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ASSOCIATION

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Department of Transportation
Docket Operations
M-30, West Building Ground Floor, Room W12-140
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Richard A. White

Re: DOT-OST-2017-0069

Dear Docket Clerk:

On behalf of the more than 1,500 member organizations of the American Public Transportation Association (APTA), I write to provide comments on the Office of Secretary's regulatory review notification published on October 2, 2017 at 82 FR 45750.

About APTA

APTA is a non-profit international trade association of more than 1,500 public and private member organizations, including public transit systems; high-speed intercity passenger rail agencies; planning, design, construction and finance firms; product and service providers; academic institutions; and state associations and departments of transportation.

General Comments

APTA has surveyed its member organizations seeking comments in response to the notification and attached you will find several regulatory streamlining proposals developed by APTA members.

We appreciate the opportunity to assist the Secretary's Office in this important endeavor. For additional information, please contact Linda Ford, APTA's General Counsel, at (202) 496-4808 or lford@apta.com.

Sincerely yours,

Richard A. White
Acting President & CEO

RAW:lcf

Title of Regulation, Statute or Policy Guidance:

School Tripper Regulations

Citation/Dates of Issuance:

49 CFR Part 605 [Docket No. FTA-2008-0015] Final Policy Statement 09/16/2008

Description:

- School “tripper service” is an exception to the prohibition against FTA grantees providing “school bus transportation that exclusively transports students and school personnel in competition with a private school bus operator.” Tripper service is defined, as a “regularly scheduled mass transportation service which is open to the public, and which is designed or modified to accommodate the needs of school students and personnel, using various fare collections or subsidy systems...”
- On September 16, 2008, FTA published a final policy statement in the *Federal Register* to change its interpretation regarding tripper service. School tripper service was restricted to only allow a grantee “to (1) utilize ‘various fare collections or subsidy systems,’ (2) modify the frequency of service, and (3) make de minimis route alterations from route paths in the immediate vicinity of schools to stops located at or in close proximity to the schools.” FTA also expanded their interpretation of exclusive “school bus operations” that violate the prohibition on competition.
- While FTA characterized the 2008 policy statement as a “clarification,” it significantly altered FTA’s historical interpretation and decisions. Prior to the rule, public transportation operators had more discretion to design or modify routes to accommodate school students. The new interpretation hinders the ability for arms of local government – the transit agency and school districts – to work together and promote efficiency.
- Before this rule took effect, as APTA and organizations representing schools noted in comments to the *Federal Register*, some transit agencies were reporting that a significant number of routes and supplemental service trips would be impacted and many schools were concerned that the rule would result in unplanned costs, disruption of service, and reduced options for students.

Recommendations for Modification, Elimination:

- FTA should recall its September 16, 2008 policy interpretation on school bus transportation and allow greater flexibility for public transportation operators to serve their communities and accommodate schoolchildren.

Title of Regulation, Statute or Policy Guidance:

Americans With Disabilities Act (ADA) Accessibility Guidelines for Transportation Vehicles

42 USC § 12204; 12149(b) and 792(b)(3) & (b)(10)

Citation/Dates of Issuance:

Docket No. ATBCB 2010-0004; December 14, 2016

Description:

- The Architectural and Transportation Barriers Compliance Board (“Access Board”) issued a final regulation that revises and updates the accessibility guidelines for non-rail vehicles—namely, buses, over-the-road buses, and vans—acquired or remanufactured by entities covered by the ADA.
- Compliance with the final rule is not required until DOT revises its accessibility standards for buses, over-the-road buses and vans acquired or remanufactured by entities covered by the ADA. Adoption by DOT will bring much-needed certainty in specifications for vehicle manufacturers and purchasers
- The final rule makes long awaited updates to vehicle accessibility standards. The Access Board first issued vehicle accessibility standards back in 1991. This final rule establishes consistent accessibility requirements for all non-rail vehicles as opposed to the vehicle-by-vehicle approach under the current guidelines. In addition, the final rule requires transit agencies with 100 or more buses to implement automated stop announcements that includes audible as well as visual components. The rule also revises the maximum running slope requirements and new accessibility requirements for over-the road buses.

Recommendations for Modification, Elimination:

- DOT should quickly begin the process for adopting the Access Board’s final regulation. APTA recommends that DOT also conduct a survey of transit systems with 100 or more buses to determine the state of technology and provide enough lead time to transit agencies to adopt automated stop announcements.

