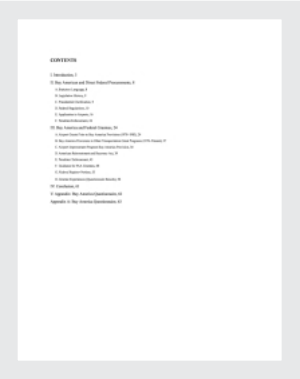

Buy America Requirements for Federally Funded Airports

DETAILS

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CONTENTS

BUY AMERICA REQUIREMENTS FOR FEDERALLY FUNDED AIRPORTS

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I. INTRODUCTION

Federal airport development grant programs include statutory preferences for domestic goods, commonly known as Buy America, Buy American, or Buy National provisions. These provisions have evolved from the 1933 Buy American Act (BAA),[1] which applied to direct procurements of goods by federal government agencies. Buy America provisions in transportation grant programs, on the other hand, apply to procurements made by recipients of federal grants, including state and local governments and airport authorities.[2]

Figure 1 summarizes these different Buy America provisions that apply to federal transportation agencies and grant programs. The transportation grant provisions generally include stricter domestic preference requirements than the original BAA. As discussed in this digest, the BAA was weakened in practice by liberal applications and interpretations of its statutory exceptions. As a result, in the transportation grant provisions, Congress included specific guidance (including numeric thresholds) regarding when one of the exceptions may apply to permit the use or purchase of foreign goods.

The Buy America provision in the Airport Improvement Program (AIP),[3] enacted in 1990, appears to have been designed as a particularly strict domestic preference requirement. The AIP Buy America provision permits the appropriation of Federal Aviation Administration (FAA) funds "for a project only if steel and manufactured goods used in the project are produced in the United States."[4] According to the current language of the AIP provision, the Secretary of Transportation may waive the domestic preference to permit the use of foreign steel or manufactured goods in the following cases:

- *Public Interest*. Where the use of domestic steel or manufactured goods would be "inconsistent with the public interest."[5]
- *Unavailability*. Where domestic steel and manufactured goods "are not produced in a sufficient and reasonably available amount or are not of a satisfactory quality."[6]
- *Unreasonable Cost*. Where the use of domestic steel and manufactured goods "will increase the cost of the overall project by more than 25 percent."[7]
- *Substantial Domestic Manufacture*. Where the project involves procurement of a *facility* or *equipment*, and final assembly of the facility or equipment occurs in the United States, and "the cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components of the facility or equipment."[8]

However, there is no requirement in the AIP Buy America provision (as there is in other transportation grant provisions) for the FAA to publish the Buy America waivers that it grants. As a result, until recent years, the AIP Buy America provision has been the subject of very little scrutiny, guidance, or enforcement. Congressional oversight was expanded with passage of the American Reinvestment and Recovery Act (ARRA) economic stimulus program in 2009,[9] which required the FAA to publish Buy America waivers for projects that received ARRA funds.[10] Consequently, the FAA has published some waivers of the Buy America requirements, and has also published expanded guidance to help AIP grant recipients comply with the requirements.[11] On February 24, 2010, the Financial Assistance Division of the FAA Office of Airport Planning and Programming (APP-500) issued Program Guidance Letter (PGL) 10-02 directed toward compliance with both the AIP and ARRA Buy America provisions.[12] Although it is brief, PGL 10-02 is the most authoritative Buy

[1] Pub. L. No. 72-428, Tit. III; Mar. 3, 1933, 47 Stat. 1520, codified at 41 U.S.C. §§ 8301–8305 (2011).

[2] *See infra* Pt. III.

[3] 49 U.S.C. § 50101 (2011). This provision is referenced herein as the "AIP Buy America Provision." However, it also applies to other lines of business within the FAA. *See infra* Pt. III. C.i.

[4] 49 U.S.C. § 50101(a) (2011).

[5] 49 U.S.C. § 50101(b)(1) (2011).

[6] 49 U.S.C. § 50101(b)(2) (2011).

[7] 49 U.S.C. § 50101(b)(4) (2011).

[8] 49 U.S.C. § 50101(b)(3) (2011).

[9] American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 (2009).

[10] *Id.* § 1605(c).

[11] *See infra* Pt. III.F.

[12] FED. AVIATION ADMIN., PROGRAM GUIDANCE LETTER NO. 10-02, GUIDANCE FOR BUY AMERICAN ON AIRPORT IMPROVEMENT PROGRAM (AIP) OR AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) PROJECTS (Feb. 24, 2010), http://www.faa.gov/airports/aip/guidance_letters/media/PGL_10_02.pdf.

America guidance available to AIP grant recipients and attempts to address the most common compliance questions. The APP-500 Office has also established a Buy America Web site that contains the most up-to-date Buy America guidance,[13] including a list of products that have received Buy America waivers, or those that the APP-500 Office has found to comply with the Buy America requirements.

Although guidance and enforcement of the AIP Buy America provision is still evolving, there is now sufficient information publicly available to provide compliance guidance for most situations encountered by AIP grant recipients. This digest synthesizes all available information, including statutory and regulatory language, legislative history, administrative and judicial opinions, and agency guidance, to help airport sponsors and their contractors understand and comply with the Buy America requirements. The digest traces the AIP Buy America provision from the BAA and the other transportation grant Buy America provisions from which it evolved. Particular attention is paid to the legislative history of the AIP Buy America provision and the limited guidance that the FAA has made available. The digest identifies areas where the FAA has directly adopted compliance tests used by other federal agencies in enforcing the BAA or other transportation grant Buy America provisions. The digest also identifies ways in which the AIP Buy America provision differs from its predecessors, where the FAA and its grant recipients should not rely on guidance provided by other agencies (involving similar but different statutes). Finally, the digest identifies areas where the FAA's interpretation of airport Buy America requirements may deviate from the congressional intent or from the interpretation of nearly identical statutory language by other federal agencies. Although some confusion remains, this digest is intended to provide answers for the most common compliance issues encountered by airport grant recipients and to serve as a resource in the development of further guidance.

[13] Fed. Aviation Admin., AIP Buy American Preferences, http://www.faa.gov/airports/aip/buy_american/ (last updated Mar. 13, 2012).

Figure 1. Comparison of Buy America Provisions Applicable to Federal Transportation Agencies and Grant Programs.

	BAA (41 U.S.C. §§ 8301–8305)		**STAA**		**AIP** (49 U.S.C. § 50101)	**ARRA**
Applies to:	Federal Agencies (48 C.F.R. § 25.000)	**FAA** (AMS T3.6.4)	FHWA (23 C.F.R. § 635.410)	FTA (23 C.F.R. § 661)	**FAA** (PGL 10-02)	Federal Agencies, **FAA** (48 C.F.R. § 25.600)
Unmanufactured Goods	Domestic (subject to Exceptions)		Exempt		Exempt (except as part of facility or equipment)	Exempt
Equipment	Domestic (subject to Exceptions)		Waived	Domestic (subject to Exceptions)	Domestic	Exempt (except Mfgr'd Construction Materials)
Substantial Domestic Manufacture Exception						
Vehicles	All equipment: Assembled in U.S. of 50% Domestic Components			Vehicles: Assembled in U.S. of 60% Domestic Components and Subcomponents	All equipment: Assembled in U.S. of 60% Domestic Components and Subcomponents	Vehicles: Exempt
Other Equipment				Equipment: All manufacturing processes in the U.S. using 100% Domestic Components		Manufactured Construction Materials: Final assembly in U.S.
	No Waiver Required			No Waiver Required		
Construction Materials	Domestic (subject to Exceptions)					
Steel			Steel: Domestic (subject to Exceptions)		Steel: Domestic (No Exceptions)	Steel & Iron: Domestic

Figure 1 continued

	BAA (41 U.S.C. §§ 8301–8305)		**STAA**		**AIP** (49 U.S.C. § 50101)	**ARRA**
Iron			Iron: Domestic (subject to Exceptions)		Iron: Exempt (except part of facility or equipment)	
Cement			Cement: Exempt		Cement: Waived	Cement & Asphalt: Excluded as Unmanufactured Goods
Asphalt			Asphalt: Waived	Asphalt: Evaluate as Mfgr'd Constr. Material	Asphalt: Waived	
Manufactured Construction Materials			Mfgr'd Constr. Materials: Waived	Mfgr'd Constr. Materials: Domestic (subject to Exceptions)	Mfgr'd Constr. Materials: Domestic (evaluate as subcomponent of facility)	Mfgr'd Constr. Materials: Final assembly in U.S.
Impracticability Exception	Determ. by Agency Head	Determined by CO				
Facilities	Evaluate Individual Construction Materials		Evaluate Individual Construction Materials		Domestic (Assembled in U.S. of 60% Domestic Components and Subcomponents)	Evaluate Individual Construction Materials
Other Exceptions						
Unavailability	Insufficient quantity AND Unsatisfactory quality No domestic response to open procurement		Insufficient quantity AND Unsatisfactory quality		Insufficient quantity OR Unsatisfactory quality	Insufficient quantity AND Unsatisfactory quality

	BAA (41 U.S.C. §§ 8301–8305)		**STAA**		**AIP** (49 U.S.C. § 50101)	**ARRA**
	Goods on FAR List plus Market Research	Goods on FAR List (No Market Research) No waiver required			Goods on FAR List (No Market Research)	Goods on FAR List plus Market Research
Unreasonable Cost	6% surcharge to foreign line items (12% if low domestic bidder is small business)		Increase total project cost by 25% if foreign content		Increase total project cost by 25%	
			No waiver required	Waiver required		
Public Interest	Determined by Agency Head		Determined by Agency Head		Determined by Agency Head	
Free Trade	Treat as Domestic goods from WTO, FTAs, NAFTA partners; Waived by U.S. Trade Rep.	Treat as Domestic goods from NAFTA partners; No waiver required	Inapplicable	Inapplicable	Inapplicable	Consistent with U.S. trade obligations
Publication	Report to Congress all purchases manufactured outside U.S. Public inspection of all waivers for Construction Materials	Public inspection of all waivers	Public inspection of all waivers	Publish Public Interest waiver in *Federal Register* Public inspection of all waivers	Exempt	Publish all waivers in *Federal Register*

II. BUY AMERICAN AND DIRECT FEDERAL PROCUREMENTS

All transportation grant Buy America provisions evolved from the BAA, which applies to direct procurement of goods by federal agencies.[14] An understanding of the BAA is therefore essential to interpreting the Buy America provisions in transportation grant programs. This section introduces the BAA, with a focus on the elements of the BAA that were later adopted in part by the AIP Buy America provision. These BAA elements are illustrated with examples involving FAA procurements and airport construction projects.

