 663 – Subpart B, (the
recipient) is satisfied that the vehicles to be purchased,
(number and description of vehicles) from (the
manufacturer), meet the requirements of 49 U.S.C. 5323(j), as amended. The recipient $\square$ , or
its appointed auditor [ (the auditor
- not the manufacturer or its agent), has reviewed documentation provided by the
manufacturer, which lists (1) the proposed component and subcomponent parts of the
vehicles identified by manufacturer, country of origin, and cost; and (2) the proposed location
of the final assembly point for the vehicles, including a description of the activities that will
take place at the final assembly point and the cost of final assembly.
Date:
Recipient Authorized Signature:
Print Name:
Title:

# **B.4 Sample Pre-Award Buy America Certificate of Non-Compliance**

PRE-AWARD BUY AMERICA CERTIFICATE OF NON-COMPLIANCE
As required by 49 CFR part 663 – Subpart B, (the
recipient) keeps on file a certification that there is a letter from FTA which grants a waiver to
the rolling stock to be purchased,
(number and description of rolling stock), from the Buy America requirements under 49 U.S.C.
5323(j)(2)(A), (2)(B), or (2)(D), as amended.
Date:
Recipient Authorized Signature:
Print Name:
Title:

## **B.5 Sample Pre-Award Purchaser's Requirements Certification**

PRE-AWARD PURCHASER'S REQUIREMENTS CERTIFICATION
As required by 49 CFR part 663 – Subpart B, (the
recipient) certifies that the vehicles to be purchased,
(number and description of vehicles) from
(the manufacturer), are the same product described in the recipient's solicitation specification
and that the proposed manufacturer is a responsible manufacturer with the capability to
produce vehicles that meet the specifications set forth in the solicitation.
Date:
Recipient Authorized Signature:
Print Name:
Title:

#### **B.6 Sample Supplier Buy America Certification**

#### <u>Instructions for Completing the Buy America Supplier Certificate</u>

The manufacturer may require suppliers to complete a Buy America Supplier Certificate for any item for which domestic content is being claimed. The Buy America Supplier Certificate is the supplier's legal attestation of its domestic content and location of manufacturing for the products being provided for the procurement.

- 1. Fill in the supplier's contact information in the designated space at the top part of the form.
- 2. Fill in the vehicle manufacturer's name and the vehicle/contract/purchase order number that connects the certificate to the specific procurement project.
- 3. Identify which of the three calculation scenarios apply for each component by checking the respective box.
  - a) Check the first box if the component is manufactured in the U.S. and more than the required percentage of its subcomponents, by cost, are manufactured in the U.S.
  - b) Check the second box if the component is manufactured in the U.S. and has less than the required percentage of its subcomponents, by cost, manufactured in the U.S.
  - c) Check the third box if the component is NOT manufactured in the U.S. but does contain U.S. subcomponents for which the supplier has documentation showing a tariff exemption.

The cost of U.S. subcomponents is calculated by dividing the cost of U.S. subcomponents by the cost of all subcomponents for each component. Generally, the cost of each subcomponent is the price the bidder or offeror paid to the supplier for the subcomponent. Transportation costs to the final assembly location must be included in calculating the cost of foreign subcomponents. 49 CFR § 661.11(m)(1). For exceptions, see 49 CFR § 661.11(o).

Use extra pages as needed to cover all components and subcomponents in the supplier's scope of provision.

- 4. List each component and its subcomponents on the designated rows. Components should be identified by name and/or part number traceable to the subject procurement.
  - a) Indicate the manufacturing location for each component and subcomponent in the designated space;
  - b) Indicate the component's percentage of domestic subcomponents for each component in the designated space;
  - c) Indicate each subcomponent's percentage of the component's domestic content in the designated space; the sum of all the subcomponents' domestic content percentages will equal the domestic content percentage of the component.
- 5. The form must be signed and dated by an authorized official of the supplier. Print the name and title of the signatory beneath the signature line.

#### APPENDIX B CERTIFICATIONS AND FORMS

Information on this form is subject to audit by the Purchaser, i.e., recipient of FTA funds, and/or by the Federal Transit Administration (and/or its agents).

