



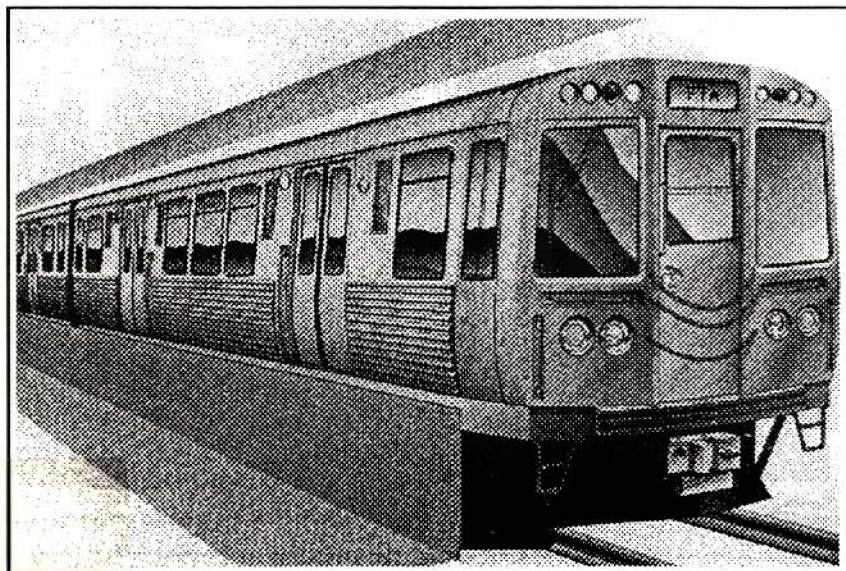
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Federal Transit
Administration

Conducting Pre-Award and Post-Delivery Audits for Rail Vehicle Procurements

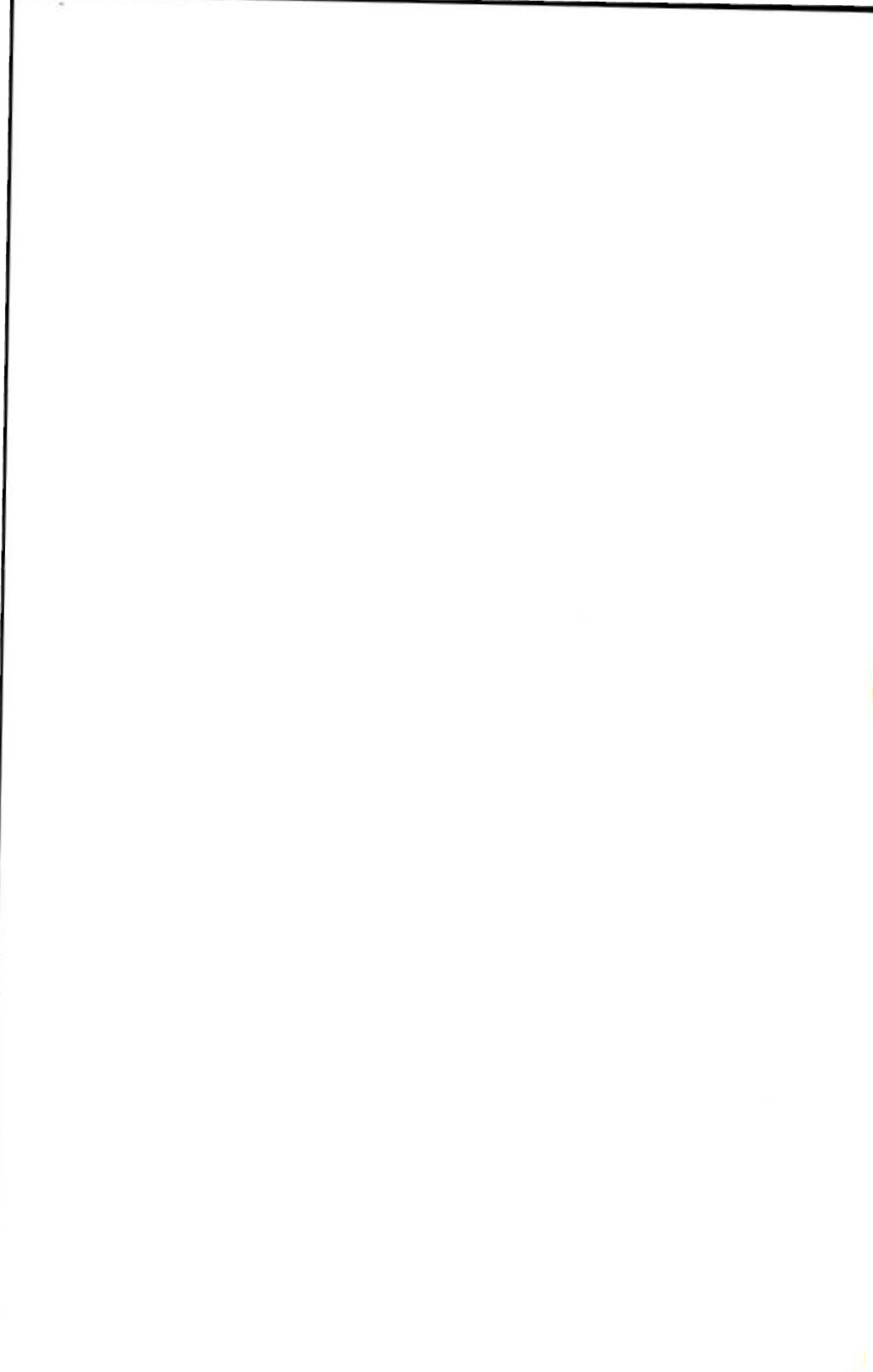
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May 22, 1994



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U.S. Department
of Transportation

**Federal Transit
Administration**

Conducting Pre-Award and Post-Delivery Audits for Rail Vehicle Procurements

May 22, 1994

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Prepared for

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The information contained in this manual is based on the Pre-Award and Post-Delivery Audits of Rolling Stock Purchases — Final Rule, the Buy America Requirements — Final Rule; and the preamble to those rules. The guidance in this manual does not constitute a determination of compliance with the DOT standards and rules or with your rights or responsibilities under the rules and is not binding on DOT.

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TABLE OF CONTENTS

DEFINITIONS	vi
INTRODUCTION	I-1
 Section One	
THE PRE-AWARD AND POST-DELIVERY REVIEW	
REQUIREMENTS SUMMARY	1-1
The Pre-Award Review	1-1
The Post-Delivery Review	1-2
 Section Two	
THE PRE-AWARD REVIEW REQUIREMENTS	
The Pre-Award Buy America Certification Requirement	2-1
Buy America-Compliant Rail Vehicles	2-1
Buy America-Exempt Rail Vehicles	2-7
The Pre-Award Purchaser's Requirements Certification Requirement	2-8
 Section Three	
THE POST-DELIVERY REVIEW REQUIREMENTS	
The Post-Delivery Buy America Certification Requirement	3-1
Buy America-Compliant Rail Vehicles	3-2
Buy America-Exempt Rail Vehicles	3-7
The Post-Delivery Purchaser's Requirements Certification Requirement	3-8
 EXAMPLES OF COMPLIANCE WITH THE PRE-AWARD AND	
POST-DELIVERY REVIEW REQUIREMENTS	
Buy America Certification	4-1
Purchaser's Requirements Certification	4-5



Section Five

**FREQUENTLY ASKED QUESTIONS ABOUT THE PRE-
AWARD AND POST-DELIVERY REVIEW 5-1**

- General 5-1**
- Buy America Certification 5-2**
- Purchaser's Requirements Certification 5-6**

APPENDIX A: SAMPLE REVIEW CERTIFICATIONS A-1

APPENDIX B: TYPICAL RAIL VEHICLE COMPONENTS B-1

APPENDIX C: BUY AMERICA WAIVERS C-1

**APPENDIX D: SAMPLE VISUAL INSPECTION AND
PERFORMANCE TEST SHEETS D-1**

APPENDIX E: LIST OF FTA OFFICES E-1

**APPENDIX F: LIST OF APPLICABLE FEDERAL
DOCUMENTATION F-1**



Exhibit I-1:	Pre-Award and Post-Delivery Review Requirements and Checklist	I-2
Exhibit 4-1:	Sample Manufacturer's Buy America Calculation	4-1
Exhibit 4-2:	Sample Content Calculation for a U.S.-Manufactured Component With at Least 60 Percent Domestic Subcomponents	4-2
Exhibit 4-3:	Sample Content Calculation for a U.S.-Manufactured Component With Less Than 60 Percent Domestic Subcomponents	4-3
Exhibit 4-4:	Sample Content Calculation for a Foreign-Manufactured Component With Domestic Subcomponents.....	4-3
Exhibit 5-1:	Sample Certification of Compliance.....	5-1
Exhibit A-1:	Sample Pre-Award Buy America Compliance Certification	A-1
Exhibit A-2:	Sample Pre-Award Buy America Exemption Certification	A-1
Exhibit A-3:	Sample Pre-Award Purchaser's Requirements Certification	A-2
Exhibit A-4:	Sample Post-Delivery Buy America Compliance Certification	A-2
Exhibit A-5:	Sample Post-Delivery Buy America Exemption Certification	A-3
Exhibit A-6:	Sample Post-Delivery Purchaser's Requirements Certification	A-3



DEFINITIONS

The definitions provided below are provided to assist the reader with terms used in this manual. Some of these terms may be defined differently than those used in the Code of Federal Regulations. This has been done for clarification purposes. However, the reader should note that the definitions provided here are consistent with the intentions of the Pre-Award and Post-Delivery Audits of Rolling Stock Purchases Rule and the Buy America Requirements Rule.

Analyst – A representative of the recipient (either working directly for the recipient or contracted by the recipient)—**not** an employee, or an agent, of the proposed rail vehicle manufacturer (in the case of the pre-award review) or the selected rail vehicle manufacturer (in the case of the post-delivery review).

Buy America Rule – The “Buy America Requirements” Regulation, Title 49 of the Code of Federal Regulations, Part 661.

Component – Any article, material, or supply, that is directly incorporated into an end product at the final assembly location.

DOT – The United States Department of Transportation.

End product – Any item to be acquired by a recipient, such as a railcar.

Final assembly – The bringing together of a significant number of individual components, whether manufactured or unmanufactured, for the purpose of creating an end product.

FTA – Federal Transit Administration, an agency of DOT.

Manufacture – The transformation of a component or group of subcomponents for the purpose of adding value to, improving, or creating a functionally different component.

Performance test – An operational test for the rail vehicle when it is tested on actual track to evaluate its performance.



Post-delivery – The period during the procurement process beginning with the signing of a formal contract with the selected contractor. It includes the period of vehicle manufacturing, inspection, testing, and delivery. It ends with title transfer or the placement of the rail vehicles into revenue service, whichever is first.

Pre-award – The period during the procurement process before the recipient enters into a formal contract with the supplier.

Pre-Award and Post-Delivery Rule – The “Pre-Award and Post-Delivery Audits of Rolling Stock Purchases” Regulation, Title 49 of the Code of Federal Regulations, Part 663.

Purchaser – The recipient.

Rail vehicle – Transit vehicles, such as railcars, locomotives, trolley cars, and light rail vehicles

Recipient – A receiver of Federal financial assistance from the FTA.

Revenue service – The operation of vehicles for the transportation of passengers as anticipated by the recipient.

Review – An analysis conducted by the recipient that will result in a file containing the necessary certifications of compliance, including the Buy America certification, purchaser’s requirements certification, and FMVSS certification.