Title of Regulation, Statute or Policy Guidance:

Altoona Bus Testing

49 U.S.C. § 5318

Citation/Dates of Issuance:

49 CFR Part 665 [Docket No. FTA–2015–0019] Final Rule August 1, 2016

Description:

- The bus testing program of the Federal Transit Administration (FTA) requires testing on all new bus models before they can be purchased with federal funds, performed in Altoona, Pennsylvania.
- The bus testing facility tests the bus model or maintainability, reliability, safety, performance, structural integrity, fuel economy, and noise.
- Delays resulting from current bus testing procedures can impact manufacturers employing American workers, and can significantly delay procurements for agencies while replacing ageing fleets is an urgent priority across the country.

Recommendations for Modification, Elimination:

- Before bus testing begins, FTA should be required to negotiate a schedule the bus manufacturer within 60 days in order to ensure that busses can be procured in a timely and efficient manner.

Title of Regulation, Statute or Policy Guidance:

Civil Rights Division of the Department of Justice (DOJ) and the Federal Transit Administration (FTA), Department of Transportation Concerning the Implementation Provisions of the Public Transportation Provisions of the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973

Citation/Dates of Issuance:

DOJ and FTA Memorandum of Understanding (MOU), July 27, 2005

Description:

- DOJ and FTA entered a Memorandum of Understanding (MOU) regarding the enforcement of ADA requirements against public transit agencies. The parties entered the MOU to “strengthen respective enforcement efforts of both agencies, eliminate possible duplication of effort, streamline enforcement processes, and to ensure coordinated and consistent nationwide enforcement.”
- Per the MOU, FTA has primary enforcement authority under ADA for recipients of FTA funding with assistance from DOJ. On the other hand, while DOJ has the authority to intervene in lawsuits filed by private parties enforcing the ADA, DOJ “shall coordinate with DOT and FTA prior to intervening in any such suit . . .”

Recommendations for Modification, Elimination:

- Over the last several years, Assistant U.S. Attorney offices have initiated ADA investigations against transit agencies without coordination or notification to DOT and/or FTA. This is problematic because it works against the very coordination and consistency the MOU seeks to achieve between the two Departments
- DOJ must require all ADA investigations and/or enforcement proceedings to be filed with the DOJ Civil Rights Division in Washington D.C. prior to communicating with the subject transit agency so that the action can be coordinated/vetted with DOT and FTA before commencing the investigation/enforcement action.

Title of Regulation, Statute or Policy Guidance:

DOT Final Rule: Transportation for Individuals with Disabilities

49 C.F.R. § 37.3 and 167(d)

Citation/Dates of Issuance:

September 6, 1991

Description:

- The Department of Transportation’s regulation regarding accessible transportation requires transit agencies to transport service animals. A service animal is defined as “any guide dog, signal dog, or other animal individually trained to work or perform tasks for an individual with a disability, including, but not limited to, guiding individuals with impaired vision, alerting individuals with impaired hearing to intruders or sounds, providing minimal protection or rescue work, pulling a wheelchair, or fetching dropped items.”
- In addition, the Department’s interpretive guidance found in Appendix D to Part 37 states:
 - A service animals shall always be permitted to accompany their users in any private or public transportation vehicle or facility. One of the most common misunderstandings about service animals is that they are limited to being guide dogs for persons with visual impairments. Dogs are trained to assist people with a wide variety of disabilities, including individuals with hearing and mobility impairments. Other animals (e.g., monkeys) are sometimes used as service animals as well. In any of these situations, the entity must permit the service animal to accompany its user.
- The Department of Justice, on the other hand, defines a service animal as:
 - A service animal is defined as a dog that has been individually trained to do work or perform tasks for an individual with a disability. The task(s) performed by the dog must directly related to the person’s disability.

Recommendations for Modification, Elimination:

DOT should amend its regulation to harmonize its definition of service animal to that of the Department of Justice. A service animal should be consistently limited to a dog trained to assist a person with a disability.

Title of Regulation, Statute or Policy Guidance:

National Performance Management Measures; Assessing Performance of the National Highway System, Freight Movement on the Interstate System, and Congestion Mitigation and Air Quality Improvement Program

23 USC § 150(c)

Citation/Dates of Issuance:

23 CFR 490 [Docket No. FHWA–2013–0054] April 22, 2016; Final Rule February 17, 2017

Description:

- FHWA released three NPRMs that together establishes a set of performance measures for State departments of transportation (State DOT) and Metropolitan Planning Organizations (MPO) to use as required by Moving Ahead for Progress in the 21st Century Act (MAP-21).
- The measures proposed would be used by State DOTs and MPOs to assess the performance of the Interstate and non-Interstate National Highway System (NHS) for carrying out the National Highway Performance Program (NHPP); to assess freight movement on the Interstate System; and to assess traffic congestion and on-road mobile source emissions for carrying out the Congestion Mitigation and Air Quality Improvement (CMAQ) Program.
- In the final rule, FHWA sets a process for State DOTs and MPOs to establish and report targets and the process that FHWA will use to assess the progress State DOTs have made in achieving targets. State DOTs will be required to establish performance targets and assess performance in 12 areas established by MAP-21, and FHWA will assess progress toward meeting targets in 10 of these areas in accordance with MAP-21 and the FAST Act. State DOTs that fail to meet or make significant progress toward targets in a biennial performance reporting period will be required to document the actions they will undertake to achieve their targets in their next biennial performance report.
- FHWA is working to develop more sophisticated performance metrics and may issue an updated rulemaking on performance measures related to person throughput and multi-modal performance in the future, following completion of ongoing research regarding multimodal system performance measures in Fall 2018.