SAMPLE BUY AMERICA SUPPLIER CERTIFICATION				
Supplie	Supplier:			
Addres				
Phone				
Email:	Email:			
	e acturer:			
Vehicle	e/Contract/Purchase Order:			
	ertifies the Supplier's status R § 661.11.	s of compliance with FT	A Buy America Regul	ations set forth in
For ea	ch component supplied for the		`	•
	The required percentage of component is manufacture subcomponents, by cost, is	d in the U.S. The Su	pplier attests that th	anufacture, and the e U.S. content of
	origin/manufacture, and the U.S. subcomponents is elig	ess than the required percentage of the subcomponents, by cost, are of U.S. rigin/manufacture, and the component is manufactured in the U.S. (in such case, the cost of .S. subcomponents is eligible for inclusion towards domestic content calculations). The upplier attests that the U.S. content of subcomponents, by cost, is as indicated below. ee 49 CFR § 661.11(I).		
	The component contains subcomponents of domestic origin, however, the component is NOT manufactured in the U.S. (in such case, the cost of U.S. subcomponents is eligible for inclusion towards domestic content calculations only if the U.S. subcomponent(s) received a tariff exemption). The Supplier attests that the U.S. content of subcomponents, by cost, is as indicated below.  See 49 CFR § 661.11(i).			
		MANUFACTURING LOCATION	% DOMESTIC CONTENT	% FOREIGN CONTENT
[COMF	PONENT NAME]	[Location of individual component manufacturer]	[Total domestic content % of all subcomponents]	[Total foreign content % of all subcomponents]
[SUBCOMPONENT NAME] (use rows for each subcomponent)		[Location of individual subcomponent manufacturer]	[Total domestic content % of individual subcomponent]	[Total foreign content % of individual subcomponents]
Attach	additional sheets as neede	ed		
Date:				
Supplier Authorized Signature:				
Print Name:				
Title:				

### **B.7 Sample Pre-Award FMVSS Compliance Certification**

# PRE-AWARD FMVSS COMPLIANCE CERTIFICATION As required by 49 CFR part 663 – Subpart D, \_\_\_\_\_ (the recipient) certifies that it received, at the pre-award stage, a copy of 's (the manufacturer) self-certification information stating that the vehicles, \_\_\_\_\_\_ (number and description of vehicles), will comply with the relevant Federal Motor Vehicle Safety Standards issued by the National Highway Traffic Safety Administration in 49 CFR part 571. Date: \_\_\_\_\_ Recipient Authorized Signature: Title: \_\_\_\_\_

## B.8 Sample Pre-Award Certification of FMVSS Inapplicability

PRE-AWARD CERTIFICATION OF FMVSS INAPPLICABILITY
As required by 49 CFR part 663 – Subpart D, (the
recipient) certifies that it received at the pre-award stage, a statement from
(the manufacturer) indicating
that the vehicles, (number
and description of vehicles), will not be subject to the Federal Motor Vehicle Safety Standards
issued by the National Highway Traffic Safety Administration in 49 CFR part 571.
Date:
Recipient Authorized Signature:
Print Name:
Title:

## **B.9 Sample Post-Delivery Buy America Certification**

POST-DELIVERY BUY AMERICA CERTIFICATION
As required by 49 CFR part 663 – Subpart C, (the
recipient) certifies that it is satisfied that the vehicles received,
(number and
description of vehicles) from (the
manufacturer), meet the requirements of 49 U.S.C. 5323(j), as amended. The recipient,
or its appointed auditor  (the auditor
- not the manufacturer or its agent), has reviewed documentation provided by the
manufacturer, which lists (1) the actual component and subcomponent parts of the vehicles
identified by the manufacturer, country of origin, and cost; and (2) the actual location of the
final assembly point for the vehicles, including a description of the activities that took place at
the final assembly point and the cost of final assembly.
Date:
Recipient Authorized Signature:
Print Name:
Title:

# **B.10 Sample Post-Delivery Buy America Certificate of Non-Compliance**

POST-DELIVERY BUY AMERICA CERTIFICATE OF NON-COMPLIANCE
As required by 49 CFR part 663 – Subpart C, (the
recipient) certifies that there is a letter from FTA which grants a waiver to the vehicles
received,
(manufacturer, number and description of vehicles) from the Buy America requirements under
49 U.S.C. 5323(j), as amended.
Date:
Recipient Authorized Signature:
Print Name:
Title:

# B.11 Sample Post-Delivery Purchaser's Requirements Certification (More Than Ten Buses or Modified Vans)

POST-DELIVERY PURCHASER'S REQUIREMENTS CERTIFICATION
As required by 49 CFR part 663 – Subpart C,
(the recipient) certifies that a resident inspector,
(the resident inspector – not an agent or employee of the manufacturer), was at
's (the manufacturer),
manufacturing site during the period of manufacture of the vehicles,
(number and
description of the vehicles). The inspector monitored manufacturing and completed a report
on the manufacture of the vehicles, and provided accurate records of all vehicle construction
activities. The report addresses how the construction and operation of the vehicles fulfill the
contract specifications. After reviewing the report, visually inspecting the vehicles, and
performance testing the vehicles, the recipient certifies that the vehicles meet the contract
specifications.
Date:
Recipient Authorized Signature:
Print Name:
Title:

## B.12 Sample Post-Delivery Purchaser's Requirements Certification (Ten or Fewer Buses or Modified Vans, or any Number of Unmodified Vans)

POST-DELIVERY PURCHASER'S REQUIREMENTS CERTIFICATION
As required by 49 CFR part 663 – Subpart C, after visually inspecting and road testing the
contract vehicles, (the recipient) certifies
that the vehicles, (number
and description of vehicles) from
(the manufacturer), meet the contract specifications.
Date:
Recipient Authorized Signature:
Print Name:
Title:

## **B.13 Sample Post-Delivery FMVSS Compliance Certification**

POST-DELIVERY FMVSS COMPLIANCE CERTIFICATION
As required by 49 CFR part 663 – Subpart D,
(the recipient) certifies that it received, at the post-delivery stage, a copy of
's (the manufacturer) self-certification
information stating that the vehicles,
(number and description of vehicles), comply with the relevant Federal Motor Vehicle Safety
Standards issued by the National Highway Traffic Safety Administration in 49 CFR part 571.
Date:
Recipient Authorized Signature:
Print Name:
Title:

## **B.14 Sample Post-Delivery Certification of FMVSS Inapplicability**

POST-DELIVERY CERTIFICATION OF FMVSS INAPPLICABILITY
As required by 49 CFR part 663 – Subpart D, (the
recipient) certifies that it received, at the post-delivery stage, a statement from
's (the manufacturer)
indicating that the vehicles
(number and description of vehicles), are not subject to the Federal Motor Vehicle Safety
Standards issued by the National Highway Traffic Safety Administration in 49 CFR part 571.
Date:
Recipient Authorized Signature:
Print Name:
Title:

## **B.15 Sample Completed Vehicle FMVSS Sticker**

MANUFACTURED BY (NAME)		
DATE: (MONTH/YEAR)	GVWR: (WEIGHT) LB	
FRONT GAWR: (WEIGHT) LB WITH (SIZE) TIRES, (SIZE/TYPE) RIMS, AT PSI COLD (SINGLE/DUAL)	REAR GAWR: (WEIGHT) LB WITH (SIZE) TIRES, (SIZE/TYPE) RIMS, AT PSI COLD (SINGLE/DUAL)	
THIS VEHICLE CONFORMS TO ALL APPLICABLE U.S. FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.		
VIN: (VEHICLE IDENTIFICATION NUMBER)		
TYPE: (VEHICLE TYPE)		