Rolling stock – Transit vehicles, such as buses, vans, cars, railcars, locomotives, trolley cars and buses, ferry boats, and vehicles used on guideways and incline planes.

STAA – The Surface Transportation Assistance Act of 1982 (Public Law 97-424, January 6, 1983).

Subcomponent – Any article, material, or supply that is one step removed from a component.

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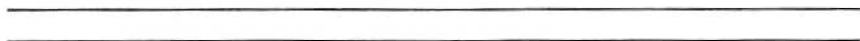
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INTRODUCTION







INTRODUCTION

The Federal Transit Act authorizes the Secretary of Transportation to provide assistance for the development of comprehensive and coordinated public and private mass transportation systems. The Act allows the Federal Transit Administration (FTA) to obligate Federal funds to mass transportation service providers for purchasing rail vehicles used to carry passengers in mass transit service. Recipients of these funds must comply with several Federal regulations, one of which is the Pre-Award and Post-Delivery Rule. If the FTA determines that the purchaser is not in compliance with the Rule, funding for the purchase may be jeopardized.

There are two parts to the Rule: the pre-award review and post-delivery review. The pre-award review is intended to help the recipient ensure that the proposed rail vehicles will meet (1) Buy America regulations, and (2) the recipient's needs and specifications. The post-delivery review is intended to help the recipient ensure that the delivered rail vehicles meet the above stipulations.

This manual provides guidance to recipients of Federal funds to help demonstrate compliance with (1) the pre-award review requirements **before** entering into a contract with a rail vehicle manufacturer and (2) the post-delivery review requirements **before** the title of the rail vehicle is transferred to the recipient.

Section One describes the requirements of the Pre-Award and Post-Delivery Rule. It details which certifications and documents are needed to support the procurement process — from issuance of the solicitation to title transfer. Sections Two and Three suggest procedures that the recipient may follow when conducting the pre-award and post-delivery reviews, respectively. The fourth section provides examples of Buy America calculations and suggests other activities to help the recipient conduct the reviews. Section Five provides responses to frequently asked questions concerning the Rule. The five appendices at the end of this manual provide samples of review certifications, lists of typical rail vehicle components, Buy America waivers, sample visual inspection and performance test sheets, and a list of FTA offices, respectively.



Exhibit I-1 on this page summarizes the content of each review and the certifications required for the review. The exhibit also indicates where each topic can be found in this manual. Recipients may use this exhibit as a checklist to track the completion of each review.

RAIL VEHICLE: _____
CONTRACT NO.: _____

<p>Pre-Award Review</p> <p>(Before signing a contract with a supplier)</p>	<p>Buy America Certification (Page 2-1)</p> <p>A. <input type="checkbox"/> Reviewed and Verified 60 Percent Domestic Content; AND <input type="checkbox"/> Reviewed and Verified Proposed U.S. Final Assembly Location, Operations, and Total Cost</p> <p>OR</p> <p>B. <input type="checkbox"/> Requested and Received Buy America Waiver</p> <p>Purchaser's Requirements Certification (Page 2-8)</p> <p>A. <input type="checkbox"/> Checked Bid Specification Compliance With Solicitation Specifications; AND <input type="checkbox"/> Completed Manufacturer Capability Study</p>
<p>Post-Delivery Review</p> <p>(Before using the vehicles in transit service)</p>	<p>Buy America Certification (Page 3-1)</p> <p>A. <input type="checkbox"/> Reviewed and Verified 60 Percent Domestic Content; AND <input type="checkbox"/> Reviewed and Verified Actual U.S. Final Assembly Location, Operations, and Total Cost</p> <p>OR</p> <p>B. <input type="checkbox"/> Requested and Received Buy America Waiver</p> <p>Purchaser's Requirements Certification (Page 3-8)</p> <p>A. <input type="checkbox"/> Completed Resident Inspector's Report; AND <input type="checkbox"/> Completed Visual Inspections and Performance Tests</p>

Note: All certifications **must** be kept on file. Supporting documentation should accompany each certification.

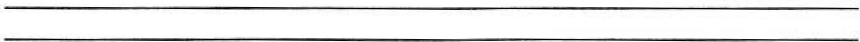
Exhibit I-1. Pre-Award and Post-Delivery Review Requirements and Checklist



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Section One

THE PRE-AWARD AND POST-DELIVERY REVIEW REQUIREMENTS SUMMARY







THE PRE-AWARD AND POST-DELIVERY REVIEW REQUIREMENTS SUMMARY

The Pre-Award and Post-Delivery Rule requires recipients to certify that pre-award and post-delivery reviews will be conducted when using FTA-appropriated funds to purchase revenue service rail vehicles. A sample certification is provided in Section 5, Exhibit 5-1 of this manual.

This section details the pre-award and post-delivery review requirements for rail vehicles.

The Pre-Award Review

The pre-award review is required before a recipient may enter into a formal contract with a supplier. The review period begins after the recipient issues the solicitation and ends before the recipient signs a formal contract with the selected manufacturer.

The review requires the recipient to complete two certifications—the Buy America certification, and the purchaser's requirements certification. Both certifications must be kept in the recipient's files for future FTA reviews.

For the Buy America certification process, the recipient must:

either

- Verify that (1) the rail vehicles will contain a minimum of 60 percent domestic products, by cost, and (2) final assembly of the rail vehicles will take place in the United States

or

- Obtain, from the FTA, a copy of the waiver letter exempting the rail vehicles from the Buy America requirements.



For the purchaser's requirements certification, the recipient must verify that:

- The manufacturer's bid specifications are in compliance with the recipient's solicitation specifications

and

- The proposed manufacturer is responsible and capable of building the rail vehicle to the recipient's solicitation specifications.

The Post-Delivery Review

A post-delivery review must be completed before a rail vehicle title is transferred to the recipient, or before a rail vehicle is placed into revenue service, whichever is first. The review period begins when the recipient signs a formal contract with the selected manufacturer and ends before title transfer or use in service.

As with the pre-award review, the recipient must complete two certifications—the Buy America certification, and the purchaser's requirements certification. Again, both certifications must be kept in the recipient's files for future FTA reviews.

The Buy America certification process is similar to that completed during the pre-award review, with the exception that the review now reflects information based on the actual rail vehicles versus the proposed rail vehicles. The post-delivery purchaser's requirements certification process is different from the pre-award purchaser's requirements certification process.

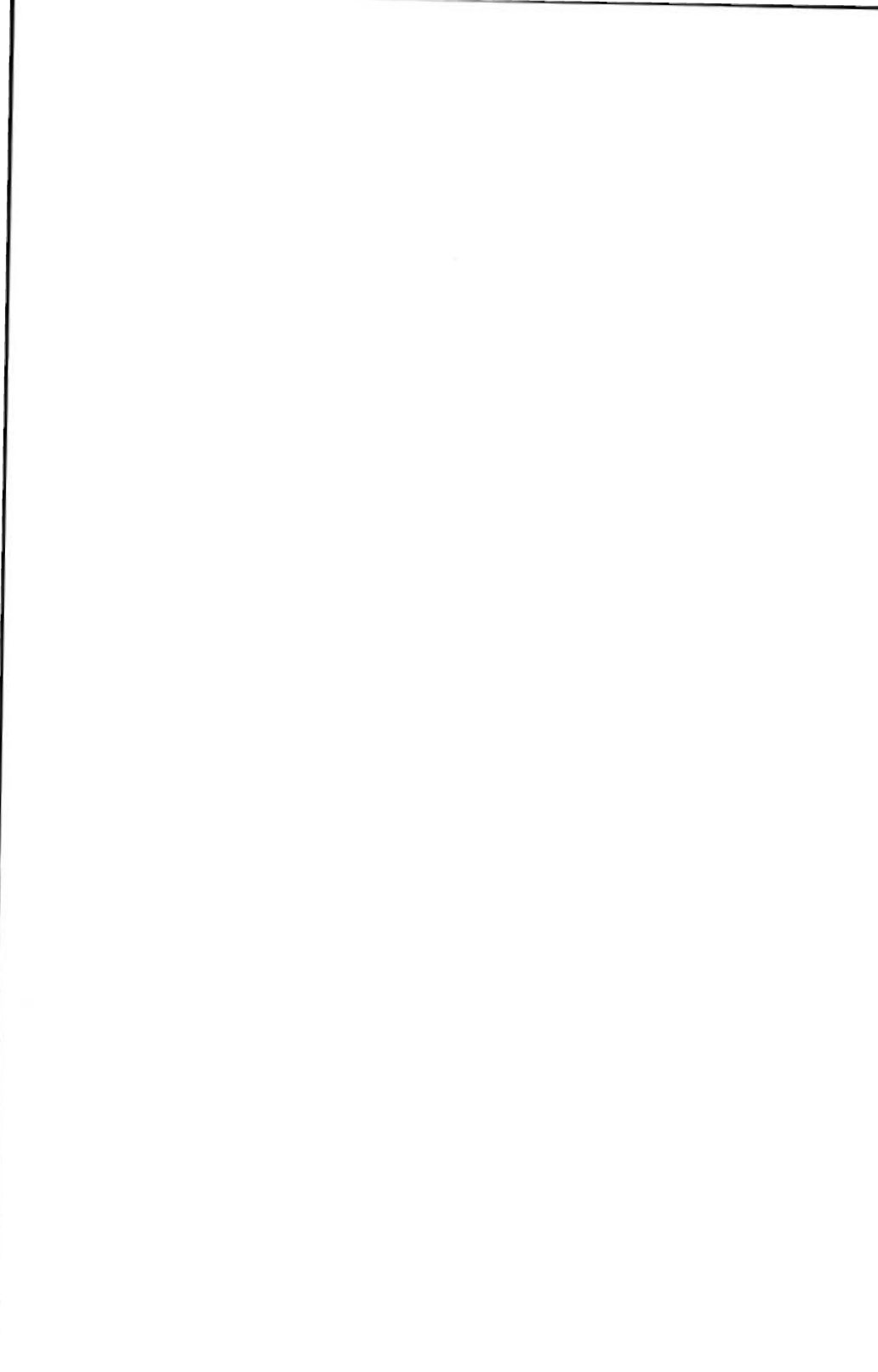


For the purchaser's requirements certification, the recipient must:

- Complete visual inspections and performance tests to demonstrate that the rail vehicles meet the contract specifications

and

- Send a resident inspector to the manufacturer's production facility during the final assembly period to (1) monitor the final assembly process and (2) complete a final report describing the construction activities and explaining how the construction and operation of the rail vehicles fulfill the contract specifications.