A. Statutory Language

Like most federal agencies, the FAA is subject to the requirements of the BAA.[15] This legislation creates a preference for domestic goods, including domestic unmanufactured goods ("unmanufactured articles, materials, and supplies that have been *mined or produced* in the United States")[16] (emphasis added) and domestic manufactured goods (those "that have been manufactured in the United States *substantially all* from" domestic components—i.e., from goods that were themselves "*mined, produced, or manufactured* in the United States")[17] (emphasis added). As a general rule, only such domestic goods 1) "shall be *acquired* for public use" in the United States (emphasis added),[18] or 2) shall be *used* in the performance of a "contract for the construction, alteration, or repair of any public building or public work" within the United States [19] (emphasis added). "Public building or public work" includes airports, terminals, and other airport facilities belonging to or constructed by the federal government, and "public use" includes the use of airports, terminals, and other facilities by the federal government.[20] Therefore, the BAA applies principally to the direct procurement of materials, equipment, or constructed facilities by the federal government (although the text of the BAA does not expressly limit itself to direct procurement by the federal government[21]).

There are a number of exceptions codified in the BAA statute, which may permit the acquisition or use of nondomestic goods in certain circumstances. These exceptions include:

- *Public Interest*. Where the head of the federal department determines that the acquisition or use of domestic goods is "inconsistent with the public interest."[22]
- *Unreasonable Cost*. Where the head of the federal department determines that the cost of domestic goods is unreasonable.[23]
- *Unavailability*. Where there are not "sufficient and reasonably available commercial quantities" of domestic goods, and domestic goods "are not of a satisfactory quality."[24]
- *Insignificance*. Where the federal contract value is less than the "micro-purchase threshold," which is currently $3,000.[25]

The BAA statute itself does not provide clear definitions, guidance, or numeric thresholds for certain key terms.[26] For example, it is unclear from the text of the statute how much assembly must take place in the United States for goods to have been domestically "manufactured" or "produced." Likewise, the fact that domestically manufactured goods must be comprised "substantially all" from domestic goods indicates that some portion of the finished product may consist of foreign goods, but the text of the statute itself does not specify what percentage of the product may be nondomestic. Also, the text of the statute does not clearly distinguish between goods that are "produced" domestically and those that are "manufactured" domestically, which could be important in certain cases because the "substantially all" criterion applies literally only to domestically *manufactured* goods. The statute does not define "manufactured" goods and "unmanufactured" goods, but clearly states that domestic unmanufactured goods include some that are "produced" in the United States, differentiating between unmanufactured goods that are "produced" and raw goods that are "mined." Also

[14] Pub. L. No. 72-428, Tit. III, 47 Stat. 1520 (Mar. 3, 1933); *See also infra* Pt. III.B.

[15] 41 U.S.C. §§ 8301–8305 (2011).

[16] 41 U.S.C. §§ 8302(a)(1), 8303(a)(1) (2011).

[17] 41 U.S.C. §§ 8302(a)(1), 8303(a)(2) (2011).

[18] 41 U.S.C. § 8302(a)(1) (2011) (emphasis added).

[19] 41 U.S.C. § 8303(a) (2011) (emphasis added).

[20] 41 U.S.C. § 8301(1) (2011); 48 C.F.R. § 2.101 (2011).

[21] *See* Antilles Cement Corp. v. Acevedo Villa, 408 F.3d 41, 48 (1st Cir. 2005) (stating that "it is at least arguable that the BAA applies to public works contracts entered into" by state and local governments as well, since the BAA itself purports to apply to *all* public works contracts).

[22] 41 U.S.C. §§ 8302(a)(1), 8303(b)(3) (2011).

[23] 41 U.S.C. §§ 8302(a)(1), 8303(b)(3) (2011).

[24] 41 U.S.C. §§ 8302(a)(2)(B), 8303(b)(1)(B) (2011).

[25] 41 U.S.C. §§ 1902(a), 8302(a)(2)(C), 8303(b)(1)(C) (2011).

[26] *See* Textron, Inc., Bell Helicopter Textron Div. v. Adams, 493 F. Supp. 824, 831 (D.D.C. 1980) ("[P]resently there are no uniform guidelines interpreting such critical terms as 'manufacture,' 'end product,' 'component,' or 'system'" in the BAA.).

with regard to the BAA exceptions, the statute does not clarify what constitutes "unreasonable" cost, "sufficient and reasonably available" quantity, or "satisfactory quality." Likewise, it is unclear from the statute text itself what might constitute a valid "public interest" exception that does not involve unreasonable cost, insufficient quantity, or unsatisfactory quality.

The following discussion illustrates how the statutory language has been clarified over the years by executive orders, regulations, administrative decisions, and case law.

B. Legislative History

The legislative history of the BAA from 1933 has been documented in previous TRB *Legal Research Digests*,[27] and has been acknowledged to be "sparse and confusing."[28] Representative Charles Eaton, speaking in support of the BAA on the House floor, said that it would "foster and protect American industry, American workers and American invested capital."[29]

Supporters of the BAA clearly intended to protect the interests of domestic manufacturers of mechanical and electrical *equipment*. The BAA was introduced by Senator Hiram Johnson, who stated that the BAA would ensure that German manufactured goods, including turbines and generators, would not be used in the construction of the Boulder Dam.[30] Senator Johnson stated that his intent was that the BAA would also prevent assembly in the United States of final products assembled from foreign components.[31] Senator Johnson appeared to intend for *all* components of procured manufactured goods to be domestic goods, unless one of the exceptions was satisfied.

Supporters of the BAA also clearly intended to protect the interests of domestic suppliers of *construction materials*. Senator James Davis, a former steel worker himself, spoke in support of the BAA on the Senate floor, saying it would "help stem the tide of foreign competition and thus prevent further reduction of wages for the American worker."[32] Senator William King, speaking in favor of the BAA on the Senate floor, stated that the BAA would also create a preference for domestic bulk construction materials, specifically including cement and lumber.[33]

Therefore, since 1933, Buy America provisions have used common statutory language to govern the procurement of both construction materials and mechanical and electronic equipment. As discussed herein,[34] this two-fold role of Buy America provisions has generated much of the confusion regarding BAA compliance, due to inherent differences in facilities construction and equipment procurement. Nevertheless, this practice of using common language to apply Buy America requirements to both equipment procurement and construction projects has continued in transportation grant programs such as the AIP.

C. Presidential Clarification

On December 17, 1954, President Dwight Eisenhower issued an executive order[35] to establish uniform standards for application of the BAA. First, the order clarified that the BAA applies to procurement by executive branch agencies of the Federal Government.[36] Second, the order clarified that goods would be "considered to be of foreign origin" only if the costs of foreign components constituted at least 50 percent of the costs of the end product.[37] This weakened the BAA considerably, since it allowed for a significant portion of the end product to consist of foreign components without any of the statutory BAA exceptions necessarily being satisfied.

The stated primary purpose of the executive order was to clarify application of the Unreasonable Cost and Public Interest exceptions to the BAA. A bid to supply domestic goods would be "deemed to be unreasonable" or "deemed to be inconsistent with the public interest" if it was higher than a competing bid to supply foreign goods, after applying a surcharge to the *portion* of the competing "bid or offered price of materials of foreign origin."[38] The standard surcharge would be 6 percent (if including import duties and costs incurred after arrival in the United States)[39] or 10 percent (if excluding import duties and costs incurred after arrival in the United States, or if the bid to supply foreign goods

[27] JAYE PERSHING JOHNSON, GUIDE TO FEDERAL BUY AMERICA REQUIREMENTS 4 (Transit Cooperative Research Program, Legal Research Digest 17, 2001); JAYE PERSHING JOHNSON, GUIDE TO FEDERAL BUY AMERICA REQUIREMENTS–2009 SUPPLEMENT 4 (Transit Cooperative Research Program, Legal Research Digest 31, 2010).

[28] Allis-Chalmers Corp., Hydro-Turbine Div. v. Friedkin, 635 F.2d 248, 257 n.17 (3d Cir. 1980).

[29] 76 CONG. REC. 1896 (1933), cited in *Textron*, 493 F. Supp. at 830.

[30] 76 CONG. REC. 3267 (1933); *see also* DANA FRANK, BUY AMERICAN: THE UNTOLD STORY OF ECONOMIC NATIONALISM 66 (1999).

[31] 76 CONG. REC. 3267 (1933).

[32] 76 CONG. REC. 1933 (1933).

[33] FRANK, *supra* note 30, at 66.

[34] *See infra* Pt. II.E.i.

[35] Exec. Order No. 10,582, 19 Fed. Reg. 8,723 (Dec. 17, 1954), available at http://www.archives.gov/federal-register/codification/executive-order/10582.html.

[36] *Id.* § 1.

[37] *Id.* § 2(a).

[38] *Id.* § 2(b).

[39] *Id.* § 2(c)(1)

was less than $25,000).[40] These surcharges likewise weakened the BAA, since domestic goods would thereafter be considered unreasonable and contrary to the public interest, despite being only 6 to 10 percent more expensive than comparable foreign goods. The head of the federal agency could elect to use a higher surcharge only after submitting a written justification for the higher surcharge to the President.[41] The executive order further weakened the BAA by requiring agencies to compare total bid prices after applying the surcharge only to line items corresponding to foreign goods. It is likely that many domestic goods, which would compare favorably in price to similar foreign goods, could be rejected under this approach due to the higher cost of other line items in the domestic bid.

The executive order did not provide any additional reasons, except for Unreasonable Cost, where a Public Interest exception to the BAA might be satisfied, implying that those exceptions are one and the same. However, the executive order provided a list of reasons why the head of the federal agency might determine that it is *not* in the public interest to purchase foreign goods, even where one of the BAA exceptions would otherwise permit it. These reasons included:

- Where a "fair proportion" of the domestic bid is attributable to small business concerns.[42]
- Where the domestic bidder "undertakes to produce substantially all of such materials in areas of substantial unemployment."[43]
- Where rejection of foreign goods "is necessary to protect essential national-security interests."[44]

The 1954 executive order appeared to weaken the BAA substantially from the original intent of its congressional sponsors. As a result, federal agencies could procure foreign goods that were only moderately less expensive than comparable American goods, and could procure goods assembled domestically where nearly half of the components were foreign. At the same time, federal agencies could selectively employ a *stricter* domestic preference by invoking the public interest.