### B.16 Sample Altered Vehicle Manufacturer's FMVSS Sticker

THIS VEHICLE WAS ALTERED BY (NAME) IN (MONTH/YEAR) AND AS ALTERED, IT CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS AFFECTED BY THE ALTERATION AND IN EFFECT IN (MONTH/YEAR)	
GVWR: (W	EIGHT) <b>LB</b>
FRONT GAWR: (WEIGHT) LB WITH (SIZE) TIRES, (SIZE/TYPE) RIMS, AT PSI COLD (SINGLE/DUAL)	REAR GAWR: (WEIGHT) LB WITH (SIZE) TIRES, (SIZE/TYPE) RIMS, AT PSI COLD (SINGLE/DUAL)
TYPE: (VEHICLE TYPE)	

#### B.17 Sample Incomplete Vehicle Manufacturer's FMVSS Sticker

THIS CHASSIS-CAB CONFORMS TO FEDERAL MOTOR VEHICLE SAFETY STANDARD NOS. (APPLICABLE FMVSS NUMBERS). THIS VEHICLE WILL CONFORM TO STANDARD NOS. (APPLICABLE FMVSS NUMBERS) IF IT IS COMPLETED IN ACCORDANCE WITH THE INSTRUCTIONS CONTAINED IN THE INCOMPLETE VEHICLE DOCUMENT FURNISHED PURSUANT TO 49 CFR PART 568. CONFORMITY TO THE OTHER SAFETY STANDARDS APPLICABLE TO THIS VEHICLE WHEN COMPLETED IS NOT SUBSTANTIALLY AFFECTED BY THE DESIGN OF THE CHASSIS-CAB.

CHASSIS-CAB MANUFACTURED BY (NAME).

(MONTH/YEAR)

#### B.18 Sample Intermediate Vehicle Manufacturer's FMVSS Sticker

WITH RESPECT TO STANDARD NOS. (APPLICABLE FMVSS NUMBERS), THE INSTRUCTIONS OF PRIOR MANUFACTURERS HAVE BEEN FOLLOWED SO THAT THE CHASSIS-CAB NOW CONFORMS TO THESE STANDARDS. THIS CHASSIS-CAB CONFORMS TO FEDERAL MOTOR VEHICLE SAFETY STANDARD NOS. (APPLICABLE FMVSS NUMBERS). WILL CONFORM TO STANDARD NOS. (APPLICABLE FMVSS NUMBERS) IF IT IS COMPLETED IN ACCORDANCE WITH THE INSTRUCTIONS CONTAINED IN THE AMENDED INCOMPLETE VEHICLE DOCUMENT FURNISHED PURSUANT TO 49 CFR PART 568.
CONFORMITY TO STANDARD NOS. (APPLICABLE FMVSS NUMBERS) IS NO LONGER SUBSTANTIALLY AFFECTED BY THE DESIGN OF THIS CHASSIS-CAB.

INTERMEDIATE MANUFACTURE BY (NAME).

(MONTH/YEAR)

### B.19 Samples of Final-Stage Vehicle Manufacturer's FMVSS Stickers

**MANUFACTURED BY (NAME).** 

**DATE**: (MONTH/YEAR)

**INCOMPLETE VEHICLE MANUFACTURED BY (NAME).** 

**DATE:** (MONTH/YEAR)

**GVWR**: (WEIGHT) LB

FRONT GAWR: (WEIGHT) LB WITH (SIZE) TIRES, (SIZE/TYPE) RIMS, AT PSI COLD (SINGLE/DUAL) | AT PSI COLD (SINGLE/DUAL)

**REAR GAWR:** (WEIGHT) **LB** WITH (SIZE) TIRES, (SIZE/TYPE) RIMS,

CONFORMITY OF THE CHASSIS-CAB TO FEDERAL MOTOR VEHICLE SAFETY STANDARDS, WHICH HAVE BEEN PREVIOUSLY FULLY CERTIFIED BY THE INCOMPLETE VEHICLE MANUFACTURER OR INTERMEDIATE VEHICLE MANUFACTURER, HAS NOT BEEN AFFECTED BY FINAL-STAGE MANUFACTURE, THE VEHICLE HAS BEEN COMPLETED IN ACCORDANCE WITH THE PRIOR MANUFACTURER'S INSTRUCTIONS, WHERE APPLICABLE. THIS VEHICLE CONFORMS TO ALL OTHER APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN **EFFECT IN (MONTH/YEAR).** 