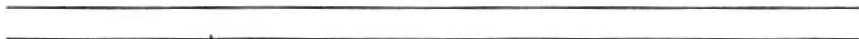


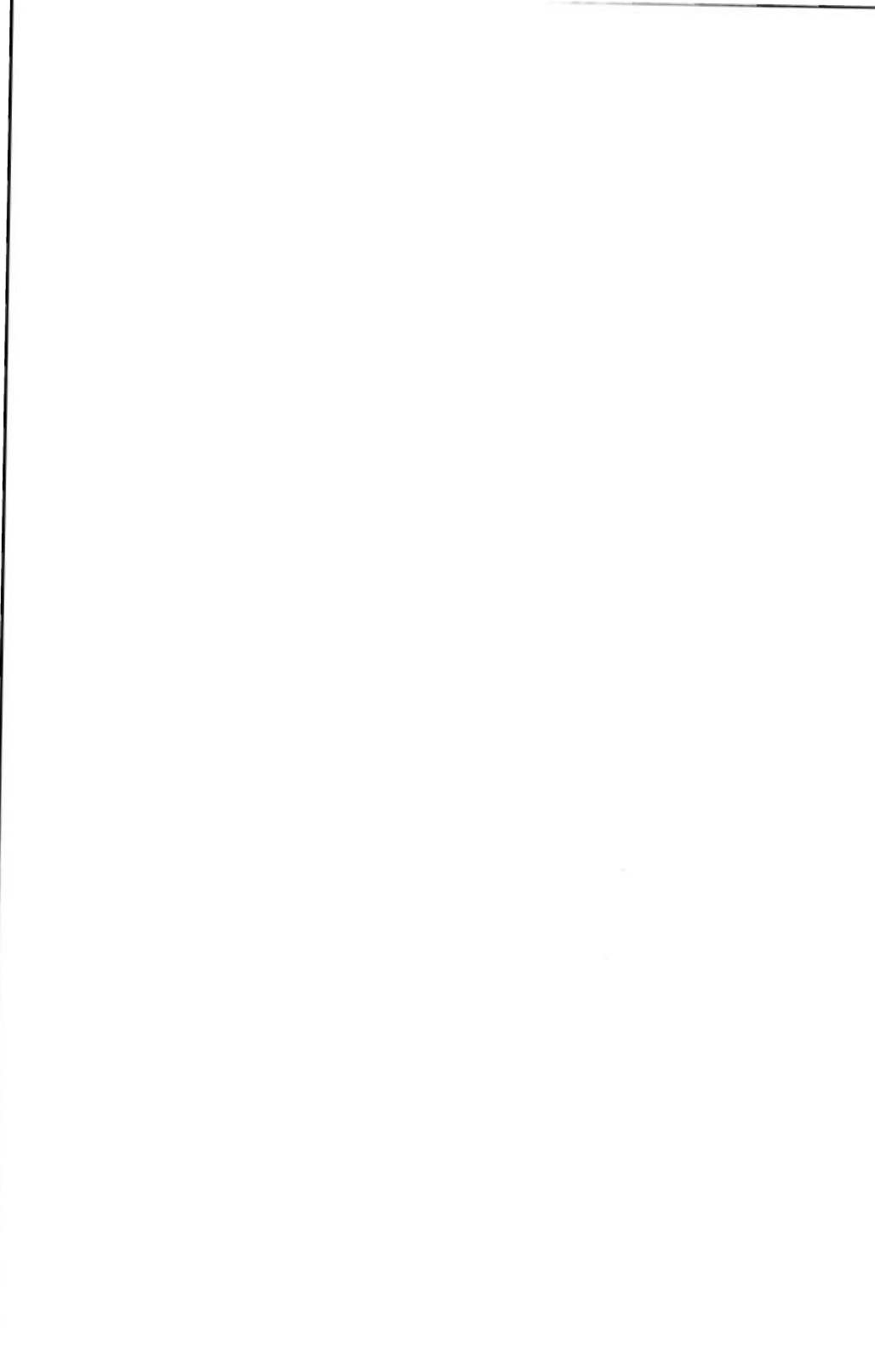


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Section Two

THE PRE-AWARD REVIEW REQUIREMENTS







THE PRE-AWARD REVIEW REQUIREMENTS

This section explains procedures that will help the recipient conduct the pre-award review in accordance with the Pre-Award and Post-Delivery Rule. It cites relevant portions of the Rule and describes the review process. Sample certifications that the recipient may use as models to demonstrate that the review has been conducted as required by the Rule are presented in Appendix A.

The Pre-Award Buy America Certification Requirement

This subsection discusses procedures that recipients may follow to demonstrate compliance with the pre-award Buy America certification requirement.

Rail vehicles to be purchased by a recipient must fall into one of two categories under this requirement: (1) vehicles that meet the Buy America domestic content and assembly requirement and (2) vehicles for which a Buy America waiver is available. The procedures for each category are described below.

Buy America-Compliant Rail Vehicles

Most rail vehicles must meet the 60 percent minimum domestic content and U.S. final assembly requirements set forth in the Buy America Rule. Therefore, the recipient must be satisfied that the rail vehicles will meet the requirements. In other words, the recipient must be satisfied that the manufacturer who is proposing to sell the vehicles can and will comply with the content and assembly requirements.

"The recipient is satisfied that the [vehicles meet] ... the requirements ... after having reviewed ... documentation ... [listing c]omponent and subcomponent parts; ... location, ... activities, ... [and] cost of final assembly." ¹

¹ Section 663.25(b), "Pre-Award and Post-Delivery Audits of Rolling Stock Purchases," 49 CFR, Part 663.



As a first step in the pre-award review process, the recipient, or a duly appointed analyst, must review the Buy America information that the proposed manufacturer must provide for the review.

The manufacturer's information must include:

- A listing of the rail vehicle components and subcomponents that will be used to calculate the percent domestic content (see Appendix B for a listing of typical rail vehicle components)

and

- The proposed final assembly location

and

- Activities that will take place during final assembly

and

- The proposed total cost of final assembly.

For each component and subcomponent listed, the manufacturer, country of origin, and cost must be identified. The cost may be presented as either a dollar or percentage figure. If a percentage is used, then the percentage is the cost for the component or subcomponent divided by the total material cost for the item to which it belongs.



The cost for parts manufactured in the United States is determined as follows:

- For subcomponents, the cost identified would be the purchase price paid by the component manufacturer.
 - For components, depending on the percent domestic content of the component, the cost identified would be either:
 - The purchase price paid by the vehicle manufacturer,
- or**
- The total domestic subcomponent material cost, plus the cost of manufacturing the component.

To calculate the percent domestic content of an item, sum the total material cost of all parts (domestic and foreign) for the item. Then sum the material cost of all **domestic** parts for the item only. Next, divide the **domestic** cost by the total cost to obtain the percent domestic content. In mathematical terms,

$$\frac{\text{Total Domestic Material Cost}}{\text{Total Material Cost}} = \text{Percent Domestic Content}$$

or

$$\frac{\text{TDMC}}{\text{TMC}} = \text{PDC.}$$

If the PDC is equal to, or greater than, 0.60, then the entire cost of the item, or purchase price paid, would be used in the listing. Otherwise, the cost used in the list would be TDMC plus the cost of manufacturing the item, since the item was manufactured in the United States.

For example, assume that a vehicle manufacturer pays \$22,000 to purchase a component from a supplier who manufactures components in the United States. If the mark-up (MU), for profit, is 10 percent (0.10), then the component supplier's actual cost for that component is \$20,000, or

$$\frac{\text{Purchase Price}}{1+\text{MU}} = \frac{\$22,000}{1.10} = \$20,000 = \text{Actual Cost.}$$



Now, assume that the component supplier's cost of manufacturing is \$5,000. Therefore, the total cost of materials for the component supplier is \$15,000, or \$20,000 - \$5,000. This is referred to as the total material cost.

Based on the above, we have the following information:

Purchase Price	Profit Margin	Actual Cost	Manufacturing Cost	Total Material Cost
\$22,000	10%	\$20,000	\$5,000	\$15,000

Next, let's assume that the total material cost for all **domestic** subcomponents is \$9,000—this is referred to as total domestic material cost (TDMC). We know from the previous information that the total material cost (TMC) for the component is \$15,000. So, if we use our earlier equation and substitute the appropriate numbers,

$$\frac{\text{TDMC}}{\text{TMC}} = \frac{\$9,000}{\$15,000} = 0.60 = \text{PDC}.$$

Since PDC is equal to or greater than 0.60, the vehicle manufacturer may use the full \$22,000 (its purchase price), in the Buy America content calculation. If the total material cost for the complete vehicle is \$1,000,000, then this single component contributes 2.2 percent toward the domestic content of the vehicle, or

$$\frac{\$22,000}{\$1,000,000} = 2.2\%.$$

Suppose that the total cost of all **domestic** subcomponents had been \$8,000 (TDMC). If that had been true, then PDC would be 0.53, or 53.3 percent. Since the minimum 60 percent domestic content is not achieved, then the vehicle manufacturer may use only \$13,000, or TDMC plus the manufacturing cost (\$5,000), in the Buy America content calculation. The component now contributes only 1.3 percent toward the domestic content of the vehicle, or

$$\frac{\$8,000 + \$5,000}{\$1,000,000} = \frac{\$13,000}{\$1,000,000} = 1.3\%.$$

The cost for foreign manufactured items with domestic parts is the total material cost for domestic parts only. The component manufacturing cost is not allowed because manufacturing did not take place in the United States.



Thus, in the two examples above, the manufacturer would use the \$9,000 or \$8,000 figures, respectively, in the Buy America content calculation. The component would therefore contribute only 0.9 or 0.8 percent toward the domestic content of the vehicle, or

$$\frac{\$9,000}{\$1,000,000} = 0.9\% \text{ or } \frac{\$8,000}{\$1,000,000} = 0.8\%, \text{ respectively.}$$

It should now be evident why vehicle manufacturers would want to use Buy America compliant components in their vehicles.

The manufacturer's list **must** identify the domestic subcomponents for components used in the content calculation, such as trucks, friction brakes, and couplers.

Section Four, "Examples of Complying With the Pre-Award and Post-Delivery Review Requirements," presents samples of domestic content calculations. Section Five, "Frequently Asked Questions About the Pre-Award and Post-Delivery Review," answers questions concerning the domestic content of components and subcomponents and the allowable cost used in the percent domestic content calculations of the vehicle.

To be assured that the manufacturer can comply with the requirements, the analyst must verify that the rail vehicles will contain a minimum of 60 percent domestic products, by cost. Therefore, the analyst must:

- Review the component and subcomponent listings to verify 60 percent domestic product content

and

- Review the final assembly cost.

To verify domestic content, the analyst needs to subtract the final assembly cost from the actual cost of the vehicle. As mentioned earlier, the vehicle will have some mark-up for profit, or possibly mark-down to stimulate sales. The purchase price needs to be adjusted by this mark-up/mark-down to obtain the actual cost to the manufacturer for producing the vehicle. This may need to be estimated as manufacturer's may be reluctant to provide detailed information. Once the actual cost is



approximated, subtract the final assembly cost. The result will be the approximate cost for all materials, recall TMC from the earlier discussion. Now the analyst can review the listing to check that the 60 percent domestic content was presented properly and realistically.

As an example, assume the manufacturer's listing indicated that the cost of a component contributed 30 percent to the domestic content of the vehicle. Since the analyst has approximated the TMC, the approximate cost for the component in question can be estimated from the percentage provided on the listing. If this cost seems unrealistic, the analyst would want to further investigate the issue. If the component costs seem unrealistic, then the analyst may need to adjust the mark-up/mark-down assumptions or check that the final assembly cost is accurate, as provided by the manufacturer.

To verify that the final assembly location will be within the United States, the analyst must:

- Check that the manufacturer has identified a final assembly location that is within the United States

and

- Review the list of final assembly activities, which should include activities, such as welding, subassembly activities, component installation, and painting, to ensure that activities at the cited final assembly location qualify as final assembly.

After the analyst has completed the steps described above, the recipient must:

- Complete a pre-award Buy America compliance certification (see sample in Appendix A, Exhibit A-1)

and

- Keep the Buy America certification on file for future FTA reviews.



If the manufacturer agrees, the recipient should, **but is not required to**, keep a copy of the manufacturer's Buy America information with the Buy America certification in the file.