Recommendations for Modification, Elimination:

- Transit agencies should not have to participate in a cost/benefit analysis with complicated methods to receive CMAQ funding.

- Setting targets in CMAQ for transit will make it difficult for agencies to provide services that ultimately improve air quality by reducing vehicle miles travelled and their associated emissions.
- A qualitative rather than a quantitative measure should be used for the description of benefits transit provides in achieving air quality attainment.

Buy America/Buy American Regulations

Consistency Across DOT Agencies in Interpretation of Buy America/Buy American Requirements

Description:

- Buy America/Buy American regulatory requirements vary widely across DOT agencies. Even where statutory and regulatory language is similar or identical, the modal administrations are interpreting and enforcing the requirements inconsistently. See link below comparing regulations:
https://www.transportation.gov/sites/DOT.dev/files/docs/buy_america_provisions_side_by_side.pdf.
- For example, the FTA's Buy America provisions do not apply to the procurement of buses and other rolling stock if the cost of components produced in the U.S. is more than 60 percent of the cost of all components and final assembly takes place in the U.S. The FTA takes the position that components are 100 percent domestic origin if the *manufacturing* activity performed by the Original Equipment Manufacturer ("OEM") advances the value or improves the condition of the subcomponents, essentially transforming the subcomponents into a new and functionally different product. Similarly, a subcomponent is 100 percent domestic origin when it is manufactured in the U.S. The FAA, on the other hand, has no devoted waiver for buses or other rolling stock. Rather, under FAA's Waiver III, the Administrator may grant a waiver for Buy American requirements if the cost of all components and subcomponents produced in the U.S. is more than 60 percent of the cost of all components of the equipment and final assembly of the equipment takes place in the U.S. Unlike the FTA, however, the FAA does not share the same interpretation of the manufacturing process. As a result, the FAA interprets its regulation to mean that even if the manufacturing activity advances the value or improves the condition of subcomponents, the precise percentage of foreign-sourced product is calculated against the FAA's 60 percent requirement, which is very different from FTA's interpretation that allows the component or subcomponent to be deemed 100 percent domestic origin.
- The discrepancy in interpretations makes it nearly impossible for an electric bus manufacturer to satisfy the FAA's Buy American regulation even though the same electric vehicle satisfies FTA's Buy America regulation. For example, the cost of imported battery cells is just too expensive on a percentage basis for a battery pack (component) to be considered of 100 percent domestic origin unless the OEM can claim that its subcomponents (e.g., modules) are also 100 percent domestic origin. Through the FTA's pre- and post-delivery Buy America audits, the agency has determined the work performed on subcomponents of a battery pack satisfy the *manufacturing* requirement, allowing OEMs to claim 100 percent domestic origin of the subcomponents, which further allows the OEMs to claim 100 percent domestic origin on the component (e.g., battery pack). The FAA – despite almost identical regulatory language – has adopted a different view of the manufacturing process. Again, under its analysis, the precise

percentage of foreign-sourced product is calculated against the FAA's 60 percent requirement.

- A uniform interpretation of Buy America/Buy American regulations across DOT modal administrations for buses and other rolling stock will lead to the more efficient use of taxpayer dollars. Agencies and OEMs are eager to work with the DOT to achieve our shared commitment to increasing domestic manufacturing and providing greater mobility for Americans, whether they be on highways, city streets or airport tarmacs.

Recommendations for Modification:

- We recommend that the DOT direct modal administrations to consistently interpret "manufacturing process" at the component and subcomponent level.
- We urge DOT to enforce FTA's interpretation of "manufacturing process" found in 56 *Fed. Reg.* 926, 929 (Jan. 9, 1991) and require the same interpretation by other DOT modal administrations. The FTA has stated alteration activities sufficient to be a manufacturing process include "forming, extruding, material removal, welding, soldering, etching, plating, material deposition, pressing, permanent adhesive joining, shot blasting, brushing, grinding, lapping, finishing, vacuum impregnating, and, in electrical and electronic pneumatic, or mechanical products, the collection, interconnection, and testing of various elements."
- Further, we recommend the FAA ultimately adopt the FTA's Rolling Stock Procurement language as a 5th waiver. Doing so would ensure consistency not only across agencies for procuring buses and other rolling stock, but would also promote the goals of the FAA's Modernization and Reform Act of 2012, which allows the FAA to award Airport Improvement Program (AIP) funds for acquiring Zero Emission Vehicles (ZEVs), including buses. See 49 USC § 47136a. Interest among airports for ZEVs has increased recently and the number of airports applying for ZEV pilot funding has sharply increased. The FTA, by its statutorily established purpose, is more intimately familiar with the bus manufacturing processes than the FAA. Therefore, an electric bus that satisfies the FTA's Buy America regulatory requirements should also be able to satisfy the FAA's Buy American regulatory requirements.
- APTA recognizes that the FAA's adoption of the FTA's Rolling Stock Procurement language is a timely effort. So, in the meantime, we strongly recommend that the FAA issue a notice or advisory circular (*i.e.*, agency-wide policy) adopting the FTA's interpretation of the "manufacturing process" in the bus and rolling stock context and inform its regional offices to apply this standard. This would permit components and subcomponents to be 100 percent domestic origin, even if they contain foreign-sourced product.

Title of Regulation, Statute or Policy Guidance:

Buy America Regulations—49 CFR 661.7 (“Waivers”)

Description:

- APTA members have noted redundancy in the evaluation and final decision making process between agencies for Buy America Act waiver requests where two or more agencies have oversight of the project, and both must provide the waiver.
- During the evaluation and final decision making process, each agency carries out its own independent review. Sometimes, one agency may grant the waiver, while the other questions/delays or denies the waiver. This redundancy and inconsistency causes project delays that can increase costs, put funding (*federal or other sources*) in jeopardy, and is generally detrimental to accomplishing to completion of the project because it often costs more money for taxpayers.
- By requiring DOT modal administrations to either coordinate and jointly issue a waiver or have one modal administration issue a waiver that applies to both modes will lead to consistent and transparent enforcement of federal rules leads, which causes fewer delays and result in more efficient use of taxpayer dollars. A coordinated approach better equips federal agencies and local transit agencies to achieve our shared commitment to providing greater mobility opportunities for Americans.
- A coordinate effort also lessens the administrative burden on federal agencies charged with reviewing and issuing Buy America waivers.

Recommendations for Modification, Elimination:

- Where two or more DOT modal administrations have oversight responsibilities for a project (*oversight that comes from both agencies having provided federal funds to the project*), evaluation and final decision for a Buy America waiver should be coordinated between the two agencies or issued by one mode and binding on the other mode.
- When a Buy America waiver is granted, DOT should establish, through guidance, that similar waiver requests that are pending, or are submitted within 90 days of the first request for a Buy America waiver regarding a similar set of facts, the second requesting party need notify only the affecting modal administrations regarding their intention to utilize the Buy America waiver granted to the first agency. It would then be incumbent upon either or both DOT modal administrations to verify the circumstances to ensure the facts are sufficiently similar to the first to justify the use of the same Buy America waiver.

Title of Regulation, Statute or Policy Guidance:

Consistency in Buy America Guidance and Regulations - Current and new technology component and subcomponent classifications - FTA 49 CFR 661.

Description:

- Buy America Compliance at the Component level is defined in 49 CFR 661.11 (g):
For a component to be of domestic origin, more than 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.
- New technology trends have a transformative relationship to component and subcomponent classifications for rolling stock vehicle end products as well as for manufactured end products as defined in Appendix A to 49 CFR 661.3. In practice, there is considerable time invested in classifying the components and subcomponents for similar rolling stock and construction projects. Participants at every level in the industry seek templates and other guidance that solidifies “accurate” interpretations of the Buy America regulations. Buy America and Buy American Compliance Matrices can effectively assist in the “standardization” of one of the most time-consuming segments of documenting Buy America and Buy American regulatory compliance.
- New technology transformation on the existing components under the Rolling Stock Waiver - Appendices B & C to 49 CFR 661.11 is creating new classifications of “system” and “assembly” components from the standalone components that existed in 1995 when the original appendices were developed. To reclassify components into an expanded “system” component classification requires identifiable inter-dependence of the components and subcomponents to the common “system” function. Simply including the word “assembly” and “system” in the component description is not sufficient to meet the requirements of 661.11(g). See attached diagram.
- External transformation of existing components under the Rolling Stock Waiver - Appendices B & C to 49 CFR 661.11 is also occurring with changes in external laws and regulations, procurement “supply chain” practices, and integrated manufacturing processes. Current FTA guidance documents the frameworks that allow an expanded interpretation of a component compliant with the provisions of 661.11(g). Case examples are Detroit Diesel Corporation (2011) and LACMTA/Rocla Concrete Tie, Inc. (2015). The current Buy America regulations have the flexibility to address these changes without additional regulatory reform actions.
- In 2006 and 2007, the FTA in response to Congressional directives and in extensive consultation with the industry, introduced the definition of a system based on the “functional test” for interconnected systems. It is interesting to note that the text discussed in the preamble but omitted from the final rule with regard to final assembly requirements for rolling stock identified, as components, energy management and storage