**VIN:** (VEHICLE IDENTIFICATION NUMBER)

**TYPE:** (VEHICLE TYPE)

OR

CONFORMITY OF THE CHASSIS-CAB TO FEDERAL MOTOR VEHICLE SAFETY STANDARD NOS. (APPLICABLE FMVSS NUMBERS) HAS NOT BEEN AFFECTED BY FINAL-STAGE MANUFACTURE. WITH RESPECT TO THE STANDARD NOS. (APPLICABLE FMVSS NUMBERS), THE VEHICLE HAS BEEN COMPLETED IN ACCORDANCE WITH THE **PRIOR** MANUFACTURER'S INSTRUCTIONS. THIS **VEHICLE** CONFORMS TO ALL OTHER APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT IN (MONTH/YEAR).

**VIN: (VEHICLE IDENTIFICATION NUMBER)** 

OR

THIS VEHICLE CONFORMS TO ALL OTHER APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT IN (MONTH/YEAR).

**VIN:** (VEHICLE IDENTIFICATION NUMBER)

**TYPE**: (VEHICLE TYPE)

## Appendix C Sample Buy America Audit Reports

C.1 Pre-Award Audit Reports
ABC TRANSIT AGENCY
ROLLING STOCK VEHICLE PROCUREMENT
Pre-Award Audit Report
Submitted By:
[Recipient and/or Consultant Information]
[Date]

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- 1.0 EXECUTIVE SUMMARY
- 2.0 AUDIT PROCEDURES
- 3.0 PRE-AWARD BUY AMERICA CERTIFICATION
  - 3.1 Verification of Domestic Content Estimate and Final Assembly Cost
  - 3.2 Verification of Final Assembly Location and Activities
- 4.0 PRE-AWARD PURCHASER'S REQUIREMENTS CERTIFICATION
  - 4.1 Verification of the Product as Described in the Specification
  - 4.2 Verification Manufacturer is Responsible with Capability and Capacity to Delivery the Product
- 5.0 FEDERAL MOTOR VEHICLE SAFETY STANDARDS (FMVSS CERTIFICATION) (WHEN APPLICABLE)
- 6.0 PRE-AWARD AUDIT CONCLUSIONS

#### **Attachments**

**Pre-Award Buy America Certification** 

**Pre-Award Purchaser's Requirements Certification** 

**Table of Domestic Content** 

#### 1.0 EXECUTIVE SUMMARY

Provide description of report including manufacturer, number and type of vehicles, and references to key FTA guidelines.

Provide statement about whether rolling stock vehicle manufacturer is compliant with Buy America pre-award audit requirements and whether the recipient has copies of the following

- i) Pre-Award Buy America Certification,
- ii) Pre-Award Purchaser's Requirements Certification, and
- iii) Pre-Award FMVSS Certification, if applicable.

Include a statement as to the organization of the report and any attachments. Provide a statement about whether the rolling stock vehicle manufacturer meets Buy America requirements.

#### 2.0 AUDIT PROCEDURES

Provide a brief description of the procedures used to perform the overall audit, including whether in-house staff or consultants were used. Include a brief statement about Pre-Award Buy America documentation received from the rolling stock vehicle manufacturer, and provide a brief overview of the review and analysis performed to determine compliance with Buy America requirements, including any onsite visits to the rolling stock manufacturer or component supplier sites. Include a brief statement about procedures used to determine the validity of the Pre-Award Purchaser's Requirements Certification, including documentation reviewed and site visits, if any, performed to determine if the proposal meets the solicitation requirements. and that the rolling stock manufacturer is responsible, with the capability and capacity to produce the vehicle in compliance with the Contract Requirements.

#### 3.0 PRE-AWARD BUY AMERICA CERTIFICATION

Provide a brief summary addressing the rolling stock vehicle manufacturer's Pre-Award Buy America documentation and how the manufacturer meets or does not meet the domestic content and final assembly requirements. Provide a brief summary of the documentation provided by the rolling stock vehicle manufacturer and reviewed by the recipient or its designated auditor.