In recent years, the Public Interest *exception* to the BAA has become associated with exceptions for trading partners.[45] In 1979, in the Trade Agreements Act (TAA), Congress first granted the President the authority to waive the BAA requirements to permit federal procurement of foreign goods from certain trading partners, including signatories to specific agreements, specifically including the World Trade Organization (WTO) Agreement on Government Procurement and the Agreement on Trade in Civil Aircraft.[46] This would generally have the effect of treating goods from those trading partners as domestic goods for purposes of the BAA. However, notably, the United States specifically excluded the FAA from the list of entities covered by the WTO Agreement on Government Procurement.[47] The FAA was excluded because other signatories were not willing to extend domestic preferences to American-manufactured air traffic control equipment.[48] Similar express exclusions for FAA procurements were subsequently inserted into various U.S. free trade agreements, including those with Bahrain, Chile, Morocco, and Oman.[49] Therefore, the FAA is not bound to extend domestic treatment to those foreign goods in its direct procurements. However, there was no such exclusion for the FAA in the North American Free Trade Agreement (NAFTA) with Canada and Mexico, which expressly requires the U.S. Department of Transportation to treat goods from those countries as domestic for purposes of the BAA.[50]

D. Federal Regulations

i. Federal Acquisition Regulations

The current regulations implementing the BAA are in Title 48 (Federal Acquisition Regulations or FAR) of the Code of Federal Regulations (C.F.R.). The FAR provides additional guidance for inter-

[40] *Id.* § 2(c)(2).

[41] *Id.* § 5.

[42] *Id.* § 3(b).

[43] *Id.* § 3(c).

[44] *Id.* § 3(a).

[45] *See infra* Pt. II.D.i.5.

[46] Trade Agreements Act of 1979, Pub. L. No. 96-39, §§ 301, 303, 93 Stat. 144 (1979).

[47] World Trade Org., Agreement on Government Procurement, U.S. App. 1, Annex 1, WT/Let/482/Rev. 1 (Oct. 1, 2004), *available at* http://www.wto.org/english/tratop_e/gproc_e/usa1.doc.

[48] TODD B. TATELMAN, CONG. RES. SERV., INTERNATIONAL GOVERNMENT-PROCUREMENT OBLIGATIONS OF THE UNITED STATES: AN OVERVIEW 9–10 n.52 (2005), http://www.fas.org/sgp/crs/misc/RL32211.pdf.

[49] U.S.-Bahrain Free Trade Agreement, Annex 9-A-1, available at http://www.ustr.gov/trade-agreements/free-trade-agreements/bahrain-fta; U.S.-Chile Free Trade Agreement, Annex 9.1, § A, available at http://www.ustr.gov/trade-agreements/free-trade-agreements/chile-fta/; U.S.-Morocco Free Trade Agreement, Annex 9-A-1, available at http://www.ustr.gov/trade-agreements/free-trade-agreements/morocco-fta/; U.S-Oman Free Trade Agreement, Annex 9, § A, available at http://www.ustr.gov/trade-agreements/free-trade-agreements/oman-fta/.

[50] North American Free Trade Agreement, Annex 1001.1b-3 ("[B]uy national requirements on articles, supplies and materials acquired for use in construction contracts covered by this Chapter shall not apply to goods of Canada or Mexico.").

preting the statutory text of the BAA. The FAR reiterates that the BAA "applies to supplies *acquired* for use in the United States"[51] (emphasis added) and "applies to *contracts* for the *construction*, alteration, or repair of any public *building* or public *work* in the United States"[52] (emphasis added). "Building or work" is defined to include airports and terminals, and "construction" is further defined to specifically include any construction, alteration, or repair (including painting) of airport facilities and terminals.[53] "Acquisition" is defined as "acquiring by *contract* with appropriated funds of supplies or services (including construction) by and for the use of the Federal Government," and "contract" is defined to include "all types of commitments that obligate the Government to an expenditure of appropriated funds" but does "*not include grants* and cooperative agreements"[54] (emphasis added). Therefore, in the airport context, the FAR implementation of the BAA originally applied only to direct procurement by the Federal Government of airport supplies or constructed facilities, but not to airport development funded by FAA grants.

Since 1996, the FAR has not applied to the FAA.[55] However, the FAR continues to apply to most other federal agencies, and it remains the most widely applicable implementation of the BAA statute. Therefore, the FAR is instructive for its clarification of certain key terms that exist in both the BAA and the AIP Buy America provision, and which terms are not clearly defined in the BAA statute itself. The following discussion addresses FAR guidance for these statutory requirements and exceptions.

1. Substantial Domestic Manufacture.—The FAR clarifies how to determine whether manufactured goods or construction materials are manufactured "substantially all" from domestic components, so that the end product itself qualifies as a domestic good. The FAR uses what it calls the "component test," which is a two-part test.[56] The FAR makes it clear that the component test, which is used to determine whether goods are of U.S. origin for purposes of the BAA, is distinct from the "substantial transformation" test, which is used to determine the country of origin under the Trade Agreements Act.[57]

First, to qualify as domestic goods under the component test, the goods "must be *manufactured* in the United States"[58] (emphasis added). Second, consistent with the 1954 executive order, "[t]he cost of domestic components must exceed 50 percent of the cost of all the components" of the article.[59] Importantly, under the FAR, goods satisfying the component test are considered to be domestic goods, even if they include some foreign components. Because these are considered domestic goods, they are not considered exceptions and thus not subject to any reporting requirements.

A component is defined as "an article, material, or supply incorporated into an end product or construction material."[60] Therefore, the manufacturing location for BAA purposes is the location where the components are assembled or incorporated into the end product. While that location must be in the United States, final assembly in the United States is insufficient for determining that the article is a domestic good—the cost of its components must also be determined. The cost of each component, for purposes of the component test, is either the contractor's cost of *acquiring* the component (including taxes, duties, and costs of transporting the component to the place of assembly or manufacture), or the contractor's cost of *manufacturing* the component (including manufacturing labor and overhead, but excluding profit).[61] The contractor's cost of assembling the components into the end product does not factor into the cost determination.

Because components are those materials or products that are directly incorporated into the end product by the contractor, it is possible that components may themselves be manufactured goods composed partially of domestic subcomponents and partially foreign subcomponents. In that case, the manufactured component would be considered a domestic good if the component itself satisfies the two-part component test (final assembly in the United States, and at least 50 percent domestic subcomponents).[62] Therefore, under the BAA, contractors can count the entire cost of the component towards the domestic portion of the end product for purposes of the component test. Unlike the AIP Buy America provision, contractors subject to the BAA are not required to count as foreign the cost of any foreign subcomponents of predominantly domestic components. It is conceivable, therefore, that under the BAA, a given end product could qualify as a domestic good even though the value of more than 50 percent of its components *and subcomponents* are of foreign origin, since the BAA analysis does not extend to the subcomponent level.

[51] 48 C.F.R. § 25.100(b) (2011).

[52] 48 C.F.R. § 25.200(b) (2011).

[53] 48 C.F.R. § 2.101 (2011).

[54] 48 C.F.R. § 2.101 (2011).

[55] *See infra* Pt. II.D.ii.

[56] 48 C.F.R. § 25.001(c)(1) (2011).

[57] 48 C.F.R. § 25.001(c) (2011).

[58] 48 C.F.R. § 25.101(a)(1) (2011).

[59] 48 C.F.R. § 25.101(a)(2) (2011).

[60] 48 C.F.R. § 25.003 (2011).

[61] 48 C.F.R. § 25.003 (2011).

[62] 48 C.F.R. § 25.101(a) (2011).

The BAA and the FAR distinguish between goods that are "manufactured" and those that are "produced" in the United States. The component test only applies to manufactured goods. Although manufactured goods are not defined in the BAA or the FAR, the focus on "components" and "assembly" in the FAR indicates that "manufactured goods" probably refers primarily to mechanical and electrical equipment (e.g., vehicles) and not to bulk construction materials such as asphalt or Portland cement, which (unlike "mined" or raw goods) have undergone some processing or production. Because the component test does not apply to those goods that are "produced" domestically but not "manufactured," the implication is that such goods must be produced domestically, entirely of domestic raw materials, in order to be considered domestic goods. This apparent middle category of "produced" goods (somewhere between raw goods and manufactured goods) is a somewhat sophisticated feature of the BAA that is not replicated in the AIP Buy America provision. It also stands in contrast to a number of state and local Buy National and Buy Local statutes, which treat bulk construction materials such as cement as "manufactured" goods.[63]

2. Reporting.—Each federal agency subject to the FAR is required to submit an annual report to Congress detailing the agency's acquisitions of goods with a place of manufacture outside the United States.[64] Since any article manufactured outside the United States would not satisfy the two-part component test, this report will only include goods that are acquired as exceptions to the BAA. However, it is conceivable that the report could exclude some foreign goods acquired under exceptions to the BAA. For example, in the case of foreign *unmanufactured* goods (those mined or produced in another country), or manufactured goods assembled in the United States substantially from foreign components, those goods are not subject to this reporting requirement even though they can only be acquired under one of the exceptions to the BAA. However, in the case of construction materials, if *any* construction materials are acquired under any exception to the BAA, the federal agency must make written findings justifying the exception and make those findings available for public inspection.[65]

Because the FAA has not been subject to the FAR since 1995, the FAA is unique among federal agencies in being exempt from these BAA reporting requirements. Likewise, as will be shown, the AIP Buy America provision is unique among the transportation grant provisions in that it exempts the FAA from reporting or publicly disclosing all Buy America waivers that it grants.

3. Unavailability.—The FAR provides guidance for applying the Unavailability exception to the BAA. Specifically, the FAR provides a list of articles, materials, and supplies where it has been determined "that domestic sources can only meet 50 percent or less of total U.S. government and nongovernment demand."[66] However, goods on the list are not automatically exempted from BAA requirements. Federal agencies subject to the FAR are still required to perform market research and seek out domestic sources before procuring foreign goods on the list.[67] Those agencies are not allowed to purchase foreign goods (either as end products or substantial components—i.e., more than 50 percent of the value of an end product) if market research reveals that domestic goods on the FAR list are available "in sufficient and reasonably available commercial quantities of a satisfactory quality to meet the requirements of the solicitation."[68] As will be seen, FAA projects are not subject to this market research requirement, neither in projects subject to the BAA nor those subject to the AIP Buy America provision.