devices and energy sources for auxiliary equipment and controls. Today, these are the “New Technology” component classifications i.e. the electric energy storage system for mainstream Zero-Emission Buses (ZEBs) configurations (battery electric, fuel cell electric and Trolley electric). The major focus in this area has been on the battery pack component and the vehicle charging interface and charging infrastructure. Current FTA interpretations for Buy America purposes, classify the charging infrastructure as subject to the general Buy America requirements of 49 CFR 661.5 and the electric system components installed on the vehicle as subject to the rolling stock requirements under 661.11. The key to assessing the substantial transformation activities for electrical products is specified in 56 Fed. Reg. 926, 929 (1991) as “*the collection, interconnection and testing of various elements.*”

- At the recent APTA 2017 Sustainability & Multimodal Planning Workshop, several key concepts were highlighted by the presenters for the electric bus technology including:
 - Interoperability between all electric buses and the charging infrastructure should adopt standards similar to that which allows current vehicles to be fueled by a standard industry infrastructure.
 - Comparative analysis between the existing diesel bus systems to the new electric bus systems have many of the same onboard systems along with new systems “electric drivetrain” and new components “vehicle charging interface”. This illustrates the need for the Buy America Compliance Matrices to be based on “functional” classifications that can assist in Buy America component and subcomponent interpretations over varied technology platforms.
- The recent issuance of FTA guidance for the provision 49 U.S.C. 5323(j)(5), accounting for the U.S. iron and steel content in the bill of materials for a “car shell” or “frame” has shifted focus on what is allowed as subcomponents for a “car body shell”, “car shell” or “frame”. There are a number of references in the industry including “structure” and “chassis” all appearing to describe the first major component for both rail cars and buses. These terms were also part of the preamble discussion in 2007 regarding revisions to the final assembly process. The list of components that were examined at that time included the major new technology components in rolling stock vehicles today.

Recommendations for Modifications, Elimination:

- The FTA should work along with industry participants in an APTA working group to create classification Buy America Compliance Matrices (BACM) by major rolling stock vehicle configurations such as ZEBs, fuel based (Diesel, CNG, LNG) and automated vehicles for Rolling Stock Vehicle End Products. The FTA provide interpretive guidance to the greatest extent possible under the current regulations, in a Buy America Compliance Matrix format, that can be confidently applied in the field and consistently yield the correct regulatory interpretation

- Additionally, the FTA should concurrently develop Buy American Compliance Matrices (BAACM) by major construction project configurations such as rail stations, maintenance buildings, utility systems (electric, water and sewer) with the industry participants in an APTA working group. There exists FTA guidance that provides a regulatory framework that can be used as a starting point to standardize typical Components for FTA-funded Construction Projects.
- The resulting BACMs and BAACMs will help standardize classifications for components from the past, present and future to be classified appropriately for Buy America domestic content calculation purposes. The FTA and/or APTA can maintain a library of Buy America Compliance Matrix templates that can be used to develop project-specific component and subcomponent schedules that can be submitted for FTA review if required. This would streamline the “compliance review” process considerably allowing the FTA to focus its attention to more complex Buy America guidance issues.
- Manufacturing activity requirements should be tied to the component classification matrix in order to differentiate what is considered “manufacturing” versus “mere assembly” activities to be performed in the United States to support the development of meaningful manufacturing jobs.
- **Buy America Compliance Matrix (BACM)**
 - Component and subcomponent classifications
 - Integrated System Component definition
 - Functional classifications
 - Substantial Transformation Manufacturing Processes
 - Cost definitions
 - Supplier Buy America Certifications

Buy America Regulations

Identifying areas where there is a lack of Buy America guidance from DOT - Buy America Requirements 49 CFR 661 and the FTA 2017 Rolling Stock Audit Handbook

Description:

- Typical Components of Ferry Boats

A “Typical Components of Ferry Boats” listing for this type of revenue service vehicle is not included in the Buy America regulations. In practice, a Ferry Boat Buy America Compliance Matrix is compiled based on functional comparative analysis to the existing major component lists. An example of equivalent components is presented below:

| Major Component | Appendix B to 661.11 Typical Components of Buses | Appendix C to 661.11 Typical Components of Rail Rolling Stock | Appendix “___” to 661.11 Typical Components of Ferry Boats |
|-----------------|--|---|--|
| | Car Body Shell | Car Shell | Hull |

- Minimum Final Assembly Activities for Minivan Conversions to Americans with Disabilities Act accessibility.