#### 3.1 Verification of Domestic Content and Final Assembly Cost

Provide a summary of the documentation provided by the manufacturer and confirm that the documentation included sufficient detail such that the reviewer was able to verify that the vehicle will contain the minimum domestic content and the final assembly costs.

The self-certification of the manufacturer of domestic content or complieance is not sufficient. The reviewer should examine documentation that inconcludes sufficient detail for the reviewer to determine whether the manufacturer is likely to meet the domestic content requirements.

Relevant information may include, but is not limited to, documentation of the breakdown of components, subcomponents, manufacture of origin, percent cost or actual cost of components, percent cost or actual cost of corresponding subcomponents, and whether the manufacturer has Buy America certifications from its suppliers. Provide a brief summary on the formulas and calculations used to determine domestic content and whether they are accurate. The Buy America pre-award audit report may include a summary table that lists the domestic components and their cost as a percentage of the total cost. The table should not include proprietary or confidential information.

Provide a summary statement of the manufacturer's claimed domestic content based on the independent analysis of the reviewer.

#### 3.2 Verification of U.S. Final Assembly Location and Activities

Provide a brief description of the rolling stock vehicle manufacturer's proposed U.S. final assembly location and how the rolling stock vehicle manufacturer's final assembly activities will correspond to minimum final assembly activities in 49 CFR part 661. Provide a summary of the final assembly costs.

#### 4.0 PRE-AWARD PURCHASER'S REQUIREMENTS CERTIFICATION

Provide a summary addressing the manufacturer's Pre-Award Purchaser's Requirements Certification and the reviewer's methods of review and analysis to determine whether the requirements were satisfied. The summary may include a a brief summary regarding how *ABC Transit Agency's* Evaluation Team reviewed the Manufacturer's Bid (Proposal), compared it to the solicitation specifications, and, after reviewing the manufacturer's bid, issued any addenda, received responses to clarifications, and found the Manufacturer to be compliant.

Additionally, the report may include a summary explaining how the recipient determined that the manufacturer is responsible. The summary may include, for example, a list of past deliveries of similar orders over the past 5 years. The summary also may indicate whether the manufacturer will use the same or similar processes and the same final assembly facility.

Provide a summary statement based on the above review as to whether or not the rolling stock manufacturer has the capacity and capability to produce the rolling stock to meet the contract requirements.

## 5.0 FEDERAL MOTOR VEHICLE SAFETY STANDARDS (FMVSS CERTIFICATION) (IF APPLICABLE)

Provide a summary statement that a sample of the Manufacturer's FMVSS self-certification sticker information was obtained and reviewed against a sample FMVSS sticker and was found to include the content required for the Pre-Award Audit. (Ref. Appendix 6).

6.0 PRE-AWARD AUDIT CONCLUSION
Provide a summary regarding how the procedures used, analysis performed and results found on the Pre-Award audit of the rolling stock manufacturer indicates the manufacturer meets Buy America Compliance and the Purchaser's requirements certification.

## C.2 Post-Delivery Audit Reports

ABC TRANSIT AGENCY
ROLLING STOCK VEHICLE PROCUREMENT
Post-Delivery Audit Report
Submitted By:
[Recipient and/or Consultant Information]
[Date]