While the FAR list is not conclusive as to whether goods qualify for the Unavailability exception, it is also not an exhaustive list of all goods that might satisfy the exception. Federal agencies subject to the FAR can also use the Unavailability exception to purchase foreign goods that are not on the FAR list, where there are no offers to supply domestic goods in response to an open solicitation.[69] This illustrates that the BAA is not intended to impede a federal project that can only be accomplished with foreign goods.

4. Unreasonable Cost.—The FAR also provides guidance for applying the Unreasonable Cost exception to the BAA. This evaluation takes place only when a federal agency subject to the FAR solicits bids, and the lowest bid does not satisfy the basic BAA requirements because it offers to supply foreign goods. If the agency received a competing bid to supply only domestic goods, a surcharge is applied to the noncompliant low bid for evaluation purposes only.[70] If the surcharged price is still lower than the lowest domestic bid, then the Unreasonable Cost exception applies and the agency may acquire foreign goods from the low bidder. Otherwise, the domestic bid is considered "reasonable," even though it is not the lowest bid, and the

[63] *See* Antilles Cement Corp. v. Acevedo Vila, 408 F.3d 41, 43 (1st Cir. 2005).

[64] 48 C.F.R. § 25.004 (2011).

[65] 48 C.F.R. § 25.202(b) (2011).

[66] 48 C.F.R. §§ 25.103(b)(1)(i), 25.104(a) (2011).

[67] 48 C.F.R. § 25.103(b)(1)(ii) (2011).

[68] 48 C.F.R. § 25.103(b)(1)(iii) (2011).

[69] 48 C.F.R. § 25.103(b)(3) (2011).

[70] 48 C.F.R. § 25.105(b) (2011).

agency may not use the Unreasonable Cost exception to purchase the foreign goods.[71]

When the goods in question are construction materials, or the lowest domestic bidder is a large business, the surcharge to be applied to the noncompliant low bid is 6 percent,[72] which is the default surcharge value from the 1954 executive order. When the lowest domestic bidder is a small business, or the procurement is a small business set-aside, the surcharge to be applied to the noncompliant low bid is 12 percent[73] (except in the case of construction materials). In other words, there is generally a higher barrier for the government to purchase foreign goods when domestic small businesses can supply the goods, albeit at greater cost. This is consistent with the Public Interest *preference* for small business concerns espoused in the 1954 executive order.

Note that the amount of the Unreasonable Cost surcharge depends on the small-business status of the lowest domestic *bidder*, not necessarily the small-business status of the domestic bidder's *supplier*, nor the *manufacturer* of goods that the domestic bidder offers to supply. Therefore, it is conceivable that the 12 percent surcharge could prefer domestic goods manufactured by a large business, as long as a small business is the party seeking the government contract. Also, as in the 1954 executive order, the head of a federal agency subject to the FAR may determine that higher surcharges are appropriate, so long as that agency's evaluation criteria are published in agency regulations.[74] Therefore, an agency could elect to impose a *stronger* preference for goods from domestic businesses of any size standard.

However, the Unreasonable Cost exception, as implemented in the FAR, is so flexible that agencies can also significantly *weaken* the domestic preference. For example, where the solicitation calls for best-value pricing, such that the agency uses evaluation criteria other than the bid price, the Unreasonable Cost surcharge applies only to the *cost* component of the overall evaluation.[75] Therefore, an offer to provide foreign goods can overcome the surcharge by outscoring the domestic bidders in the other evaluation criteria, such as by providing superior technical quality. This FAR provision effectively creates a new Superior Quality exception to the BAA, one that is not expressly stated in the statute itself. It permits the procurement of foreign goods even where the domestic bid would otherwise be considered reasonable based on cost comparison alone. Conversely, a domestic bidder can win a solicitation by earning a superior technical evaluation even if its bid would otherwise be considered unreasonable based solely on its comparison to the surcharged cost of foreign goods.

Although the FAR no longer applies to the FAA, the FAA has adopted nearly identical requirements for the Unreasonable Cost exception to the BAA, including the 6–12 percent surcharge and the best-value surcharge approach.[76] However, the AIP Buy America provision adopts a flat 25 percent differential and applies it to the overall project cost,[77] which means that the Unreasonable Cost exception is much less likely to be invoked on an AIP project than on a project subject to the BAA. In fact, there are no known instances of Unreasonable Cost waivers being granted under the AIP Buy America provision.

5. Public Interest.—The FAR clarifies that the Public Interest exception to the BAA applies where the federal government "has an agreement with a foreign government that provides a blanket exception to the Buy American Act."[78] Specifically, under the Trade Agreements Act, the BAA has been waived for transactions covered by the WTO Agreement on Government Procurement or other Free Trade Agreements (FTAs).[79] These trade agreements apply to most federal government acquisitions or construction contracts exceeding certain dollar thresholds specified for each trading partner.[80] This effectively requires goods whose country of origin is a specified trading partner to be treated as domestic goods for purposes of the BAA. One important point is that in determining whether the country of origin of the foreign goods is a trading partner, the FAR does not use the two-part component test, but instead uses the "substantial transformation" test.[81] That is, if the components of a foreign product are transformed "into a new and different article of commerce, with a name, character, or use distinct from the original article" at a location within the borders of the trading partner, then that foreign product is treated as a domestic good for BAA purposes.[82] This is true regardless of the origin of its component parts. In other words, the product of a trading partner is

[71] 48 C.F.R. § 25.105(c) (2011).

[72] 48 C.F.R. §§ 25.105(b)(1), 25.204(b) (2011).

[73] 48 C.F.R. § 25.105(b)(2) (2011).

[74] 48 C.F.R. § 25.105(a)(1) (2011); *see also* 48 C.F.R. § 25.204(b) (2011).

[75] 48 C.F.R. § 25.502(a)(3) (2011).

[76] Fed. Aviation Admin., Acquisition Mgmt. Pol'y § 3.6.4 (Oct. 2006), available at http://fast.faa.gov/AMSPolicy.cfm?CFID=40798511&CFTOKEN=51562370&p_title=AMS%20Policy.

[77] 49 U.S.C. § 50101(b)(4) (2011).

[78] 48 C.F.R. §§ 25.103(a), 25.202(a)(1) (2011).

[79] 48 C.F.R. § 25.402(a)(1) (2011).

[80] 48 C.F.R. § 25.402(b) (2011).

[81] 48 C.F.R. § 25.001(c)(2) (2011).

[82] *Id.*

treated as a domestic good even if most of its components originate in non-trading-partner foreign countries.

The WTO Agreement on Government Procurement and most FTAs do not apply to grant programs such as the AIP.[83] Therefore, foreign goods that would satisfy the Public Interest exception under the BAA do not necessarily qualify for a Public Interest waiver under the AIP Buy America provision. In fact, as will be seen, it is unclear what would qualify for a Public Interest waiver on an AIP project, as there are no known instances of Public Interest waivers under the AIP Buy America provision.

For construction projects subject to the BAA, the FAR implies that the Public Interest exception applies where the head of the federal agency determines that it would be "impracticable" to limit purchases of certain construction materials to domestic goods.[84] There is no guidance in the FAR for determining impracticability, although presumably it is distinct from Unavailability and Unreasonable Cost. This appears to give federal agencies subject to the FAR wide latitude to purchase foreign construction materials, so long as they satisfy the written justification requirement described above.[85] Although the FAR no longer applies to the FAA, as will be seen in the following section, the FAA has directly adopted Impracticability as a separate, standalone exception to the BAA that applies only to direct FAA procurements of construction materials.

ii. Acquisition Management System (AMS)

On November 15, 1995, Congress authorized the creation of an Acquisition Management System (AMS) for the FAA "that addresses the unique needs of the agency and, at a minimum, provides for more timely and cost-effective acquisitions of equipment and materials."[86] The legislation also expressly stated that the FAR and certain other federal laws would not apply to the FAA's new AMS.[87] However, Congress did not exclude the FAA from the BAA. This section summarizes how the BAA has been implemented in the AMS for direct FAA procurements.

1. Overview.—The FAA's AMS includes both policy and guidance.[88] AMS *policy* is mandatory and "applicable to all activities associated with the analysis of agency needs for products, services, and facilities."[89] AMS *guidance* includes templates for contract provisions, which "should be followed unless there is a rational basis for adopting a different approach."[90]

The FAA's mandatory AMS policy regarding foreign acquisition is, "The FAA will comply with the tenets of the [BAA] as part of the agency's *best value* determination during the contractor selection process"[91] (emphasis added). By indicating a preference for best-value pricing, this suggests that the FAA's typical evaluation criteria include factors other than cost. As described above, best-value pricing decreases the protection for domestic goods under the BAA, because the Unreasonable Cost surcharge only applies to the cost of foreign goods and not to the other evaluation criteria.[92]

The FAA's AMS guidance largely adopts the FAR provisions relevant to acquisition of supplies[93] and acquisition of construction materials.[94] The AMS guidance expresses "a strong preference for acquiring only domestic end products."[95] The AMS guidance adopts the FAR's two-part component test for determining whether manufactured goods are substantially domestic.[96]

2. Exceptions and Exclusions.—As noted previously, the FAA is expressly excluded from various free trade agreements as well as the WTO Agreement on Government Procurement, but the FAA is not excluded from the Agreement on Trade in Civil Aircraft or NAFTA.[97] Accordingly, in its 1996 creation of the AMS system, the FAA adopted contract procurement guidance extending domestic treatment only to signatories of NAFTA[98] and parties to the Agreement on Trade in Civil Aircraft,[99] for procurements subject to those agreements. In the case of construction materials, unlike the FAR, the AMS

[83] *See infra* Pt. III.C.ii.3.

[84] 48 C.F.R. § 25.202 (2011).

[85] *See supra* Pt. II.D.i.2.

[86] Department of Transportation and Related Agencies Appropriations Act, Pub. L. No. 104-50, § 348(a) (1995).

[87] *Id.* § 348(b).

[88] Fed. Aviation Admin., AMS Policy vs. Guidance, http://fast.faa.gov/AMSPolicyVsGuidance.cfm (last visited July 24, 2012).

[89] *Id.*

[90] *Id.*

[91] Fed. Aviation Admin., Acquisition Mgmt. Pol'y § 3.6.4 (Oct. 2006), available at http://fast.faa.gov/AMSPolicy.cfm?CFID=40798511&CFTOKEN=51562370&p_title=AMS%20Policy.