Buy America-Exempt Rail Vehicles

Although few rail vehicles are exempt from the Buy America domestic content and final assembly requirements, some manufacturers' vehicles may be eligible for an FTA waiver exempting the vehicles from the requirements. If a waiver does exist for the vehicles the recipient must:

"There is a letter from [FTA], which grants a waiver to the [vehicles] to be purchased ..."²

- Obtain a Buy America waiver letter from the FTA for the rail vehicles

and

- Complete a pre-award Buy America exemption certification (see sample in Appendix A, Exhibit A-2)

and

- Keep the Buy America certification on file for future FTA reviews.

The recipient should keep a copy of the FTA waiver letter with the Buy America certification in the files. Appendix C summarizes details of current Buy America waivers.

² Section 663.25(a), "Pre-Award and Post-Delivery Audits of Rolling Stock Purchases," 49 CFR, Part 663.



The Pre-Award Purchaser's Requirements Certification Requirement

This subsection discusses procedures that recipients may follow to demonstrate compliance with the pre-award purchaser's requirements certification requirement.

This requirement is intended to eliminate those manufacturers that appear irresponsible and/or incapable of complying with the recipients' solicitation specifications.

*"The [vehicles are] ... the same ... [as] described in the ... specification ... and the proposed manufacturer is ... responsible ... [and has] the capability ..."*³

To comply with the purchaser's requirements certification, the recipient, or a designated analyst, must check:

- That the manufacturer's bid specifications are in compliance with the recipient's solicitation specifications

and

- That the proposed manufacturer will be capable of meeting the specifications.

To ensure compliance, the analyst should review:

- The solicitation specifications, the bid specifications, and the recipient's approval of any approved equals

and

- The manufacturer's qualifications (such as quality control measures, previous customer's, and other qualification documents).

³ Section 663.27(a) & (b), "Pre-Award and Post-Delivery Audits of Rolling Stock Purchases," 49 CFR, Part 663.



After the review has been completed, the recipient must:

- Complete a pre-award purchaser's requirements certification (see sample in Appendix A, Exhibit A-3)

and

- File the purchaser's requirements certification for future FTA reviews.

The recipient should keep copies of their solicitation specification, the manufacturer's bid specification, approvals of any approved equals, and manufacturer qualifications with the purchaser's requirements certification in the file.

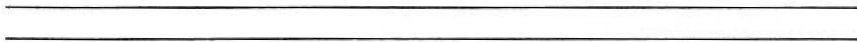




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Section Three

THE POST-DELIVERY REVIEW REQUIREMENTS







THE POST-DELIVERY REVIEW REQUIREMENTS

In addition to the pre-award review requirements, recipients must comply with the post-delivery review requirements during and after vehicle manufacturing. This section explains procedures that will help the recipient conduct the post-delivery review in accordance with the Pre-Award and Post-Delivery Rule. It cites relevant portions of the Rule and describes the review process. Sample post-delivery certifications that the recipient may use as models to demonstrate that the review has been conducted as required by the Rule are presented in Appendix A.

The Post-Delivery Buy America Certification Requirement

This subsection discusses procedures that recipients may follow to demonstrate compliance with the post-delivery Buy America certification requirement.

The process for complying with the post-delivery Buy America certification requirement is similar to the pre-award requirement, except that the recipient is now certifying the actual rail vehicles rather than the proposed rail vehicles. As with the pre-award review, the rail vehicles received must fall into one of two categories under this requirement: (1) vehicles meeting the Buy America domestic content and assembly requirements and (2) vehicles for which a Buy America waiver is available. The procedures for each category are described below.

If the Buy America information has not changed since the pre-award review and the recipient is satisfied that this is the case, the recipient may use the pre-award review documentation for the post-delivery review. However, if there is some doubt, another review should be conducted.



Buy America-Compliant Rail Vehicles

Most rail vehicles must meet the 60 percent minimum domestic content and U.S. final assembly requirements set forth in the Buy America Rule. Therefore the recipient must be satisfied that the rail vehicles comply with the requirements. Before certifying that the purchased vehicles meet the Buy America requirements, the recipient or a duly designated analyst must review the Buy America information, which must be provided by the manufacturer. This information must include:

"The recipient is satisfied that the [vehicles meet] ... the requirements ... after having reviewed ... documentation ... [listing c]omponent and subcomponent parts; ... location, ... activities, ... [and] cost of the final assembly."

- A listing of vehicle components and subcomponents used to calculate the percent domestic content (see Appendix B for a listing of typical rail vehicle components)

and

- The actual final assembly location

and

- The activities that took place during final assembly

and

- The actual total cost of final assembly.

For each component and subcomponent listed, the manufacturer, country of origin, and cost must be identified. The cost may be presented as either a dollar or percentage figure. If a percentage is used, then the percentage is the cost for the component or subcomponent divided by the total material cost for the item to which it belongs.

¹ Section 663.35(b), "Pre-Award and Post-Delivery Audits of Rolling Stock Purchases," 49 CFR, Part 663.



The cost for parts manufactured in the United States is determined as follows:

- For subcomponents, the cost identified would be the purchase price paid by the component manufacturer.
- For components, depending on the percent domestic content of the component, the cost identified would be either:
 - The purchase price paid by the vehicle manufacturer,

or

 - The total domestic subcomponent material cost, plus the cost of manufacturing the component.

To calculate the percent domestic content of an item, sum the total material cost of all parts (domestic and foreign) for the item. Then sum the material cost of all **domestic** parts for the item only. Next, divide the **domestic** cost by the total cost to obtain the percent domestic content. In mathematical terms,

$$\frac{\text{Total Domestic Material Cost}}{\text{Total Material Cost}} = \text{Percent Domestic Content}$$

or

$$\frac{\text{TDMC}}{\text{TMC}} = \text{PDC.}$$

If the PDC is equal to, or greater than, 0.60, then the entire cost of the item, or purchase price paid, would be used in the listing. Otherwise, the cost used in the list would be TDMC plus the cost of manufacturing the item, since the item was manufactured in the United States.

For example, assume that a vehicle manufacturer pays \$22,000 to purchase a component from a supplier who manufactures components in the United States. If the mark-up (MU), for profit, is 10 percent (0.10), then the component supplier's actual cost for that component is \$20,000, or

$$\frac{\text{Purchase Price}}{1+\text{MU}} = \frac{\$22,000}{1.10} = \$20,000 = \text{Actual Cost.}$$



Now, assume that the component supplier's cost of manufacturing is \$5,000. Therefore, the total cost of materials for the component supplier is \$15,000, or \$20,000 - \$5,000. This is referred to as the total material cost.

Based on the above, we have the following information:

Purchase Price	Profit Margin	Actual Cost	Manufacturing Cost	Total Material Cost
\$22,000	10%	\$20,000	\$5,000	\$15,000

Next, let's assume that the total material cost for all **domestic** subcomponents is \$9,000—this is referred to as total domestic material cost (TDMC). We know from the previous information that the total material cost (TMC) for the component is \$15,000. So, if we use our earlier equation and substitute the appropriate numbers,

$$\frac{\text{TDMC}}{\text{TMC}} = \frac{\$9,000}{\$15,000} = 0.60 = \text{PDC}.$$

Since PDC is equal to or greater than 0.60, the vehicle manufacturer may use the full \$22,000 (its purchase price), in the Buy America content calculation. If the total material cost for the complete vehicle is \$1,000,000, then this single component contributes 2.2 percent toward the domestic content of the vehicle, or

$$\frac{\$22,000}{\$1,000,000} = 2.2\%.$$

Suppose that the total cost of all **domestic** subcomponents had been \$8,000 (TDMC). If that had been true, then PDC would be 0.53, or 53.3 percent. Since the minimum 60 percent domestic content is not achieved, then the vehicle manufacturer may use only \$13,000, or TDMC plus the manufacturing cost (\$5,000), in the Buy America content calculation. The component now contributes only 1.3 percent toward the domestic content of the vehicle, or

$$\frac{\$8,000 + \$5,000}{\$1,000,000} = \frac{\$13,000}{\$1,000,000} = 1.3\%.$$

The cost for foreign manufactured items with domestic parts is the total material cost for domestic parts only. The component manufacturing cost is not allowed because manufacturing did not take place in the United States.



Thus, in the two examples above, the manufacturer would use the \$9,000 or \$8,000 figures, respectively, in the Buy America content calculation. The component would therefore contribute only 0.9 or 0.8 percent toward the domestic content of the vehicle, or

$$\frac{\$9,000}{\$1,000,000} = 0.9\% \text{ or } \frac{\$8,000}{\$1,000,000} = 0.8\%, \text{ respectively.}$$

It should now be evident why vehicle manufacturers would want to use Buy America compliant components in their vehicles.

The manufacturer's list **must** identify domestic subcomponents for components used in the content calculation, such as trucks, friction brakes, and couplers.

Section Four, "Examples of Complying With the Pre-Award and Post-Delivery Review Requirements," presents samples of domestic content calculations. Section Five, "Frequently Asked Questions About the Pre-Award and Post-Delivery Review," answers questions concerning the domestic content of components and subcomponents and the cost to be used in the domestic content calculations of the vehicles.

To be assured that the rail vehicles are in compliance with the requirements, the analyst must verify that the rail vehicles contain a minimum of 60 percent domestic products, by cost. Therefore, the analyst must:

- Review the component and subcomponent listings to verify 60 percent domestic product content

and

- Review the total final assembly cost.

To verify domestic content, the analyst needs to subtract the final assembly cost from the actual cost of the vehicle. As mentioned earlier, the vehicle will have some mark-up for profit, or possibly mark-down to stimulate sales. The purchase price needs to be adjusted by this mark-up/mark-down to obtain the actual cost to the manufacturer for producing the vehicle. This may need to be estimated as manufacturer's may be reluctant to provide detailed information. Once the actual cost is



approximated, subtract the final assembly cost. The result will be the approximate cost for all materials, recall TMC from the earlier discussion. Now the analyst can review the listing to check that the 60 percent domestic content was presented properly and realistically.

As an example, assume the manufacturer's listing indicated that the cost of a component contributed 30 percent to the domestic content of the vehicle. Since the analyst has approximated the TMC, the approximate cost for the component in question can be estimated from the percentage provided on the listing. If this cost seems unrealistic, the analyst would want to further investigate the issue. If the component costs seem unrealistic, then the analyst may need to adjust the mark-up/mark-down assumptions or check that the final assembly cost is accurate, as provided by the manufacturer.

To verify that the final assembly location was within the United States, the analyst must:

- Check that the manufacturer's final assembly location is located within the United States

and

- Review the list of final assembly activities, which should include activities such as welding, subassembly activities, component installation, and painting, to ensure that the activities at the final assembly location qualify as final assembly.

After the analyst has completed the steps described above, the recipient must:

- Complete a post-delivery Buy America compliance certification (see sample in Appendix A, Exhibit A-4)

and

- Keep the Buy America certification on file for future FTA reviews.



If the manufacturer agrees, the recipient should, **but is not required to**, keep a copy of the manufacturer's Buy America information with the Buy America certification in the file.

Buy America-Exempt Rail Vehicles

Although few rail vehicles are exempt from the Buy America domestic content and final assembly requirements, some manufacturers' vehicles may be eligible for an FTA waiver, exempting the vehicles from the requirements. If the vehicles are exempt, the recipient must:

"There is a letter from [FTA], which grants a waiver to the [vehicles] received ..."²

- Obtain a Buy America waiver letter from the FTA for the vehicles

and

- Complete a post-delivery Buy America exemption certification (see sample in Appendix A, Exhibit A-5)

and

- Keep the Buy America certification on file for future FTA reviews.

The recipient should keep a copy of the FTA waiver letter with the Buy America certification in the files. Appendix C summarizes details of current Buy America waivers.