Final Assembly Activities for Minivan Conversion to Americans with Disabilities Act accessibility have been identified through the provision under (c) in Appendix D to 661.11 for evaluating alternative final assembly plans. The FTA has identified through several decision letters, conversion “final assembly” activities described as (a) “Strip-Out” through (p) “Miscellaneous” which collectively constitute final assembly as required by 49 C.F.R. § 661.11 (a) and (r). By incorporating this guidance in the Buy America regulations and the FTA 2017 audit handbook, it will clarify what is considered a manufacturing activity being conducted at the final assembly location as part of § 661.11 (r) in contrast with the manufacturing process of a component as allowed by 661.11 (d) -- *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.*

- Supplier Buy America Certification

The Buy America regulations do not specify that a supplier Buy America Certification is required only that documentation should be available to support regulatory compliance. The regulations stipulate Buy America Certifications for the “End Products” per 49 CFR 661.6 (manufactured end products) and 661.12 (rolling stock).

The 2017 audit handbook provides a sample Supplier Buy America Certification that can be modified to provide documentation for the domestic content of the components used in the manufacture of the “End Product” rolling stock vehicle.

In practice, suppliers providing components and sub-components to the rolling stock manufacturers “OEM” issue certifications for the following: (1) blanket for all products manufactured at a U.S. location, (2) stock products, (3) project specific for customized products, and (4) sub-components supplied for TVM internally manufactured components.

- Audit guidelines for specific procurement types:

When updating the guidance in the FTA 2017 Handbook and the 49 CFR 661 regulations the FTA should incorporate guidance from the FTA September 2016 Final Policy Statement regarding the audit requirements for agencies participating in joint procurements and multi-year procurements.

There is a FAQ provided to address this but in practice, it is a reoccurring question regarding the option orders exercised after contracts were signed before October 1, 2015 and during the waiver periods specified in the 9/1/16 guidance. There are many changes now with suppliers certifying partial compliance under 661.11(l), component classifications expanding into systems and assemblies, consolidations and acquisitions with current suppliers and new suppliers.

- Component Transportation Costs to the End Product final assembly location.

The intent of allocating the transportation costs to the cost of foreign components and subcomponents only was to increase the foreign content costs included in the divisor of the domestic content calculation. The “cost” of the foreign component is what is paid directly to the manufacturer of that component. The revision from the Draft to the Final audit handbook edited Section 5: FAQs reflects the regulatory language.

The audit function to review the foreign shipping cost can be derived from the Cargo Preference Act documentation for overseas ship or air costs, and land transport to the final assembly location. Additional foreign component transportation costs are also allocated by the Transit Vehicle Manufacturer (TVM) freight analysis for payments made other transportation service providers. Several sources exist to identify direct foreign transportation costs.

When the TVM manufactures a component or subcomponent at the final assembly location of the end product rolling stock as allowed under 661.11 (d), the final assembly location of the “end product” now becomes the manufacturing location of the component. Therefore, the manufacturing location receives the incoming subcomponents, at cost, plus the sub-components subsequent shipping cost.

- Domestic content calculation for a purchased component compliant with 49 C.F.R. 661.11(g).

The 2017 audit handbook did not include the purchased component as one of the components included in the schedule on page 39 which provided a bus with three components. This example illustrated compliance for components complying with 49 C.F.R. 661.11 (l) and (i) and an OEM manufactured component with a cost basis under 49 C.F.R. 661.11(m)(2) complying with 49 C.F.R. 661.11(g). A purchased component with a cost basis under 49 C.F.R. 661.11(m)(1) complying with 49 C.F.R. 661.11(g) is missing. The domestic content calculation for the TVM manufactured component is also incorrect as it includes the TVM component manufacturing cost as a subcomponent for the purposes of calculating the domestic content for the component.

- Partial domestic content calculation for components qualifying under 661.11 (l).

Specific guidance is required for the partial domestic content calculation for components qualifying under 661.11 (l) which allows: “(l) 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.” References in the 2017 audit best practices handbook have included several conflicting calculations.

- Standardize Methodology for documenting General Public Interest Waivers included in the domestic content calculations for System Components.

General Public Interest waivers for components, such as the DVR, has allowed these items to be counted towards to domestic content of the rolling stock vehicle. However, when looking at the content of a “system” component to be installed on the vehicle, which may be comprised of just the waiver item accounting for >60% of the value of the “system” component along with other foreign subcomponents can lead to determinations that only the waiver item can be included versus the entire value of the system component.