[92] 48 C.F.R. § 25.502(a)(3) (2011).

[93] Fed. Aviation Admin., Acquisition Mgmt. Guidance, T3.6.4 § 1 (Oct. 2007).

[94] Fed. Aviation Admin., Acquisition Mgmt. Guidance, T3.6.4 § 2 (Jan. 2011).

[95] Fed. Aviation Admin., Acquisition Mgmt. Guidance, T3.6.4 § 1(a) (Oct. 2007).

[96] *Id.*

[97] *See supra* Pt. II.D.i.5.

[98] Fed. Aviation Admin. Acquisition Mgmt. Pol'y, T3.6.4 § 6(c) (Apr. 2011).

[99] Fed. Aviation Admin. Acquisition Mgmt. Guidance, T3.6.4 § 6(d) (Apr. 2011).

guidance treats Canadian and Mexican construction materials as domestic goods (rather than as a Public Interest *exception*) when the contract is subject to NAFTA.[100] Since those purchases are not considered to be exceptions to the BAA, the FAA (unlike other federal agencies) is exempt from reporting or documenting those purchases of foreign goods.

The "strong preference" for domestic goods in the AMS guidance is subject to the following additional exceptions:

- *Public Interest*. Requires a written, nondelegable determination by the FAA Administrator.[101]
- *Unreasonable Cost*. Where the low bid offers to supply foreign goods, the contracting officer (CO) is to apply a surcharge to the low bid and compare it with the lowest domestic bid. The AMS directly adopts the default FAR surcharge amounts of 6 percent for supplies (where the lowest domestic bidder is a large business) and construction materials, or 12 percent for supplies where the lowest domestic bidder is a small business.[102]
- *Unavailability*. As in the FAR, this exception applies "[w]hen a competitive acquisition results in no offers of domestic end products."[103] The AMS also directly adopts the FAR list of unavailable domestic items.[104] However, unlike the FAR, the AMS does not require the CO to perform market research to determine whether items on the list are actually unavailable domestically. Therefore, the FAA may procure foreign goods from the FAR list even when it could acquire those goods from domestic sources. Furthermore, under the AMS, items on the list "may be treated as domestic products,"[105] so the FAA is not required to report or document these purchases of foreign goods as exceptions to the BAA. Therefore, it is somewhat easier for the FAA to acquire certain foreign goods than it is for federal agencies that are subject to the FAR.
- *Impracticability*. Although the BAA does not expressly provide an Impracticability exception, it is suggested in the FAR as a subset of the Public Interest exception for construction materials.[106] Under the AMS, for construction materials only, the CO may determine that "[i]t is impracticable to use a particular domestic construction material."[107] This suggests that under the AMS, unlike the FAR, the Impracticability exception is distinct from the Public Interest exception, since only the Administrator may find a Public Interest exception under the AMS. Once again, this makes it somewhat easier for the FAA to acquire foreign construction materials than it is for federal agencies subject to the FAR, since the FAR requires the head of the federal agency to authorize any Public Interest (or Impracticability) exception to the BAA.
- *Insignificance*. Purchases of $3,000 or less.[108]

The AMS implementation of the BAA largely mirrors the FAR, although the AMS slightly relaxes the BAA requirements for direct FAA procurements. Most notably, individual COs are not required to research whether items on the FAR list of unavailable materials are actually unavailable domestically, and individual COs may conclude that it is impracticable to purchase construction materials domestically.

3. *Reporting and Documentation.*—Under the AMS, where the FAA acquires any foreign goods under an exception to the BAA, the CO is required to document the basis for the exception and to make the documentation justifying the exception available for public inspection.[109] On its face, this requirement appears somewhat more stringent than either the FAR public inspection requirement, which only applies to procurement of foreign *construction materials*, or the FAR reporting requirement, which only applies to *manufactured goods* assembled in foreign countries.[110] Under the AMS, the FAA's public inspection requirement is extended to *all* foreign goods procured under exceptions to the BAA, including unmanufactured goods and manufactured goods assembled domestically substantially of foreign components.

However, upon closer inspection, the AMS documentation requirement is significantly relaxed for FAA procurements in comparison to other federal procurements subject to the FAR. First, the AMS public inspection requirement does not extend to procurements of common items from the FAR list of goods unavailable domestically, or to procure-

[100] Fed. Aviation Admin., Acquisition Mgmt. Guidance, T3.6.4 § 2(b)(4) (Jan. 2011).

[101] Fed. Aviation Admin., Acquisition Mgmt. Guidance, T3.6.4 § 1(b)(2) (Oct. 2007); Fed. Aviation Admin., Acquisition Mgmt. Guidance, T3.6.4 § 2(b)(2) (Jan. 2011).

[102] Fed. Aviation Admin., Acquisition Mgmt. Guidance, T3.6.4 § 1(d)(1) (Oct. 2007); Fed. Aviation Admin., Acquisition Mgmt. Guidance, T3.6.4 § 2(b)(3)(a) (Jan. 2011).

[103] Fed. Aviation Admin., Acquisition Mgmt. Guidance, T3.6.4 § 1(b)(3)(c) (Oct. 2007).

[104] Fed. Aviation Admin., Acquisition Mgmt. Guidance, T3.6.4 § 1(e) (Oct. 2007).

[105] *Id.*

[106] *See supra* Pt. II.D.i.5.

[107] Fed. Aviation Admin., Acquisition Management Guidance, T3.6.4, § 2(b)(3)(b) (Jan. 2011).

[108] Fed. Aviation Admin., Acquisition Management Guidance, T3.6.4, § 1(b)(1) (Jan. 2011); Fed. Aviation Admin., Acquisition Management Guidance, T3.6.4 § 2(b)(1) (Jan. 2011).

[109] Fed. Aviation Admin., Acquisition Mgmt. Guidance, T3.6.4 § 1(c) (Oct. 2011); Fed. Aviation Admin., Acquisition Mgmt. Guidance, T3.6.4 §§ 2(c), 2(d) (Jan. 2011).

[110] *See supra* Pt. II.D.i.2.

ments of foreign construction materials under NAFTA, because the AMS exempts those items as *domestic goods* rather than as exceptions to the BAA. Also, unlike federal agencies subject to the FAR, the FAA is exempt from reporting to Congress on its procurement of foreign manufactured goods. Therefore, there is much less available documentation of foreign goods purchased by the FAA than there is for other federal agencies.

E. Application to Airports

Partially as a result of the AMS relaxation of BAA requirements, the BAA has only a marginal impact on FAA procurements. Therefore, there are very few reported cases involving BAA disputes in FAA procurements, particularly after adoption of the AMS in 1996. This section summarizes the available BAA cases relevant to airports, most of which are administrative opinions in response to bid protests.

These cases illustrate the most common disputes under the BAA: Whether goods are manufactured substantially all from domestic components, what constitutes a manufactured construction material, and how to apply the Unreasonable Cost exception. Although these same issues may arise under the AIP Buy America provision, the more precise statutory language of the AIP provision appears to be designed to clarify these elements of the BAA that are regularly disputed. Therefore, a review of the following cases is helpful to gain an appreciation for the AIP Buy America provision.

i. Substantial Domestic Manufacture

1. Supplies.—As discussed above, the FAA adopts the two-part component test to determine whether manufactured goods that include some foreign components may be considered domestic goods. Federal agencies may procure goods that satisfy this component test without demonstrating that the goods satisfy one of the statutory exceptions to the BAA. Under the component test, first, the goods must be "manufactured in the United States."[111] Second, the goods must be comprised "substantially all from articles, materials, or supplies mined, produced, or manufactured in the United States."[112] These requirements are illustrated in a number of early 1970s opinions involving French manufacturer Thomson-CSF.

a. American Standard Protest of Texas Instruments/Thomson-CSF Contract for Instrument Landing Systems (1970).—In 1970, the federal government sought to enter into a multi-year procurement contract for instrument landing systems (ILS) to be "installed at airports to guide aircraft along a predetermined path to a landing approach."[113] The acquisition was set up as a two-phase procurement process.[114] First, interested contractors would respond to the federal government's request for technical proposal (RFTP) to demonstrate their technical ability to manufacture an ILS to the desired specifications.[115] Second, the government would accept cost proposals only "from those contractors who have manufactured and can demonstrate at an operating airfield" an ILS that passed an FAA flight check.[116]

Although Thomson-CSF could manufacture an ILS that satisfied the technical requirements, it realized "it needed to team with a United States company in order to comply with the Buy American Act."[117] Thomson-CSF and Texas Instruments (TI) entered into a 1-year working agreement to jointly pursue opportunities in the American ILS market.[118] Under this arrangement, TI responded to the RFTP as the prime contractor, disclosing Thomson-CSF as its subcontractor.[119] Although TI was experienced at manufacturing airport surveillance radar (ASR) systems, it had never manufactured an ILS.[120]

In January 1970, as part of its review of TI's technical proposal, FAA representatives inspected a French-manufactured Thomson-CSF ILS at Bretigny airfield in France.[121] In May 1970, the federal government determined that TI (with Thomson-CSF on its team) satisfied the technical requirements and was qualified to provide a cost proposal in the second step of the procurement process.[122] TI's cost proposal to provide the initial 29 ILS units was $2.656 million, less than half the $5.453 million cost proposal from the only other qualified manufacturer, American Standard, Inc.[123] American Standard protested the bid decision, alleging that TI was not a qualified ILS manufacturer, and that the procurement would violate the BAA due to TI's reliance on the capabilities of foreign manufacturer Thomson-CSF.[124]

By analyzing the two phases of the procurement process separately, the Comptroller General deter-

[111] 41 U.S.C. §§ 8302(a)(1), 8303(a)(2) (2011).

[112] *Id.*

[113] Am. Standard, Inc. v. Laird, 326 F. Supp. 492, 493 (D.D.C. 1971)

[114] *Id.* at 495.

[115] *Id.*

[116] *Id.*

[117] *Id.*

[118] *Id.*

[119] *Id.* at 496.

[120] *Id.* at 495.

[121] *Id.* at 496.

[122] *Id.* at 497.

[123] To American Standard, Inc., No. B-168269(2), 1970 WL 4393, at *1 (Comp. Gen. Sept. 2, 1970).