² Section 663.35(a), "Pre-Award and Post-Delivery Audits of Rolling Stock Purchases," 49 CFR, Part 663.



The Post-Delivery Purchaser's Requirements Certification Requirement

This subsection discusses procedures that recipients may follow to demonstrate compliance with the post-delivery purchaser's requirements certification requirement.

The purchaser's requirements certification is meant to help safeguard the recipient by ensuring that the rail vehicles are built to contract specifications. To comply with the certification requirements, the recipient, or its duly appointed analyst, must:

"a resident inspector ... was at the manufacturing site After reviewing the [inspector's] report, and visually inspecting and ... testing the [vehicles], the [vehicles] meet the contract specifications."³

- Send a resident inspector to the manufacturer's final assembly facility
- and**
- Visually inspect and performance test the vehicles.

The resident inspector must complete a manufacturing report, which should include any information that supports or refutes claims made by the manufacturer concerning its capabilities or the vehicle specifications. This information will help support the recipient in any disputes that might arise with the manufacturer.

³ Section 663.37(a)&(b), "Pre-Award and Post-Delivery Audits of Rolling Stock Purchases," 49 CFR, Part 663.



The resident inspector's report must include, at a minimum:

- Accurate records of all vehicle construction activities (such as component manufacturing processes, final assembly activities, and quality control data collected)

and

- A description of how the construction and operation of the vehicles fulfills the contract specifications (the report should reference the above cited manufacturing processes, final assembly activities, and quality control data).

After the resident inspector has completed the report, the recipient, or its analyst, must review the report and conduct the visual inspections and performance tests. To assist the recipient and analyst, sample visual inspection and performance test sheets are presented in Appendix D.

Once the steps described above have been completed, the recipient must:

- Complete a post-delivery purchaser's requirements certification (see sample in Appendix A, Exhibit A-6)

and

- File the purchaser's requirements certification for future FTA reviews.

The resident inspector's report, visual inspection sheets, and performance test sheets should be included in the file with the purchaser's requirements certification.

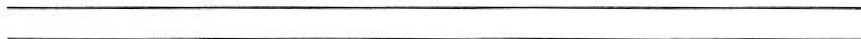




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Section Four

EXAMPLES OF COMPLIANCE WITH THE PRE-AWARD AND POST-DELIVERY REVIEW REQUIREMENTS







EXAMPLES OF COMPLIANCE WITH THE PRE-AWARD AND POST-DELIVERY REVIEW REQUIREMENTS

This section provides examples of Buy America certification calculations, and purchaser's requirements certification information.

Buy America Certification

Exhibit 4-1 presents a sample table to be prepared by a manufacturer for the Buy America certification process.

Component Subcomponent	Manufacturer	Origin	Percentage of Component Vehicle Cost Cost
1. Trucks			
Wheels	A Co	U.S.A.	13%
Journal Bearings	B Co	U.S.A.	4
Propulsion Gear Boxes	C Co	U.S.A.	20
Track Brakes	D Co	U.S.A.	5
Traction Motors	E Co	U.S.A.	21
Total (trucks)	F Co	U.S.A.	63%
2. Friction Brakes (Foundation Brake Equipment)			23%
Air System	G Co	U.S.A.	53%
Brake Resistor	H Co	U.S.A.	8
Total (friction brakes)	I Co	U.S.A.	61%
3. Coupler			8
Mechanical Equipment	J Co	U.S.A.	30%
Electrical Equipment	K Co	U.S.A.	32
Total (coupler)	L Co	U.S.A.	62%
4. Passenger Seats	M Co	U.S.A.	2
5. Flooring	N Co	U.S.A.	2
6. Air-Conditioning/Heating Unit	O Co	U.S.A.	5
7. Pantograph	P Co	U.S.A.	2
8. Wheelchair Lift	Q Co	U.S.A.	2
9. Windows	R Co	U.S.A.	1
10. Lighting System	S Co	U.S.A.	2
11. Auxiliary Power Equipment Rack	T Co	U.S.A.	1
12. Destination Signs	U Co	U.S.A.	1
13. Assembly Materials	V Co	U.S.A.	4
Total (vehicle)			<u>60%</u>

Exhibit 4-1. Sample Manufacturer's Buy America Calculation



If a component is manufactured in the United States with less than 60 percent domestic subcomponents, then only its domestic cost (i.e., the cost of its **domestic** subcomponents **plus** the cost of manufacturing the component) may be used in the domestic content calculation of the vehicle.

Domestic subcomponents exported for inclusion in a foreign-manufactured component may also be included in the Buy America calculation, if the domestic subcomponents received a tariff exemption for importation back into the United States. However, **only** the cost of the **domestic** subcomponents, which is the cost at the time of export, may be used in the domestic content calculation of the vehicle.

The presentation of the costs for both of the above cases is different from that shown in Exhibit 4-1. Exhibit 4-2 presents the Buy America presentation for the cost of friction brakes with at least 60 percent domestic subcomponents as was shown in Exhibit 4-1.

Component Subcomponent	Manufacturer	Origin	Percentage of Component Cost	Vehicle Cost
2. Friction Brakes				
Air System	G Co.	U.S.A.	53%	
Brake Resistor.....	H Co.	U.S.A.	8	
Total (friction brakes)	I Co.	U.S.A.	61%	8%

Exhibit 4-2. Sample Content Calculation for a U.S.-Manufactured Component With at Least 60 Percent Domestic Subcomponents

The 8 percent "Total (friction brakes)" figure in Exhibit 4-2 indicates that the cost equals 8 percent of the cost of all components used in the vehicle. In this case, the cost includes direct labor costs, direct materials costs, freight-in costs, sales costs, general and administrative costs, and an allowance for profit attributable to manufacturing the brakes.

For example, if the total cost of all components is \$1,000,000, then, according to Exhibit 4-2, the cost of the friction brakes is \$80,000. Of that \$80,000, if \$60,000 were the total cost of all subcomponents, then \$20,000 would be the cost of manufacturing. The cost of the air system and resistor is \$31,800 and \$4,800, respectively.



Exhibit 4-3 presents a Buy America calculation for friction brakes manufactured in the United States with less than 60 percent domestic subcomponents.

Component Subcomponent	Manufacturer	Origin	Percentage of Component Cost	Percentage of Vehicle Cost
2. Friction Brakes				
Air System	G Co.	U.S.A.	53%	
Total (friction brakes)	I Co.	U.S.A.	53%	5.2%

Exhibit 4-3. Sample Content Calculation for a U.S.-Manufactured Component With Less Than 60 Percent Domestic Subcomponents

In Exhibit 4-3, the 5.2 percent "Total (friction brakes)" figure means that the cost of the domestic subcomponents (or 53 percent of the brake subcomponent cost) **plus** the cost of manufacturing the brakes equals 5.2 percent of the cost of all components used in the vehicle. In this case, the cost of the brakes includes direct labor costs, **domestic** direct materials costs (or the domestic subcomponent costs), freight-in costs, an allowance for profit, and the sales, general and administrative costs attributable to manufacturing the brakes.

Using the earlier example, the 53 percent implies that the domestic subcomponents cost \$31,800. Since the \$20,000 manufacturing cost is allowed, the total is \$51,800, or approximately 5.2 percent of \$1,000,000.

Exhibit 4-4 provides an example of friction brakes from a foreign source with domestic subcomponents that received tariff exemptions.

Component Subcomponent	Manufacturer	Origin	Percentage of Component Cost	Percentage of Vehicle Cost
2. Friction Brakes				
Air System	G Co.	U.S.A.	53%	
Total (friction brakes)	I Co.	Foreign Country....	53%	3.2%

Exhibit 4-4. Sample Content Calculation for a Foreign-Manufactured Component With Domestic Subcomponents



In Exhibit 4-4, the 3.2 percent "Total (friction brakes)" figure means that the cost of the domestic subcomponents (**domestic** direct materials cost) used in the brakes is 3.2 percent of the cost of all components used in the vehicle.

Continuing with the previous example, the 3.2 percent indicates that the domestic components contribute \$32,000 toward the cost of the vehicle. Recall that the total cost of the subcomponents equals \$60,000. Note, however, that the \$20,000 manufacturing cost is **not** allowed for foreign components as is allowed in both previous examples.

A component's manufacturing cost is never used when calculating the domestic content of that component; its domestic content is based on subcomponent cost only. However, the component's manufacturing cost should be used in the domestic content calculation of the vehicle, if the component was manufactured in the United States. Notice in the examples that the \$20,000 manufacturing cost never contributes toward the domestic content of the **component**, but it does contribute toward the domestic content of the **vehicle** in Exhibits 4-2 and 4-3.



Purchaser's Requirements Certification

The recipient should keep the following information in the certification file to support the purchaser's requirements certification review:

- A comparison of solicitation and bid specifications
- An analysis of manufacturing capability
- Copies of the visual inspection sheets
- Copies of the performance test sheets
- A copy of the resident inspector's report describing manufacturing activities
- Records of quality control measurements.

Comparison of Solicitation and Bid Specifications

The recipient should keep on file copies of the solicitation specifications, the manufacturer's specifications, and the recipient's agreement to any deviations from the solicitation technical specifications as proposed by the manufacturer.

Analysis of Manufacturing Capability

The recipient should keep on file an analysis of a prospective manufacturer's information used to verify that the manufacturer is capable of building the rail vehicles to the specifications. This analysis may include statements, letters, and other information from the manufacturer describing the product, manufacturing and final assembly operations, and quality assurance program.

Visual Inspection Sheets

The visual inspection sheets should include a line for each item in the specification that can be verified and signed off. Appendix D contains a sample visual inspection sheet.



Performance Test Sheets

Performance test sheets should include all information cited in the contract that fairly represents the handling and operation of the vehicles. It might include items such as top speed, noise, braking, jerk limiting, accessibility, maintainability, and operation of all accessories. Appendix D contains a sample performance test sheet.

Manufacturing Activities

The resident inspector's report must include a description of final assembly and manufacturing operations, including a description of machine and hand operations—such as welding, painting, and drilling.

Records of Quality Control Measurements

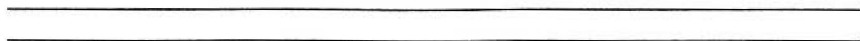
Typical records of quality control should include information of actual and specified dimensions, clearances, and machining and assembly tolerances. In addition, the operational characteristics of all accessories should be included with this information.



U.S. Department of Transportation
Federal Transit Administration

Section Five

FREQUENTLY ASKED QUESTIONS ABOUT THE PRE-AWARD AND POST-DELIVERY REVIEW







FREQUENTLY ASKED QUESTIONS ABOUT THE PRE-AWARD AND POST-DELIVERY REVIEW

This section presents some of the most frequently asked questions about pre-award and post-delivery review. This guidance is for information only. The responses do not constitute a determination of compliance with the Department of Transportation (DOT) standards and rules. Appendix E contains a list of FTA regional offices to contact if further clarification is needed.

General

1. *When must a recipient complete the "Certification of Compliance" as stipulated in Section 663.7 of the Rule?*

The Section 663.7 Certification of Compliance must be submitted as part of the grant application for any revenue service rolling stock grant. (See Exhibit 5-1 for a sample certification.) Once a recipient has submitted their first certification, the certification may be retained in the recipient's files and referenced in the "Statement of Continuing Validity" for any future rolling stock grants.

PRE-AWARD AND POST-DELIVERY AUDIT
CERTIFICATION OF COMPLIANCE

As required by 49 CFR Part 663, Subpart A, _____
_____ (the recipient) certifies that it will
conduct, or cause to be conducted, pre-award and post-delivery
audits as prescribed in the "Pre-Award and Post-Delivery Audits of
Rolling Stock Purchases; Final Rule."