#### A B C TRANSIT AGENCY NAME HERE

## Post-Delivery Buy America Certification for (Rolling Stock Manufacturer Name Here)

POST- DELIVERY BUY AMERICA CERTIF		
As required by 49 CFR part 663 - subpart	•	
	fied that the rolling stock vehicles receive (number and description of rolling sto	
vehicles) from	(the manufacturer), meet t	
requirements of 49 U.S.C. 5323(j).	(the manufacturer), meet t The recipient ☐ , or its appointed auditor	
(tne audi	itor – not the manufacturer or its agent), n	
	nanufacturer, which lists (1) the actual compone ck vehicles identified by manufacturer, country	
	ck verticles identified by mandiacturer, country	
	ivities that took place at the final assembly po	
and the cost of final assembly.		
Name:	Date:	
Signature:	Title:	
Post-Delivery Purchaser's Requirements Certification for (Rolling Stock Manufacturer Name Here)		
POST-DELIVERY PURCHASER'S REQUIR		
As required by 49 CFR part 663 – subpar		
(the recipient) certifies that a resident inspection	ector, t or employee of the manufacturer), was	
(the resident inspector – not an agen	to employee of the manufacturer), was the manufacturer), manufacturing s	
during the period of manufacture of the ro		
	ck). The inspector monitored manufacturing a	
completed a report on the manufacture of t	he rolling stock, and provided accurate records	
	rt addresses how the construction and operation	
	cifications. After reviewing the report, visua	
	nce testing the rolling stock, the recipient certifications	
that the rolling stock meets the contract spe	cincations.	
Name:	Date:	
Signature:	Title:	

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- 2.0 POST-DELIVERY AUDIT PROCEDURES
- 3.0 POST-DELIVERY BUY AMERICA CERTIFICATION
  - 3.1 Verification of Domestic Content
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- 4.0 POST-DELIVERY PURCHASER'S REQUIREMENTS CERTIFICATION
  - 4.1 Assignment of Resident Inspector to Final Assembly Location and Rolling Stock Vehicle Manufacturer's Cababilty and Capacity
  - 4.2 Inspection Testing and Commissioning to Show Vehicles Fulfill Contract Specifications
- 5.0 FEDERAL MOTOR VEHICLE SAFETY STANDARDS (FMVSS CERTIFICATION) (IF APPLICABLE)
- 6.0 POST-DELIVERY AUDIT CONCLUSIONS

#### **APPENDICES**

- **Appendix 1** Rolling Stock Vehicle Manufacturer's Post-Delivery Buy America Worksheet, Auditor's associated analysis and verification of final assembly cost
- Appendix 2 Rolling Stock Vehicle Manufacturer's Buy America Certification
- **Appendix 3** Resident Inspector's Post-Delivery Purchaser's Requirements Report

#### 1.0 EXECUTIVE SUMMARY

Provide a description of the report including manufacturer, number and type of vehicles, and references to key FTA guidelines.

Provide a statement about whether the rolling stock vehicle manufacturer is compliant with both (or all three) certifications; reference FTA regulations (49 CFR parts 661 and 663).

Provide a description of how the report is divided into two (or three) major sections in accordance with the regulation's requirements, namely:

- i) Post-Delivery Buy America Certification
- ii) Post-Delivery Purchaser's Requirements Certification
- iii) Post-Delivery FMVSS Certification (if applicable)

Include a statement about the appendices of the report containing the relevant attachments to support the two (or three) major sections.

Provide a statement as to whether the rolling stock vehicle manufacturer meets the requirements of 49 CFR part 663.

#### 2.0 POST-DELIVERY AUDIT PROCEDURES

Provide a brief description of the procedures used to perform the overall audit, including whether recipient's staff or consultants were used. Include a brief statement about the Post-Delivery Buy America documentation received from the rolling stock vehicle manufacturer, and provide a brief overview of the review and analysis performed to determine compliance with Buy America Requirements, including onsite visits to the rolling stock manufacturer or component supplier sites. Include a brief statement about the procedures used to verify the Post-Delivery Purchaser's Requirements Certification, including the presence of a resident inspector and confirmation of receipt and review of the resident inspector's report, to determine compliance with Post-Delivery Purchaser's Requirements Certification.

#### 3.0 POST-DELIVERY BUY AMERICA CERTIFICATION

Provide a brief summary addressing the rolling stock vehicle manufacturer's Post-Delivery Buy America documentation, and whether the manufacturer meets or does not meet the domestic content and final assembly requirements. Provide a brief summary of the documentation provided by the rolling stock vehicle manufacturer and reviewed by the recipient or its designated auditor.

#### 3.1 Verification of Domestic Content and Final Assembly Cost

Provide a detailed summary of the auditor's review of the rolling stock vehicle manufacturer's Buy America worksheet and whether it includes all the typical components of the rolling stock being purchased per 49 CFR § 661.11. State the total % domestic content claimed by the rolling stock vehicle manufacturer.