[124] *Id.* at *2–3.

mined,[125] and the U.S. District Court for the District Columbia affirmed,[126] that an award to the TI team satisfied procurement regulations. First, because the BAA did not apply to the technical qualifications phase, TI satisfied the requirement for ILS manufacturing experience and technical capability, based on the demonstrated past performance of its foreign subcontractor Thomson-CSF.[127] Furthermore, the decision to award based on TI's cost proposal did not violate the BAA because TI proposed to manufacture the ILS delivered under the contract in the United States.[128] Although TI alone did not have the necessary experience or capability, Thomson-CSF would share its "technological knowledge, design data, trade secrets, patent rights, manufacturing techniques and its other proprietary interests" to TI, and Thomson-CSF personnel would "direct the manufacture of the ILS" by TI personnel.[129] Thomson-CSF personnel would be responsible for installing the first five ILS at airports, whereas TI would be responsible for installing the remainder.

At the time it submitted its technical proposal, TI was under the impression that "some critical or difficult to manufacture components and subassemblies" would be manufactured by Thomson-CSF in France and imported while TI developed the capability to completely manufacture the ILS.[130] However, the imported components were expected to "comprise much less than the 50 percent of the system allowed by the 'Buy American' act," so the final product would be manufactured "substantially all" of domestic components.[131] However, the government team evaluating technical proposals (which included FAA representatives) was concerned about the use of foreign components manufactured by Thomson-CSF in France, due to concern "that metric tools would be needed for repair and maintenance purposes and that there may be difficulties in replacing these parts."[132] To address that concern, TI and Thomson-CSF worked together to identify American subcomponents that could substitute for the foreign subcomponents used in Thomson-CSF's French manufacturing process, and concluded that the ILS could be manufactured using *only* domestic parts (even though the components assembled in France out of domestic subcomponents would not qualify as domestic goods under the two-part component test). Furthermore, by the time the District Court issued its opinion in 1971, TI had become "increasingly more sophisticated" about ILS manufacturing under the "tutelage" of Thomson-CSF under their working agreement, so that an even smaller percentage of the ILS components would have to be manufactured by Thomson-CSF in France than originally contemplated.[133]

Neither the Comptroller General's opinion nor that of the District Court addressed what portion of the $2.656 million contract price would be paid to foreign manufacturer Thomson-CSF. For example, the proposal disclosed that Thomson-CSF would be supplying supervisory labor and proprietary technology.[134] Depending on the financial value of the subcontract and working agreement between TI and Thomson-CSF, a substantial portion of the prime contract price could have effectively been a "pass-through" to Thomson-CSF using the domestic manufacturer, TI, as a conduit. Furthermore, American Standard suggested that the terms of the subcontract and working agreement should be of interest to the federal government, as future procurements of the identical ILS could be subject to "the vicissitudes of the foreign policies of the French government, since the latter can control the transfer of T-CSF technology and key people to the U.S."[135] However, neither the Comptroller General nor the District Court treated these as relevant considerations under the BAA, which required only that the ILS be "manufactured in the United States substantially all from" domestic goods, and did not account for the costs of final assembly labor in the United States. The arrangement between TI and Thomson-CSF satisfied the component test, as TI personnel would assemble the ILS in the United States, substantially all from domestic parts and components. As the Comptroller General stated, the policy issues raised by American Standard "may be appropriate for consideration by Congress," but the award to TI did not violate the BAA.[136]

b. Texas Instruments Protest of General Dynamics/Thomson-CSF Contract for Airport Surveillance Radar (1973).—Some contemporary opinions in similar situations suggest that the financial value of a subcontract to a foreign manufacturer is a relevant consideration when determining whether goods are manufactured "substantially all from" domestic components, even where the foreign subcontract involves only labor and not goods. In 1973,

[125] *Id.* at *5.

[126] Am. Standard, Inc. v. Laird, 326 F. Supp. 492, 504 (D.D.C. 1971).

[127] *Id.* at 499.

[128] *Id.* at 496–97.

[129] *Id.* at 502.

[130] *Id.* at 496–97.

[131] *Id.*

[132] *Id.* at 497.

[133] *Id.* at 503.

[134] *Id.* at 502–03.

[135] To American Standard, Inc., No. B-168269(2), 1970 WL 4393, at *5 (Comp. Gen. Sept. 2, 1970).

[136] *Id.*

TI protested an FAA decision to award a contract to General Dynamics for the design and manufacture of the next-generation ASR system.[137] While TI may have lacked expertise at ILS manufacturing, TI was "one of the leading suppliers of ASR equipment to FAA in the past," and was the incumbent manufacturer of the previous-generation ASR system,[138] so TI did not need to team with Thomson-CSF to buttress its technical proposal in this case. Therefore, Thomson-CSF teamed with General Dynamics, which submitted a cost proposal of $17.7 million to supply 31 ASR units, more than $4 million less than TI's cost proposal.[139]

TI contended that the FAA's procurement of the ASR units from General Dynamics would violate the BAA due to the involvement of Thomson-CSF. However, the Comptroller General noted that Thomson-CSF would not be "delivering an end product or any components" as a subcontractor to General Dynamics, but would merely be "furnishing certain design efforts to be utilized by General Dynamics in producing the end product."[140] On its face, this "oversight" arrangement appears very similar to the prior ILS teaming arrangement between Thomson-CSF and TI. However, because General Dynamics was an experienced manufacturer of ASR systems, it is unlikely that General Dynamics' arrangement with Thomson-CSF involved such an extensive licensing agreement or such an extensive transfer of proprietary technology from the foreign manufacturer.

In this case, the Comptroller General specifically considered the financial value of General Dynamics' subcontract with Thomson-CSF, apparently rejecting its position in the American Standard protest that consideration of financial arrangements is better left to Congress. The Comptroller General concluded that "the dollar amount of the Thompson [sic] subcontract is $1.6 million which is substantially below 50 percent of the value of the total end product cost cited by the [Buy American] Act."[141] Because Thomson-CSF was not providing any components or manufacturing labor, under its own precedents, the value of the Thomson-CSF contract should not have been relevant to the Comptroller General. The procurement satisfied the BAA because more than 50 percent of the cost of *goods* was attributable to domestic components, and the final assembly occurred in the United States.

It could be argued that the Thomson-CSF working agreements with TI and General Dynamics illustrate a loophole in the BAA, in conflict with the congressional intent to ensure that government spending helps domestic industry. These cases demonstrate that a prime contractor can pass a substantial portion of federal procurement funds through to a foreign manufacturer via mechanisms other than manufacturing subcontracts, such as licensing agreements or design subcontracts, in such a way that the procurement itself satisfies the BAA component test. However, it could also be argued that the BAA served its intended purpose in these cases by supporting domestic employment. In both procurements, substantially all components of the ILS and ASR units would be manufactured in the United States by employees of the domestic prime contractors. Those employees would be paid for their labor even if their employers, the domestic manufacturers, were losing money overall under their financial arrangements with Thomson-CSF. Furthermore, while the foreign manufacturer was sharing its technical expertise and supervising the manufacturing process, the domestic manufacturers would develop capabilities and expertise that they did not have previously. TI and General Dynamics may have been obligated to pay Thomson-CSF a licensing fee to continue to practice those technologies on future contracts. However, without the BAA, there would have been less incentive for Thomson-CSF to team with TI and General Dynamics, and the domestic manufacturers would never have had the opportunity to develop that expertise.

2. Construction Materials.—Due to the Substantial Domestic Manufacture requirement in the BAA, where a federal procurement or construction project incorporates some amount of foreign goods, it may still satisfy the BAA without an exception being invoked. Although the BAA requires raw goods or unmanufactured goods acquired or used by the federal government to be of domestic origin, *manufactured* construction materials acquired or used by the federal government need only satisfy the component test: final assembly in the United States, substantially all of domestic components. Foreign goods that would be noncompliant if analyzed independently may comply with the BAA if the foreign goods are considered only insubstantial components of the overall manufactured construction materials. Therefore, it is critical to determine how "construction materials" are defined for BAA purposes.

For supply acquisitions (e.g., procurement of equipment), it is generally easy to identify the manufactured goods that are acquired—they will typically be specified as line items on the purchase order or other contract. For construction contracts, however, identifying the manufactured construc-

[137] To Akin, Gump, Strauss, Hauer & Feld, 53 Comp. Gen. 5, GAO B-177847, July 10, 1973.

[138] *Id.* at 7.

[139] *Id.* at 6.

[140] *Id.* at 11.

[141] *Id.*

tion materials can be more difficult. Congress clearly did not intend for federal agencies to consider the constructed facility to be a "manufactured good" under the BAA, since the text of the BAA forbids the *use* of foreign manufactured goods in construction, and expressly applies the BAA to procurement or use of *construction materials*. Where those construction materials are manufactured goods, then under the BAA component test those construction materials may contain an insubstantial percentage of foreign components and still comply with the BAA. Therefore, for purposes of determining BAA compliance, it can be critical whether the foreign goods are themselves construction materials, or are merely components of manufactured construction materials.