Date: _____

Signature: _____ Title: _____

Exhibit 5-1. Sample Certification of Compliance



2. *Who must sign the Certification of Compliance?*

The certification must be signed by the recipient even if the funds will be passed on to another party. Further, if the funds are passed on, the initial recipient has the ultimate responsibility of ensuring that the final recipient of the funds carries out its duties and responsibilities as required by the Rule.

3. *Who must conduct the pre-award and post-delivery reviews?*

The recipient, or an analyst appointed by the recipient must conduct the review. The analyst may not be an employee of the manufacturer or its agent. In many instances a recipient may retain the services of a consultant to conduct the review. Although the Rule implies that this is an audit, it should not be misconstrued to imply that the recipient must hire an auditor to conduct the review.

Buy America Certification

1. *Must a Buy America certification be conducted for every procurement?*

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, as well as technical developments, may make updated products noncompliant. If a pre-award and post-delivery Buy America review has been conducted for a given vehicle, then the same information may be used to demonstrate compliance at a later date if there has been no component or assembly changes to the vehicle since the last certification.



2. *Is the 60 percent domestic content calculated as a percentage of the total vehicle price?*

No. The 60 percent domestic content is calculated as a percentage of the total cost of all components, before final assembly. The cost of an individual component is the price a vehicle manufacturer pays a supplier for that component, plus freight-in costs and (if foreign) any applicable duties.

3. *How is the origin of a component determined?*

A component is considered to be of domestic origin, if at least 60 percent of its subcomponents, by cost, 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 used in the Buy America calculation of the vehicle.

The cost of an individual subcomponent is the price a component manufacturer pays a supplier for that subcomponent, plus freight-in costs and (if foreign) any applicable duties.

If the component is manufactured at the final assembly location, then the manufacturing and final assembly activities must be separate and distinct activities.

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 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 Buy America 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 Buy America calculation.

Raw materials exported for use in a component manufactured outside the United States may not be used in the Buy America calculation.

5. *Do the subcomponents have to be broken down into sub-subcomponents?*

No. The rule states that sub-subcomponents are not required to be identified in the Buy America calculations.

6. *If a vehicle uses a component from a foreign source and we wish to order it later as a spare part, do we need to conduct a domestic content certification for that spare part?*

No. The Pre-Award and Post-Delivery Rule applies to the purchase of buses, vans, cars, railcars, locomotives, trolley cars and buses, ferry boats, and vehicles used on guideways and incline planes. The Rule does not apply to the purchase of spare parts. Spare parts must, however, comply with the Buy America Rule.

7. *What cost is used in the Buy America calculation for domestic components?*

The entire cost of domestic components may be used in the content calculation. A component is considered domestic if it contains at least 60 percent domestic subcomponents, by cost, and is manufactured in the United States. The cost of a domestic component includes direct labor costs, direct material costs, sales costs, general and administrative costs, and overhead costs associated with manufacturing that component, plus freight-in costs. The total cost should be the actual cost of the component, **not** the bid price.



8. *Are only components of domestic origin allowed to be used in the Buy America calculations?*

No. Components manufactured in the United States with less than 60 percent domestic subcomponents, by cost, and foreign-manufactured components with domestic subcomponents, that received a tariff exemption for importation back into the United States, may be used in the Buy America content calculation.

9. *If a component contains less than 60 percent domestic subcomponents, how would it be used in the calculation?*

Components manufactured in the United States with less than 60 percent domestic subcomponents, by cost, may also be used in the domestic content calculation. However, the component's entire cost may not be used. The cost for such a component includes direct labor costs, **domestic** direct material costs (domestic subcomponent costs), sales costs, general and administrative costs, and overhead costs associated with manufacturing that component, plus freight-in costs.

10. *Can components from foreign sources with domestic subcomponents be used in the calculation?*

Yes. If the vehicle contains foreign-manufactured components with domestic subcomponents, which 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 may **not** be used, because it has been manufactured outside the United States.



11. *What if the manufacturer is concerned about releasing proprietary information?*

If the manufacturer is concerned about releasing proprietary information, the recipient may contract with an external consultant to conduct the manufacturer's Buy America certification review. After the consultant has reviewed the component and subcomponent documentation, the consultant will inform the recipient whether or not the Buy America requirements have been fulfilled. Once the recipient, or consultant, has reviewed the Buy America information, the manufacturer has fulfilled the requirements of the Buy America certification assuming that compliance has been established. The manufacturer is not required to provide the recipient with hard copies of the Buy America calculations. A manufacturer may require the external consultant to sign a proprietary information disclosure statement.

Purchaser's Requirements Certification

1. *Can two or more recipients purchasing vehicles from the same contractor combine the orders and use one resident inspector?*

Yes. The contract agreement between the inspector and the recipients should be carefully worded to cover the concerns of all parties.

2. *What is the responsibility of the resident inspector?*

A resident inspector is required to visit the manufacturer's production facility during the assembly period. The purpose of the requirement is to help the recipient ensure that vehicles will comply with the contract specifications. Therefore, the recipient is required to send an in-plant inspector to the manufacturer's final assembly facility to verify that the manufacturer is in compliance with the specifications.



The inspector must prepare a report (1) providing accurate records of all vehicle construction activities and (2) summarizing how the construction and operation of the vehicles meet (or do not meet) the terms of the contract.

The amount of time that an inspector must spend at a manufacturer's production facility will depend on the complexity and duration of manufacturing and assembly. Hence, the on-site inspection requirement for a complex vehicle may be more periodic than that for a less complex vehicle, although the resulting inspector's report should be equally comprehensive in both cases.

3. *Do any of the requirements of the Pre-Award and Post-Delivery Rule apply to the purchase of used rolling stock or public-to-public transfer of vehicles?*

No. However, any arrangement designed to avoid the regulations would be considered an illegal circumvention of the regulations, which would result in the withdrawal of Federal funding.

5. *Where the contract provides for more than one delivery period, does the grantee conduct a post-delivery review for each delivery period?*

This question addresses the circumstances where a contract provides for multiple deliveries and the delivery periods are scheduled at substantially different time intervals, such as 6 months or 1 year apart. When a contract for vehicles provides for separately scheduled delivery periods, the recipient should complete a post-delivery review for each period. This does not mean that a separate review is necessary for each shipment within a delivery period.

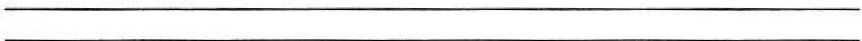




U.S. Department of Transportation
Federal Transit Administration

Appendix A

SAMPLE REVIEW CERTIFICATIONS







SAMPLE REVIEW CERTIFICATIONS

PRE-AWARD BUY AMERICA COMPLIANCE CERTIFICATION

As required by Title 49 of the CFR, Part 663 – Subpart B, _____
_____ (the recipient) is satisfied that the rail
vehicles to be purchased, _____
(number and description of rail vehicles) from _____
_____ (the manufacturer), meet the require-
ments of Section 165(b)(3) of the Surface Transportation Assistance Act of
1982, as amended. The recipient , or its appointed analyst _____

(the analyst – not the manufacturer or its agent), has reviewed documen-
tation provided by the manufacturer, which lists (1) the proposed component
and subcomponent parts of the rail vehicles identified by manufacturer,
country of origin, and cost; and (2) the proposed location of the final
assembly point for the rail vehicles, including a description of the activities
that will take place at the final assembly point and the cost of final assembly.

Date: _____

Signature: _____

Title: _____

Exhibit A-1. Sample Pre-Award Buy America Compliance Certification

PRE-AWARD BUY AMERICA EXEMPTION CERTIFICATION

As required by Title 49 of the CFR, Part 663 – Subpart B, _____

_____ (the recipient) certifies that there is a letter from FTA that grants a waiver to
the rail vehicles to be purchased, _____
_____ (number and description of rail vehicles),
from the Buy America requirements under Section 165(b)(1), (b)(2), or (b)(4)
of the Surface Transportation Assistance Act of 1982, as amended.

Date: _____

Signature: _____

Title: _____

Exhibit A-2. Sample Pre-Award Buy America Exemption Certification



PRE-AWARD PURCHASER'S REQUIREMENTS CERTIFICATION

As required by Title 49 of the CFR, Part 663 – Subpart B, _____
_____ (the recipient) certifies that the rail
vehicles to be purchased, _____
(number and description of rail 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 a
rail vehicle that meets the specifications.

Date: _____

Signature: _____ Title: _____

Exhibit A-3. Sample Pre-Award Purchaser's Requirements Certification

POST-DELIVERY BUY AMERICA COMPLIANCE CERTIFICATION

As required by Title 49 of the CFR, Part 663 – Subpart C, _____
_____ (the recipient) certifies that it is satisfied
that the rail vehicles received, _____
(number and description of rail vehicles) from _____
_____ (the manufacturer), meet the require-
ments of Section 165(b)(3) of the Surface Transportation Assistance Act of
1982, as amended. The recipient , or its appointed analyst _____

_____ (the analyst – not the manufacturer or its agent), has reviewed documen-
tation provided by the manufacturer, which lists (1) the actual component
and subcomponent parts of the rail vehicles identified by the manufacturer,
country of origin, and cost; and (2) the actual location of the final assembly
point for the rail vehicles, including a description of the activities that took
place at the final assembly point and the cost of final assembly.

Date: _____

Signature: _____ Title: _____

Exhibit A-4. Sample Post-Delivery Buy America Compliance Certification



POST-DELIVERY BUY AMERICA EXEMPTION CERTIFICATION

As required by Title 49 of the CFR, Part 663 – Subpart C, _____
_____ (the recipient) certifies that there is a
letter from FTA, which grants a waiver to the rail vehicles received, _____

(manufacturer, number and description of rail vehicles), from the Buy
America requirements under Section 165(b)(1), (b)(2), or (b)(4) of the
Surface Transportation Assistance Act of 1982, as amended.