Include information about the information and documentation reviewed by the auditor to verify the domestic content, including, but not limited to, whether information about the breakdown of components, subcomponents, manufacture of origin, percent cost or actual cost of components and percent cost or actual cost of corresponding subcomponents. Provide a brief summary about the formulas and calculations used to determine domestic content and whether it is accurate. Provide any other unique details about the manufacturer's Buy America worksheet. Provide a summary of the auditor's review of the bill of material and whether it was used to verify components. Provide a summary of the auditor's review of purchase orders or paid invoices of components and whether costs were traceable to the rolling stock manufacturer's Buy America domestic content worksheet.

Provide a brief summary about whether the manufacturer has signed certificates from component suppliers certifying U.S. content <sup>46</sup> and a statement about the sampling of the components supplier's certifications.

Provide a summary statement affirming the manufacturer's claimed domestic content based on the independent analysis. Provide a final statement about whether the Rolling Stock Manufacturer's Buy America Worksheet is accurate and documented.

#### 3.2 Verification of U.S. Final Assembly Location and Activities

Provide a brief summary confirming the U.S. final assembly location and how final assembly activities correspond to minimum final assembly activities in 49 CFR § 661.11 Appendix D. Make reference to the Resident Inspector's report that details this information (as an Appendix).

#### 4.0 POST-DELIVERY PURCHASER'S REQUIREMENTS CERTIFICATION

Provide a summary that this section addresses the manufacturer's Post-Delivery Purchaser's Requirements Certification. Provide a brief summary on the methods of review and analysis to determine if the requirements were satisfied, including presence of the resident inspector, resident inspector's report, and verification and results of visual inspection and test sheets.

Provide a summary statement as to whether the Rolling Stock Vehicle Manufacturer meets the Post-Delivery Purchaser's Requirements, as stated in 49 CFR part 663 Pre-Award and Post-Delivery Audits of Rolling Stock Purchases.

## 4.1 Assignment of Resident Inspector to Final Assembly Location; Verification of Manufacturer's Capability and Capacity

Provide a brief summary of the Resident Inspector's report and how it demonstrates the Rolling Stock Manufacturer's Capability and Capacity. Include information such as whether the resident inspector was at the facility full time or part time, the number of resident inspectors at the final assembly plant, and the type of inspections performed on vehicles as summarized in the resident inspector's report (Appendix 5). Provide a summary of quality assurance and control

<sup>&</sup>lt;sup>46</sup> Note this is just a statement as to whether the manufacturer has obtained certificates from its suppliers; signed certificates from suppliers is not requirement, but is a recommended practice.

processes and whether the processes are consistent with the appropriate FTA elements of quality<sup>47</sup> (as an Appendix).

## 4.2 Inspection Testing and Commissioning to Show Vehicles Fulfill Contract Specifications

Provide a brief summary of key inspection, testing, test witnessing and commissioning activities as summarized in the resident inspector's report, making reference to sample inspection check sheets, testing procedures, reports, and examples of how the inspection and testing results meet the technical specification requirements (as an Appendix).

## 5.0 FEDERAL MOTOR VEHICLE SAFETY STANDARDS (FMVSS CERTIFICATION) (IF APPLICABLE)

Provide a summary statement that the rolling stock vehicle manufacturer's actual FMVSS self-certification sticker information was obtained and reviewed against a sample FMVSS sticker and was found to include the content required for the Post-Delivery Audit. (Ref. Appendix 6).

#### 6.0 POST-DELIVERY AUDIT CONCLUSION

Provide a summary regarding how the procedures used, analysis performed, and results found on Post-Delivery Audit of the rolling stock manufacturer indicate that the Buy America Compliance and the Purchaser's requirements certification have been satisfied.

<sup>&</sup>lt;sup>47</sup> Available on FTA's website: <a href="https://www.transit.dot.gov/funding/procurement/project-management-oversight-pmo">https://www.transit.dot.gov/funding/procurement/project-management-oversight-pmo</a>.