The FAA's AMS adopts the FAR definition of a construction material as "an article, material, or supply brought to the construction site," including those manufactured goods brought onto the construction site "pre-assembled" from other articles, materials, or supplies, for incorporation into the building or work.[142] However, the AMS and FAR also define construction materials to include some specific systems, including "emergency life safety systems," that are assembled at the construction site from their individual components.[143] Therefore, there is an allowance for some foreign goods to be brought onsite, combined with domestic goods, and assembled onsite into a "construction material," which is then considered to be a domestic good for purposes of the BAA.

a. Incorporation of Foreign Steel and Wiring Brought onto the Construction Site—Strand Hunt Construction (2001).—A 2001 decision by the FAA Office of Dispute Resolution for Acquisition (ODRA) addresses the issue of identifying the construction material, where some foreign components are brought onto the construction site.[144] The FAA Alaska Region contracted for the construction of an air traffic control tower and related facilities at Merrill Field in Anchorage, Alaska.[145] A dispute arose between the FAA and its prime contractor regarding the incorporation into the structure of wiring and steel reinforcing mesh that were not of domestic origin.[146] The FAA considered the wiring and mesh to be construction materials, but the contractor's position was that they were only *components* of manufactured construction materials, and that the manufactured construction materials themselves were domestic goods under the component test.[147]

The wiring was of Canadian origin, and was installed onsite by an electrical subcontractor as part of the environmental controls system for the facility.[148] It was undisputed that the wiring was brought onto the site for incorporation into the controls system, not preassembled into the controls system. However, the prime contractor argued that the environmental controls system was an "emergency life safety system" that should be treated as a single construction material, estimating that two-thirds of the environmental controls system "was in some way related to basic life safety issues."[149] The FAA agreed to this designation, but still required the contractor to demonstrate the percentage of the controls system composed of foreign components.[150] (Since it was undisputed that the system was assembled onsite, the contractor only needed to demonstrate compliance with the second part of the component test.) After accounting for the cost of the Canadian wiring and the other components of the controls system, the contractor demonstrated "that the made-in-America content of the control system was 82%."[151] This was more than sufficient to meet the Substantial Domestic Manufacture criteria of the BAA and justify the use of Canadian wiring. In fact, the ODRA held the FAA responsible for the delay involved in the contractor certifying BAA compliance of the controls system, because the FAA had previously acknowledged that "the controls system [was] over 50% American made."[152]

The steel reinforcing mesh was admittedly a component of the exterior insulation and finishing system (EIFS), although the contractor could not seriously contend that EIFS was an "emergency life safety system." EIFS panels were manufactured by a subcontractor in a hangar at Merrill Field of components including cement, reinforcing mesh, and polystyrene insulation.[153] Since those materials were all brought onto the airport for manufacture of EIFS panels, the FAA treated each component as a "construction material" for BAA purposes.[154] Some of the steel mesh was of Canadian or German origin.[155] However, the contractor argued that the foreign mesh was an insubstantial component of

[142] Fed. Aviation Admin., Acquisition Mgmt. Guidance, T3-6-4 § 13(e) (Jan. 2011).

[143] *Id.*

[144] Contract Dispute of Strand Hunt Construction Under Contract No. DTFA04-97-C-10022, No. 99-ODRA-00142 (Fed. Aviation Admin. 2001), *available at* http://www.pubklaw.com/rd/other/ODRA-01-171.pdf.

[145] *Id.* § 1.

[146] *Id.* § 2, ¶¶ 54, 58, 83.

[147] *Id.* § 2, ¶¶ 59, 84.

[148] *Id.* § 2, ¶¶ 82–83.

[149] *Id.* § 2, ¶ 87.

[150] *Id.* § 2, ¶ 89.

[151] *Id.* § 2, ¶ 90.

[152] *Id.* § 2, ¶¶ 89, 92, 110.

[153] *Id.* § 2, ¶ 51–52.

[154] *Id.* § 2, ¶ 54.

[155] *Id.* § 2, ¶¶ 54, 58.

the EIFS panels, which were assembled in the hangar, then transported from the hangar to the control tower construction site as pre-assembled panels.[156] Because the hangar location was not within the bounds of the construction site, as defined by the construction contract, the ODRA agreed with the contractor that the EIFS panels themselves were domestically manufactured construction materials for purposes of the BAA.[157] Therefore, ODRA concluded that the FAA was responsible for delays involved in requiring the contractor to certify that the steel mesh itself was BAA compliant.[158]

b. Offsite Assembly of Hangar Door Components from Foreign Subcomponents, with Final Assembly at the Construction Site—Megadoor (1995).—The issue of how to identify the construction material for the Substantial Domestic Manufacture criterion has also arisen in the context of airport hangar doors.[159] In 1995, the Office of the Inspector General (OIG) conducted an investigation into the use of hangar doors supplied for federal hangar construction projects by Megadoor, Inc., a U.S. subsidiary of a Swedish company.[160] According to the OIG, the hangar door system was designed by the Swedish company, which also supplied some foreign subcomponents and instructed its U.S. subsidiary which subcomponents to purchase in the United States.[161] The U.S. subsidiary assembled the subcomponents into components of hangar door systems to be shipped to the construction site, where the components would be assembled into the completed hangar door system.[162] The issue was whether the completed hangar door system qualified as the "construction material," or whether the "construction materials" were the individual components that were brought onsite and assembled into the final door system.[163] If the latter were true, then several of the components would not comply with the BAA because of the high proportion of Swedish subcomponents.

The COs determined that the hangar doors complied with the BAA, treating the completed hangar door system as the "construction material."[164] They supported this determination based on the project specifications, which had a separate section devoted to hangar doors. The OIG determined that position was supportable, but noted that other federal agencies took different positions. The Army Corps of Engineers, for example, would have treated each component arriving at the construction site as a "construction material."[165] Under the Corps interpretation, the hangar door system would be a collection of construction materials, some of which would not comply with the BAA. The Army National Guard, on the other hand, would have treated the constructed facility as a "construction material," so that the hangar door system was only one component of the construction material.[166] Under the National Guard interpretation, the constructed facility would comply with the BAA even if the entire hangar door system was a foreign good, as long as 50 percent of all hangar components were of domestic origin. (Under the National Guard interpretation, the component test would condense to a one-part test, since the final assembly location would necessarily be the domestic construction site.)

Due to the many conflicting interpretations of the BAA involving construction materials, the OIG declined to overturn the award to Megadoor.[167] Instead, the OIG called for clarification of the BAA requirements and terms.[168] In particular, the OIG noted, the component test for determining whether manufactured goods are domestic under the BAA should "be made to conform" with the substantial transformation test for country of origin in the Trade Agreements Act.[169] There was clearly enough uncertainty surrounding the FAR and AMS definitions of "construction material" that practically any given federal airport construction project could be determined to be either BAA-compliant or noncompliant, subject to the CO's interpretation.

Although construction materials under the BAA remain subject to interpretation for purposes of the component test, the AIP Buy America provision largely bypasses this confusion by applying the Substantial Domestic Manufacture criterion specifically to *equipment* and *facilities*, rather than manufactured goods in general.[170] Therefore, in the case of construction projects, the component test applies to the constructed facility, not to each construction material brought onsite. (This is similar to the Army National Guard approach described in the OIG report above.) Therefore, AIP grant recipients can avoid controversies over identifying the

[156] *Id.* § 2, ¶ 59.

[157] *Id.* § 2, ¶ 60.

[158] *Id.* § 2, ¶ 61.

[159] OFFICE OF INSPECTOR GEN., AUDIT REPORT NO. 95-207, BUY AMERICAN ACT REQUIREMENTS IN ACQUISITIONS OF VERTICAL LIFTING HANGAR DOORS (1995), *available at* http://www.dodig.mil/audit/reports/fy95/95-207.pdf.

[160] *Id.* at 2.

[161] *Id.*

[162] *Id.* at 2–3.

[163] *Id.* at 5.

[164] *Id.* at 7.

[165] *Id.* at 7.

[166] *Id.* at 6.

[167] *Id.* at 9.

[168] *Id.*

[169] *Id.* at 10.

[170] 49 U.S.C. § 50101(b)(3) (2011).

"construction material," and instead focus on whether the overall facility satisfies the component test.

ii. Unreasonable Cost

Federal agencies are frequently able to take advantage of the Unreasonable Cost exception to the BAA, due to the rather low surcharges applied when evaluating the cost of foreign goods under the FAR and AMS. Therefore, perhaps most of the FAA procurements challenged under the BAA involve the Unreasonable Cost exception. In addition, the Unreasonable Cost exception to the BAA appears to provide a particularly broad avenue to purchase foreign goods, since the cost comparison of foreign and domestic goods can be further diluted by bundling the procurement of foreign goods with domestic goods, or by evaluating procurements on factors other than cost (e.g., technical quality). These and other issues with the Unreasonable Cost exception are illustrated by the following cases.

1. Surcharge Applied on a Line-Item Basis

a. Boca Systems Protest of Print-O-Tape Contract for Flight Strip Recorders (1996).—In 1996, the FAA issued a single solicitation for 800 thermal printers and a 5-year supply of printer paper, or "flight strips," to be used by air traffic controllers to record flight data.[171] The FAA determined that two commercially available printers could satisfy the resolution requirements: a printer manufactured by Boca Systems, Inc. (a domestic small business), and a printer manufactured by IER (a foreign company).[172] The FAA received four proposals, one from Boca, and three from contractors offering to supply the IER printer.[173] The low bid was from Print-O-Tape, Inc., a domestic paper manufacturer offering to supply its paper with the IER printer.[174] Boca protested the award under the BAA.[175] The ODRA determined that the FAA properly applied a 12 percent surcharge to the cost of foreign printers (but not the price of domestic paper) in Print-O-Tape's bid.[176] The surcharge increased Print-O-Tape's total bid by $182,208, yet Print-O-Tape's surcharged bid was still less than Boca's bid, justifying award to Print-O-Tape under the Unreasonable Cost exception to the BAA.[177] This case illustrates a number of potential issues that can arise with application of the Unreasonable Cost exception.

First, because the BAA surcharge applies only to the procurement line items that are not domestically manufactured, the FAA's decision to bundle printers and paper in a single procurement could have influenced the outcome. Agencies with a preference for a particular foreign-manufactured item might attempt to minimize the influence of the Unreasonable Cost surcharge by bundling the procurement of those foreign goods with other supplies to which the BAA surcharge would not apply. In this case, Boca argued, if the printers were procured separately from the paper, then Boca's bid to supply 800 of its domestically manufactured printers may have been "reasonable" under the BAA, after applying the 12 percent surcharge to its competitors' price for supplying 800 foreign printers.[178] However, when combined with the price of 5 years worth of flight strips compatible with each printer, Boca's total bid price (for printers and paper) was greater than Print-O-Tape's bid (including the surcharged cost of foreign printers). Therefore, Boca's bid was considered "unreasonable" under the BAA, even if the price of its printer alone would compare favorably to the surcharged price of foreign printers. The ODRA concluded that it was rational for the FAA to combine the printers and a 5-year paper supply in the same procurement, in light of the FAA's AMS Policy,[179] "which encourages consideration of the entire life cycle of fielded systems."[180] It was important for the FAA to consider such factors as the compatibility of the printers and the paper, and to have a single contractor to contact when issues arose regarding either printer supplies or printer maintenance.[181]

Boca attempted to cast doubt on Print-O-Tape's ability to provide software and maintenance services related to integrating and maintaining the foreign IER printers in the air traffic control stations.[182] First, the software source code was presumably developed by, and would ultimately have to be supplied by, the foreign manufacturer IER. Second, the domestic paper manufacturer Print-O-Tape probably did not have the required technical

[171] Protest by Boca Systems, Inc. Under Solicitation DTFA02-96-R-60015, No. 96-ODR-0008 (Fed. Aviation Admin. 1997), *aff'd*, Fed. Aviation Admin. Order No. ODR-97-15 (Mar. 7, 1997), *available at* http://www.faa.gov/about/office_org/Headquarters_offices/agc/pol_adjudication/agc70/CaseFiles/view/docs/97_15DRO.pdf.