Date: _____

Signature: _____ Title: _____

Exhibit A-5. Sample Post-Delivery Buy America Exemption Certification

POST-DELIVERY PURCHASER'S REQUIREMENTS CERTIFICATION

As required by Title 49 of the CFR, Part 663 – Subpart C, _____
_____ (the recipient) certifies that a resident
inspector, _____

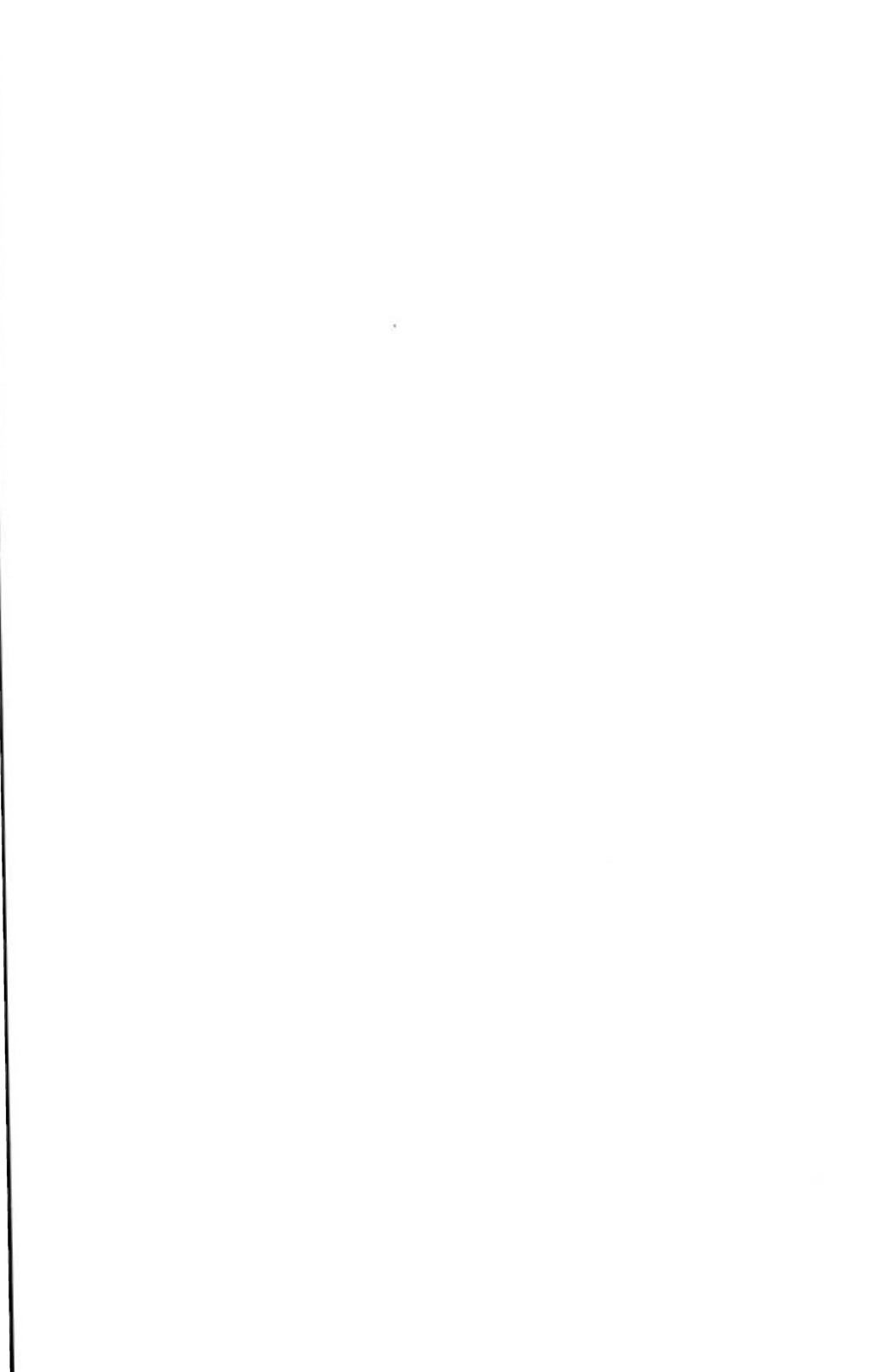
(the resident inspector – not an agent or employee of the manufacturer),
was at _____ 's
(the manufacturer) manufacturing site during the period of manufacture of
the rail vehicles, _____

(number and description of rail vehicles). The inspector monitored
manufacturing and completed a report on the manufacture of the rail
vehicles providing accurate records of all vehicle construction activities. The
report addresses how the construction and operation of the rail vehicles fulfill
the contract specifications. After reviewing the report, visually inspecting the
rail vehicles, and performance testing the rail vehicles, the recipient certifies
that the rail vehicles meet the contract specifications.

Date: _____

Signature: _____ Title: _____

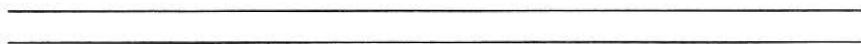
Exhibit A-6. Sample Post-Delivery Purchaser's Requirements
Certification

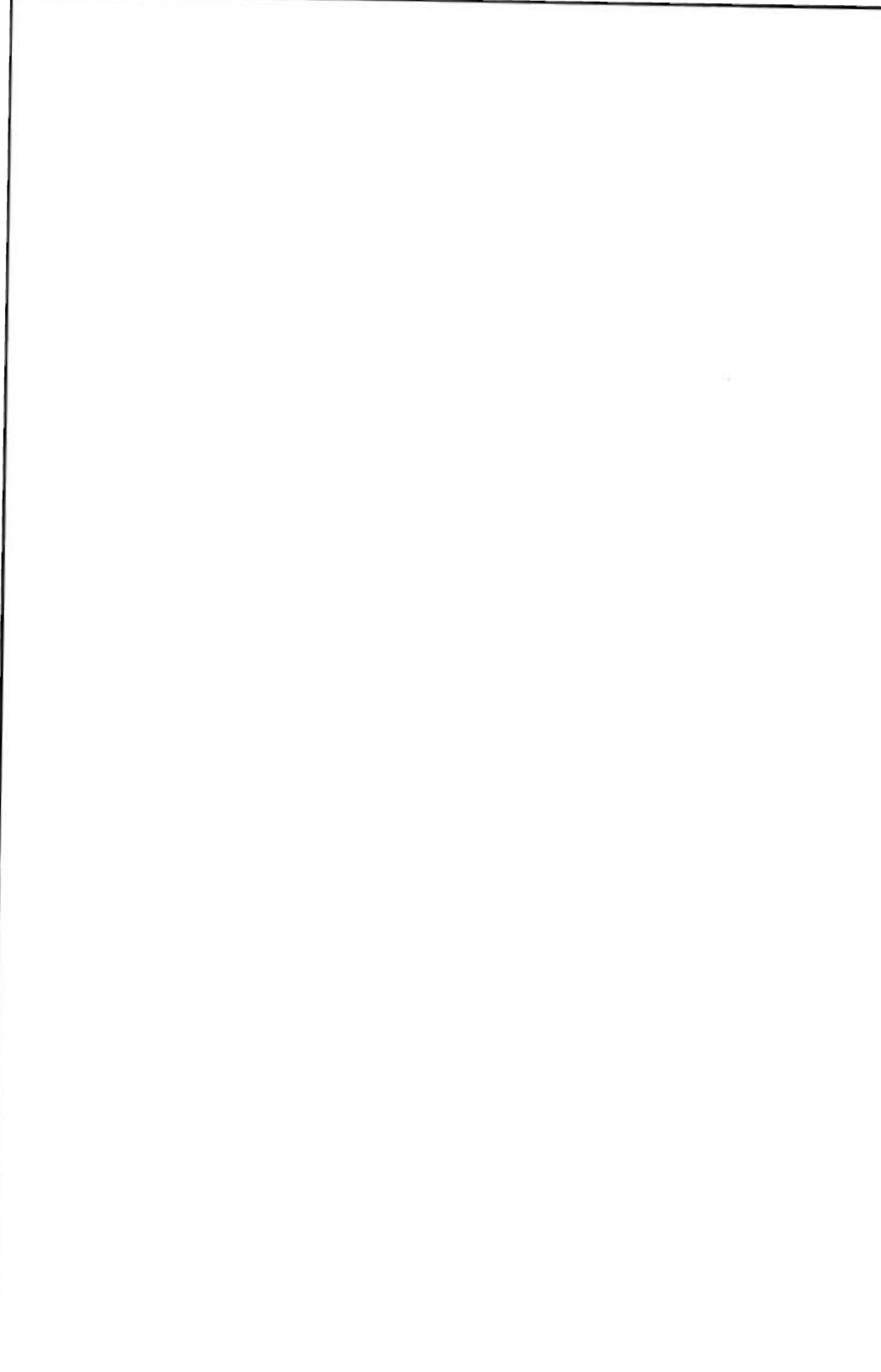




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Appendix B
TYPICAL RAIL VEHICLE COMPONENTS







TYPICAL RAIL VEHICLE COMPONENTS

The components listed below are examples of typical rail vehicle components. These lists are not meant to be exhaustive. Other components may be included in the Buy America calculation depending on the configuration of the vehicles.

Typical Components of Rail Vehicles for the Buy America Content Calculation

- Acceleration and braking resistors
- Air brake compressors
- Air conditioning equipment
- Articulation assemblies
- Axles
- Brake controls
- Car shells
- Communication equipment
- Couplers and draft gear
- Diagnostic equipment
- Door actuators and controls
- Doors
- Foundation brake equipment (such as friction brakes)
- Interior linings
- Journal bearings
- Lighting
- Low voltage auxiliary power supplies
- Main transformer
- Pantographs
- Propulsion controls
- Propulsion gear boxes
- Seating
- Third rail pick-up equipment
- Traction motors
- Train control systems
- Trucks
- Window assemblies

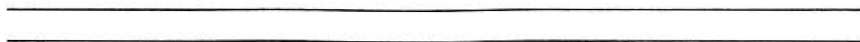




U.S. Department of Transportation
Federal Transit Administration

Appendix C

BUY AMERICA WAIVERS







BUY AMERICA WAIVERS

Inconsistency With the Public Interest [STAA, §165 (b)(1) and 49 CFR Part 661, §661.7(b)]

The Administrator may waive the Buy America requirements if the Administrator finds that compliance with the requirements would be inconsistent with the public interest. This includes waivers for prototype vehicles and first time items being produced by foreign firms relocating facilities to the United States.

This waiver may be granted for end products, as well as for components and subcomponents. If a component or subcomponent is granted this waiver, the component or subcomponent is considered to be of domestic origin and its entire cost may be used for the purposes of calculating the domestic content requirement.

Nonavailability of Materials [STAA, §165 (b)(2) and 49 CFR Part 661, §661.7(c)]

The Administrator may waive the Buy America requirements if the Administrator finds that the item for which a waiver is being requested is not produced in the United States in sufficient and reasonably available quantities and of satisfactory quality.

This waiver will be granted if no responsive and responsible bids are received offering the item in the United States. It will also be granted in the case of sole source procurements.

If a component or subcomponent is granted this waiver, the component or subcomponent is considered to be of domestic origin and its entire cost may be used for the purposes of calculating the domestic content requirement.



Price-Differential

[STAA, §165 (b)(4) and 49 CFR Part 661, §661.7(d)]

The Administrator may waive the Buy America requirements if the Administrator finds that a domestic product will cost more than 25 percent of an equivalent foreign product.

The 25 percent applies to the cost of an end product, **not** the cost of the contract. The preamble to the Rule states, "the price differential is not to be applied to the overall contract between the grantee and its supplier, but to the comparative costs of each individual item (end product) being supplied." Therefore, if the inclusion of a domestic component increases the cost of a vehicle by more than 25 percent over that if a foreign-manufactured component were used, then a waiver may be given.

Excepted Articles, Materials, and Supplies

[49 CFR Part 661, §661.7 (App. A)(a)]

Title 48 of the CFR, Part 25, Section 108 (Federal Acquisition Regulation; Foreign Acquisition, "Excepted Articles, Materials, and Supplies") establishes articles, materials, and supplies exempt from the Buy America requirements and may be amended from time to time. This waiver falls under the waivers set forth in STAA, §165 (b)(1) and (b)(2) .

Microcomputer Equipment

[49 CFR Part 661, §661.7 (App. A)(d)]

Microcomputer equipment, including software, from a foreign source is exempt from the Buy America requirements. This waiver falls under the waiver set forth in STAA, §165 (b)(1) and (b)(2).



Foreign Spare Parts **[49 CFR Part 661, §661.11 (App. A)(a)]**

The Buy America requirements are waived for spare parts from a foreign source, if the total cost of the foreign spare parts being procured is 10 percent or less of the contract value. This exception applies only if the spare parts are being procured with the end products in which they will be installed.