Software and microcomputer elements can have smaller dollar values compared with the hardware elements in a component. However, their impact on the functionality of the overall component can be significant as the “system controller” can transform a stand-alone component into a system component by interconnecting additional hardware elements together. The key, to providing a framework to define a system component, is the extent to which the system controller controls the functionality and interconnectivity of the individual components.

Several FTA interpretations (Detroit Diesel, Rocola) illustrate that there is flexibility in the regulations to accommodate technology influences. Therefore, other long-standing ideas of independent components must be reviewed in light of emerging technology. While engines and transmissions were clearly demarcated in buses for many years and, in fact, interchanging among manufacturers was possible, integrated propulsion systems now blur those lines.

- Standardize the System Component Definition.

The component lists for Appendix B and C identify a total of 5 system components. Subsequent FTA guidance upheld that the components, identified on Appendices B and C, are “components” not “subcomponents” of larger system components.

Additionally, Appendix C refers collectively to “equipment” in several instances, including “communication equipment.” Communication equipment does not arrive at a final assembly location as a single package but instead as multiple pieces of hardware installed throughout a vehicle and interconnected via cabling within the car shell. This has led to debate among auditors concerning whether all communication equipment should be considered as a single component as suggested by the language in the Appendix or each of the as many as twenty individual pieces of hardware must be considered as a separate components.

In 2007, the Buy America Requirements of 49 CFR 661 was amended to include a definition of “systems” to 661.3 Definitions. This definition assists in classifying the equipment as either a stand-alone manufactured end product or a component of a system manufactured end product.

For rolling stock, customer options include a number of systems i.e. fire suppression, communication, AVL, etc. Typical implementation scenarios for a communications system, for example, include re-purposing equipment from retiring vehicles, pre-wiring only for system components to be installed at the Grantee location, multiple suppliers providing subcomponents, etc. System quotations from the pre-award stage to post-delivery can vary considerably.

- TVM internally manufactured components and subcomponents:

Components and subcomponents manufactured by the TVM are, by necessity, treated differently, since no single ‘selling cost’ can reliably be derived when the requisite US content is present. The

lack of definitive guidance in this area leads to competing interpretations among practitioners that materially affects whether a particular vehicle is compliant or not.

Cost Elements: Minimum acceptable internally manufactured component and subcomponent cost elements need to be specified to assist in the proper accounting for the “entire cost” of a component (661.11 (m)(2)) as allowed under 661.11 (g):

*“For a component to be of domestic origin, more than 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.”*

Cost, under generally accepted accounting principles, is the same whether the component or subcomponent is purchased or internally manufactured. The basic cost elements are materials, labor, overhead, and profit. The specific items included in these categories will vary based on supply chain sourcing, operations and the manufacturing capabilities for each supplier. Suppliers will always include these minimum cost elements in their invoiced cost to the TVM.

- Non-recurring costs:

The 2017 audit handbook uses the FAQ 5.2.2 to specify, that “All non-recurring expenses such as engineering, mockups, fixtures/tooling, spare parts, manuals, and training also are excluded from the Buy America component calculations.”

In practice, the treatment of non-recurring costs should be clarified and standardized. Where an OEM purchases a fully compliant component, the entire purchase price is counted as US content. FTA should clarify that this remains the case, even where a supplier may have broken out its costs to segregate its non-recurring costs. The purchase price remains constant whether or not such costs are segregated.

For non-recurring costs related to internally built components, FTA should likewise provide definitive guidance to avoid competing interpretations. FTA should acknowledge that non-recurring costs associated with internal manufacture of a fully compliant component are appropriately counted as US content. The measure of such attribution should be a fractional portion of such non-recurring costs equal to the fraction of vehicles potentially delivered under the contract. As an example, where a contract includes a base order of five vehicles and options for five additional vehicles, one tenth of the non-recurring costs associated with the internal manufacture of fully compliant components should be counted as US content. Extending the ratio to include both base and option orders is necessary to ensure consistency whether or not options are exercised.

This is an area that has experienced differing interpretations primarily due to the variability in non-recurring cost elements, complexity in the accounting for them, and based on the rolling stock vehicle involved the magnitude of the amount that influences the domestic content calculation.

Recommendations for additional Regulations and Guidance :

- The FTA should create an additional appendix under Appendix B to 49 CFR 661.11 for Typical Components of a Ferry Boat with consultation with industry. While outreach should be broad, FTA should specifically seek the opinions of shipbuilders and Buy America auditors with

experience in this niche area. Shipbuilding practices and a typical bill of materials is far different from those associated with rail car and bus manufacturing and the ultimate guidance must account for this to avoid unnecessarily inflating the cost of the vehicles based on cost of compliance.