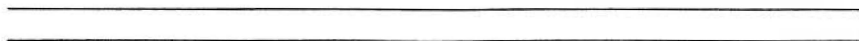


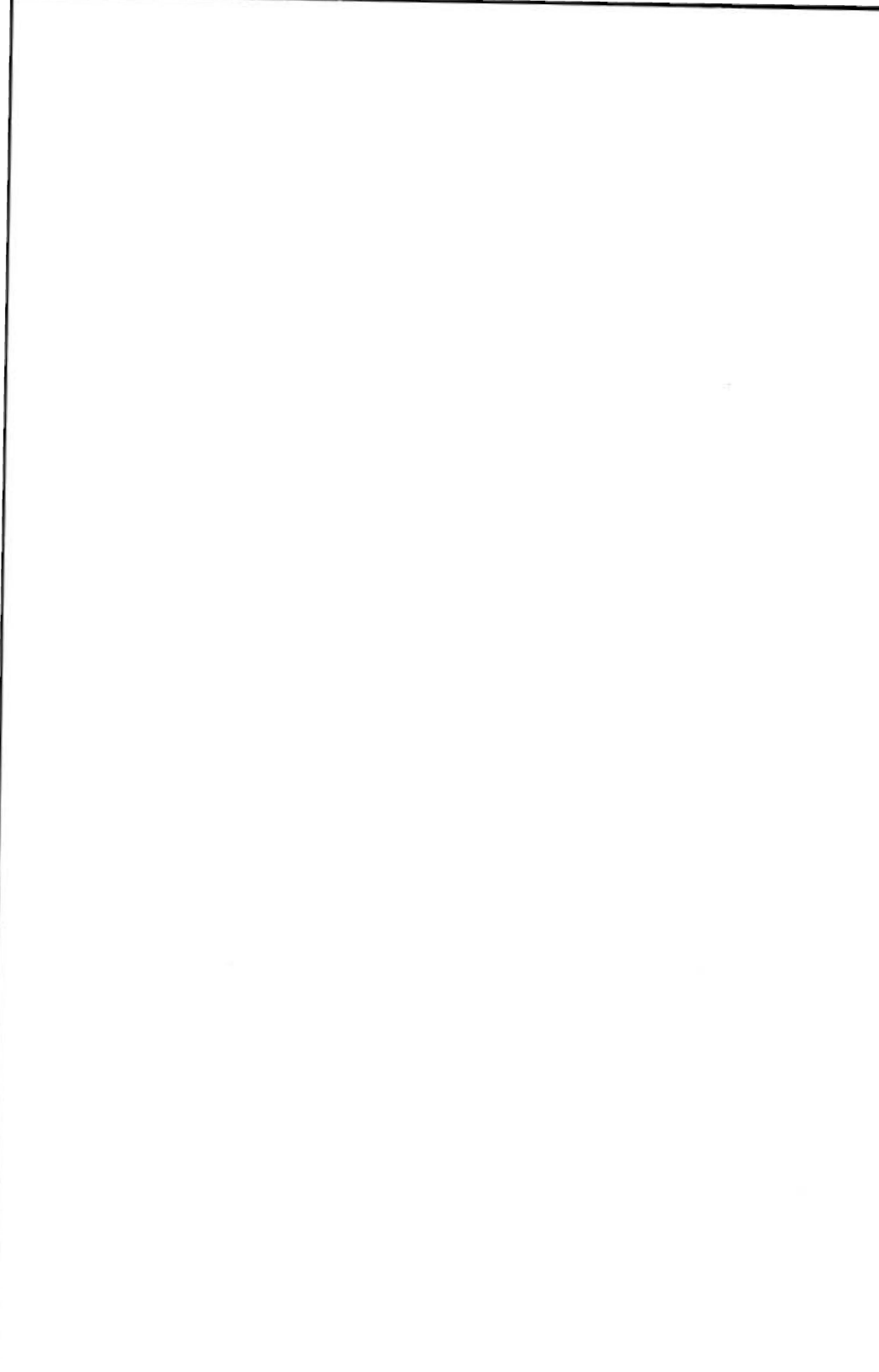


U.S. Department of Transportation
Federal Transit Administration

Appendix D

SAMPLE VISUAL INSPECTION AND PERFORMANCE TEST SHEETS







U.S. Department of Transportation
Federal Transit Administration

SAMPLE VISUAL INSPECTION AND PERFORMANCE TEST SHEETS

The sample visual inspection sheet and performance test sheet included in this section are meant for guidance purposes only. The information contained within is not meant to be exhaustive, but only to provide assistance for those recipients whom are developing the sheets.



SAMPLE VISUAL INSPECTION SHEET

Guide for Inspection:
The Following Items Should Be Inspected
on Every Vehicle of Each Order

Vehicle Manufacturer _____
Vehicle Number _____
Test Location _____

Item	Requirement	Inspection Instruction	Result	Inspector/Date	Remarks/Notes
Weight	Maximum weight of _____ lb.	Measure on certified scale	Weight _____		
Length over coupler faces	Maximum length of _____ ft.	Measure	Length _____		
Finish and Color	Smooth body surfaces and paint	Visually inspect all surfaces for flaws	Pass/Fail		
Interior Panel Fastening	Absence of rough edges or surfaces	Visually inspect for proper installation	Pass/Fail		
Interior Hardware	Attached with recessed screws	Visually inspect for proper installation	Pass/Fail		
Door Operation	Opening time of _____ sec.	Verify door opening time frame	Pass/Fail		
Interior Lighting	Shall be florescent type	Visually inspect	Pass/Fail		
Exterior Lighting	All vehicle lights to operate from LVPS	Visually inspect	Pass/Fail		
Air Exhausts/ Underfloor Equipment	Directed in a vertical downward direction	Visually inspect	Pass/Fail		
Metal Joining	Welds, brazes, soldering	Shall comply with ANSI, ASME, AWS, and contract specs.	Pass/Fail		
Electrical	Wiring and junction boxes	Inspect for loose or stretched wires	Pass/Fail		
Batteries	Assembled on pallet-type grating, removable from side	Visually inspect, remove and replace	Pass/Fail		
HVAC	Capacity and performance	Operate AC, check compressor, condenser, flow, and temperature	Pass/Fail		
Wheelchair Access	Clear lift or ramp access, and securement area	Operate lift or ramp, inspect operation, measure areas	Pass/Fail		
Trucks	Mounting and arrangement	Check that underfloor wheel truing machines can be used without removal of trucks	Pass/Fail		



SAMPLE PERFORMANCE TEST SHEET

Guide for Inspection:
The Following Items Should Be Inspected
on Every Vehicle of Each Order

Vehicle Manufacturer _____
Vehicle Number _____
Test Location _____

Item	Requirement	Inspection Instruction	Result	Inspector/Date	Remarks/Notes
Primary Power Supply	Capable of performance btwn. 450 and 900 V dc	Operate vehicle within window, verify operation	Pass/Fail		
Electric Braking	Stopping distance	Verify function	Pass/Fail		
Friction Braking	Stopping distance	Verify function	Pass/Fail		
Jerk Limiting	_____ mph/sec ² ± 10 percent during normal accel./decel.	Verify function	Pass/Fail		
Wheel Spin/Slide	Correctable within _____ sec.	Verify function	Pass/Fail		
Acceleration	____ rate from 0 to _____ mph	Verify acceleration	Pass/Fail		
Resonance	Absence of audible, visible vibrations	Operate vehicle, check for vibrations and rattles	Pass/Fail		
Overspeed Alarm	Pulsating tone signal, silenced when manual controller placed in brake zone	Operate vehicle until overspeed reached	Pass/Fail		
Body Roll	Shall not exceed 4 degrees from track plane	Operate vehicle, check body roll	Pass/Fail		
HVAC	Interior temperature	Operate system, check internal and ambient temp.	Int. ____ Amb. ____		
Door Interlock	BRK signal and P-signal interlocks	Verify interlocks with door open	Pass/Fail		
Leveling	Shall stabilize floor height and compensate for weight change rates of less than 600 lb. per sec. per truck	Verify operation during loading and unloading	Pass/Fail		
General	N/A	During testing, observe any abnormalities in ride and vibration of vehicle	Pass/Fail		

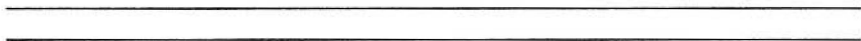




U.S. Department of Transportation
Federal Transit Administration

Appendix E

LIST OF FTA OFFICES







LIST OF FTA OFFICES

Please address your correspondence to the:

Federal Transit Administration

at the following locations:

A. Regional Offices

1. Region I (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont)

Transportation Systems Center
55 Broadway, Suite 920
Kendall Square
Cambridge, Massachusetts 02142-0193
(617) 494-2055

2. Region II (New Jersey, New York, and Virgin Islands)

26 Federal Plaza, Suite 2940
New York, New York 10278-0194
(212) 264-8162

3. Region III (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia)

1760 Market Street, Suite 500
Philadelphia, Pennsylvania 19103-4124
(215) 656-6900

4. Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, Puerto Rico, South Carolina, and Tennessee)

1720 Peachtree Road, N.W., Suite 400
Atlanta, Georgia 30309-2439
(404) 347-3948



5. Region V (Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin)

55 East Monroe Street, Suite 1415
Chicago, Illinois 60603-2439
(312) 353-2789

6. Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, and Texas)

524 East Lamar Boulevard, Suite 175
Arlington, Texas 76011-3900
(817) 860-9663

7. Region VII (Iowa, Kansas, Missouri, and Nebraska)

6301 Rockhill Road, Suite 303
Kansas City, Missouri 64131-1117
(816) 523-0204

8. Region VIII (Arizona, Colorado, Montana, Nevada, North Dakota, South Dakota, Utah, and Wyoming)

216 Sixteenth Street, Suite 650
Columbine Place
Denver, Colorado 80202-5120
(303) 844-3242

9. Region IX (American Samoa, California, Guam, and Hawaii)

211 Main Street, Suite 1160
San Francisco, California 94105-1926
(415) 744-3133

10. Region X (Alaska, Idaho, Oregon, and Washington)

915 Second Avenue, Suite 3142
Jackson Federal Building
Seattle, Washington 98174-1002
(206) 220-7954



U.S. Department of Transportation
Federal Transit Administration

B. Department Of Transportation

1. Office of Grants Management
400 Seventh Street, S.W.
Washington, D.C. 20590
(202) 366-4043

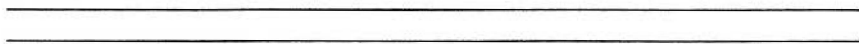




U.S. Department of Transportation
Federal Transit Administration

Appendix F

LIST OF APPLICABLE FEDERAL DOCUMENTATION







LIST OF APPLICABLE FEDERAL DOCUMENTATION

General Documentation

Surface Transportation Assistance Act of 1982,
Public Law No. 97-424

Surface Transportation Assistance Act of 1978,
Public Law No. 95-599

**Surface Transportation and Uniform Relocation Assistance Act of
1987,** Public Law No. 100-17

Buy America Documentation

Buy America Act of 1933, 41 USC 10

Buy America Act of 1988, Public Law No. 100-418

Buy America Requirements; Notice of Proposed Rulemaking,
53 FR 32994

**Buy America Requirements—Surface Transportation Assistance
Act of 1982,** 49 CFR Part 661

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

Pre-Award and Post-Delivery Documentation

**Pre-Award and Post-Delivery Audits of Rolling Stock Purchases,
Notice of Proposed Rulemaking,** 53 FR 40850

**Pre-Award and Post-Delivery Audits of Rolling Stock Questions and
Answers,** 57 FR 10834

Pre-Award and Post-Delivery Audits of Rolling Stock Purchases,
49 CFR Part 663

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