- The FTA should include the minimum final assembly activities for Minivan Conversion to Americans with Disabilities Act accessibility in Appendix D to § 661.11 – Minimum Requirements for Final Assembly identifying conversion activities described as (a) “Strip-Out” through (p) “Miscellaneous” that collectively constitute final assembly as required by 49 C.F.R. § 661.11 (a) and (r). Include this provision in a separate section following “(b) Buses: in Appendix D to § 661.11 – Minimum Requirements for Final Assembly.”
- Since foreign transportation costs are an adjustment to the total material cost, the FTA should seek to provide clear guidelines to ensure the divisor includes what the regulations intend as it will impact the domestic content percentage at both the component and vehicle levels. The 2017 audit handbook should include a chart that identifies the foreign transportation costs to include in the divisor for domestic content calculations.
- The FTA should include, in section 4, 2017 audit best practices handbook a fourth component to the three component domestic content calculation for a rolling stock vehicle on the schedule included on page 39. Additionally, the TVM internally manufactured component example should exclude the component manufacturing cost from the domestic content calculation for the component and the calculation methodology should be corrected.
- From the FTA’s September 1, 2016 guidance, include a chart in the 2017 audit handbook that would list the types of procurements and the pre-award, intermediate, and post-delivery audit requirements. This can be a general representation of the 5-year and 7-year contract terms over the procurement types.
- The sample Supplier Buy America Certification in the 2017 audit handbook should cite the correct citation for 661.11(l) and add 661.11 (h) as an option box for the subcomponent suppliers. The certifications are considered valid for one year unless a major change requires recertification.
- The FTA can include a chart that identifies the cost basis for each component classification and provides a list of what is to be included in “component manufacturing cost”

| Buy America Regulations | Domestic Content Compliance | Cost Basis | |
|-------------------------|--|---|--|
| | | 661.11 (m)(1) Purchased | 661.11 (m)(2) TVM Manufactured |
| 49 C.F.R. 661.11 (g) | Full | Invoice price paid to the supplier for the component | Cost accounting schedule that accounts for the ‘invoice price’ equivalent to what would be paid to 3 rd party supplier. |
| 49 C.F.R. 661.11 (l) | Partial | U.S. subcomponent cost + component manufacturing cost | U.S. subcomponent cost + component manufacturing cost |
| 49 C.F.R. 661.11 (i) | Tariff Exemption – U.S. subcomponent cost only | U.S. subcomponent cost only | U.S. subcomponent cost only |

- A comparison chart that shows the system versus stand-alone component classifications for equipment installed on a bus, rail car, ferryboat can standardize the major component lists. Advances in technology directly impact the domestic content calculations for components and system components as software is imbedded in most devices today versus in 1995 when the regulations were developed. Concepts, such as the Internet of Things (IOT), illustrate this trend. FTA should, in consultation with industry, review its listings of components and systems to conform to current manufacturing practices, the integration of functions and the interdependence of the components to the system function.
- The 2017 FTA handbook should directly address the direct technology influence on the 1995 component definitions exhibited in the Appendices B and C. For example, destination signs in 1995 were stand-alone assemblies that were manually operated or programmed. Examples of component classifications for major types i.e. systems, assemblies, etc. should be provided. Additionally, the FTA should define a means of defining when components may be separated or combined to adjust to these changes in design and manufacturing.
- Clarify the definition of car body shell or frame as designated in the provision for the iron and steel calculation provided at 49 USC 5323 (j)(5). This is needed to help classify the steel and iron specifically associated with the car body shell bill of materials. This should address the subcomponents identified for both Car Shells and Car Body Shells and Frames.
- The different references to “manufacturing cost” appear to conflict with the costs defined in (m)(1) and (2) which reference the “invoice cost” of the component and subcomponents, by cost, under 661.11(g). Additionally, if the cost of the domestic subcomponents divided by the cost of all the subcomponents is < 60% then essentially the cost of the foreign subcomponents is subtracted from the “invoice cost” of the U.S. manufactured component. This is consistent with accounting for the U.S. material cost and the U.S. manufactured Component’s labor, overhead and profit. The handbook has references to just manufacturing labor excluding the remaining manufacturing costs altogether. Examples of component manufacturing costs should be included in the handbook.

Specific identification of the minimum cost elements is required to address the completeness of the divisor for the domestic content calculation. The draft FTA handbook illustrated this in the Appendix A schedules for Bus and Rail by adding the total cost line for the component. The difference between the total cost line and the subcomponent cost subtotal line represented the component manufacturing costs (labor, overhead, profit). The 2017 FTA audit handbook should include Appendix A schedules for the component “types” described in the regulations especially for system and assembly components.

- The FTA should solicit actual non-recurring cost examples from recent rail and major bus procurements to assess how the non-recurring costs influences the domestic content calculation.