[172] *Id.* § II.

[173] *Id.* § II.

[174] *Id.* § II.

[175] *Id.* § IV.3.

[176] *Id.* § IV.3.

[177] *Id.* § IV.3.

[178] *Id.* § IV.2.

[179] Fed. Aviation Admin., Acquisition Mgmt. Pol'y § 2.1 (Feb. 2004) ("FAA uses [lifecycle management] to determine and prioritize its needs, make sound investment decisions, implement solutions efficiently, manage assets and services over their lifecycle.").

[180] *Boca Systems*, § IV.2.

[181] *Id.* § IV.1.

[182] *Id.* § IV.5.

expertise to provide "the associated maintenance and engineering support" for the IER printers.[183] In Print-O-Tape's initial response to the solicitation, it indicated that it would provide source code for the IER printer software subject to a separate software licensing agreement.[184] The contracting officer notified Print-O-Tape that its offer must include software source code, and Print-O-Tape increased its total bid price and "unequivocally stated that the source code would be provided" as part of that revised price.[185] The ODRA concluded that award to Print-O-Tape was justified because Print-O-Tape had secured "IER's contractual commitment to supply the equipment and codes to Print-O-Tape."[186] However, the BAA surcharge applied only to the price of the foreign goods (printers), and not to the price of supplying software source code, integration support, or maintenance of the printers after integration in the air traffic control centers.

This outcome represents a potential loophole with the distinction in the BAA between goods and services. Services are not subject to the Unreasonable Cost surcharge, even though such services as installation and maintenance could be an important factor in the overall life cycle cost of manufactured goods, and the cost of those services in a domestic offeror's bid could be largely a pass-through to the foreign manufacturer. More vexing is the question of the software license. Here, the domestic offeror revised its bid upward to account for providing the printer source code to the FAA.[187] Presumably, this additional amount was passed through as a license fee to the foreign printer manufacturer who developed the software as part of developing the printer. It does not appear from the opinion that the FAA or ODRA considered whether the software itself constituted foreign goods, or whether the software license was an additional component of the printers, to which the BAA surcharge should have been applied. However, a few years after the *Boca Systems* decision, Congress made the BAA inapplicable to federal government purchases "of information technology…that is a commercial item,"[188] thus formally excluding most software purchases from the BAA.

The ODRA thus rejected Boca's arguments that the contract with Print-O-Tape violated the intent of the BAA by bundling the procurement of foreign goods with domestic goods and services. Print-O-Tape's total bid for foreign goods, domestic goods, and services compared favorably to Boca's domestic bid, with the BAA Unreasonable Cost surcharge applied only to the foreign goods in Print-O-Tape's bid. The AIP Buy America provision, on the other hand, appears to be designed to avoid such controversies over bundling procurements. The AIP Buy America provision states that its Unreasonable Cost differential applies to "the cost of the overall project," not just the individual line items.[189] That clarification in the AIP Buy America provision removes the bundling loophole that might exist under the BAA, which Boca claimed was being used by the FAA to work around the BAA in favor of the foreign printers.

Boca also implied that the bid specifications were drafted to favor IER. The FAA solicitation stated that either Boca or IER printers would satisfy the specifications, but it is conceivable that a contracting agency favoring a certain foreign-manufactured product could draft the bid specifications so narrowly that no domestic goods would satisfy the specifications. In this case, Boca argued that the specifications were *not narrow enough*—that the Boca printers were of significantly higher quality than the IER printers,[190] and therefore Boca could not compete with the lower cost of the less capable IER printers, even after the BAA surcharge was applied to the IER price. Relying on precedents where the bid protestor argued that specifications were drawn too narrowly in order to favor a competitor, the ODRA determined that the standard of review is whether the agency's specifications are "rational; supported by substantial evidence."[191] The ODRA concluded that the FAA's bid specifications met that standard, pointing to "extensive research" by the FAA regarding the minimum requirements for its new printers.[192] The less capable foreign IER printers "represented a quantum leap over the quality of the old dot-matrix printers," and the advanced capabilities offered only by the domestic Boca printer were "not required."[193] Therefore, the ODRA upheld the FAA's solicitation specifications, allowing offerors to supply the foreign IER printer and significantly underbid the more capable domestic Boca printer. Under a best-value procurement, which would evaluate bids on both price and technical quality, the outcome may have been different.

2. Surcharge Applies Only to Cost Element of Evaluation

a. Litton Systems Protest of Thomson-CSF Contract for Airport Surveillance Radar Tubes

[183] *Id.* § IV.5.

[184] *Id.* § IV.4.

[185] *Id.* § IV.4.

[186] *Id.* § IV.5.

[187] *Id.* § II.

[188] Consolidated Appropriations Act of 2004, Pub. L. No. 108-199, § 535, 118 Stat. 3 (2003).

[189] 49 U.S.C. § 50101(b)(4) (2011).

[190] *Boca Systems*, § II.

[191] *Id.* § IV.1.

[192] *Id.* § IV.1.

[193] *Id.* § IV.1.

(1996).—A number of cases demonstrate how to apply the Unreasonable Cost surcharge in the context of FAA best-value evaluations. In 1983, the FAA issued an RFP for replacement Klystron tubes for use in its existing ASR units.[194] The RFP stated that the contract would be awarded to the bidder "whose technical/cost relationship was the most advantageous to the government."[195] Thomson-CSF, the foreign ASR manufacturer, bid $172,550.[196] Litton Systems, Inc., a domestic company that did not have a Klystron tube in production at the time, bid $110,000.[197] Because of Litton's inexperience, it effectively received a lower technical evaluation than Thomson-CSF. However, the evaluation rubric was not well defined, and the FAA accounted for Litton's inexperience by adding $200,000 to Litton's $110,000 bid, representing the amount the FAA estimated it would cost Litton to develop the Klystron tube manufacturing capability.[198] Even after applying the 6 percent Unreasonable Cost surcharge to Thomson-CSF's $172,500 bid, it was still lower than the FAA's $310,000 estimate of the "true development costs" of Litton's bid.[199]

Litton protested because its actual bid price was less than Thomson-CSF's surcharged bid price, and thus not unreasonable under the BAA. The Comptroller General agreed with Litton,[200] because the technical and cost components of the bids should be evaluated separately (with the Unreasonable Cost surcharge applying only to the cost component), and the two criteria should have been given equal weight (since the RFP did not specify otherwise).[201] In that scheme, Litton would receive a lower technical evaluation than Thomson-CSF, but its cost would be lower than that of Thomson-CSF, and thus not unreasonable under the BAA. The Comptroller General ordered the FAA to reevaluate "Litton's proposal and consider whether an award to Litton would be advantageous to the government."[202]

b. Optical Scientific Protest of Vaisala Contract for Automated Weather Observation System Sensors (2006).—Similarly, in 2006, Optical Scientific, Inc., protested the FAA's decision to award a contract to Vaisala, Inc., for Automated Weather Observation System (AWOS) visibility sensors manufactured in Finland.[203] Vaisala outscored Optical Scientific on the technical evaluation, but Optical Scientific bid a lower price.[204] Optical Scientific believed that its combined score would have been better than Vaisala's if the FAA had imposed the Unreasonable Cost surcharge on Vaisala. However, the FAA's AMS guidance (which directly adopted the language from the FAR) only required the Unreasonable Cost surcharge to be applied when the foreign offer was the low bid, and it was undisputed that Vaisala bid a higher price than Optical Scientific.[205] After the protest was filed, the FAA voluntarily applied the Unreasonable Cost surcharge to the Vaisala bid, and its combined score was still better than that of Optical Scientific, rendering the BAA challenge moot.[206] However, the ODRA agreed with Optical Scientific that, pursuant to the 1954 executive order,[207] the Unreasonable Cost surcharge "is automatically triggered whenever a foreign offer and a domestic offer are submitted for a competitive federal contract,"[208] not just when the offer to supply foreign goods is the low bid. The ODRA recommended updating the AMS guidance to clarify that the Unreasonable Cost surcharge is "mandatory in circumstances such as these where foreign and domestic offer are submitted for a competitive procurement."[209]

The AIP Buy America provision does not appear to have a similar relaxation for best-value procurements. On an AIP project, an Unreasonable Cost waiver may be granted only where the use of domestic steel and manufactured goods "will increase the cost of the overall project by more than 25 percent."[210] There is no allowance in the text of the statute to compare bids based on any criteria except cost (e.g., technical quality). If there is a significant difference in technical quality between the domestic and foreign good (as in the *Optical Scientific* protest), or if there is no comparable domestic good in existence (as in the *Litton Systems* protest), then it would be more appropriate for an

[194] *In re: Litton Systems, Inc.*, Electron Tube Div., GAO B0215106, 63 Comp. Gen. 585, 586 (1984).

[195] *Id.* at 587.

[196] *Id.* at 590.

[197] *Id.*

[198] *Id.*

[199] *Id.* at 590–91.

[200] *Id.* at 591.

[201] *Id.* at 586–88.

[202] *Id.* at 591.

[203] Protest of Optical Scientific, Inc. Pursuant to Solicitation No. DTFAAC-05-R-02321, No. 06-ODRA-00374 (Fed. Aviation Admin. 2006), *aff'd*, Fed. Aviation Admin. Order No. ODRA-06-387 (Aug. 18, 2006), *available at* http://www.faa.gov/about/office_org/Headquarters_offices/agc/pol_adjudication/agc70/CaseFiles/view/docs/06_387fr.pdf.

[204] *Id.* § II, ¶ 16.

[205] *Id.* § III.A.

[206] *Id.* § I.

[207] Exec. Order No. 10,582, 19 Fed. Reg. 8,723 (Dec. 17, 1954), available at http://www.archives.gov/federal-register/codification/executive-order/10582.html.

[208] *Optical Scientific*, § III.A.

[209] *Id.* § III.A.

[210] 49 U.S.C. § 50101(b)(4) (2011).

AIP grant recipient to seek an Unavailability waiver. At any rate, because the Unreasonable Cost surcharge in the AIP Buy America provision is 25 percent (a major increase from the 6 to 12 percent surcharge in the BAA), it is much less likely that the conditions can be satisfied to justify an Unreasonable Cost waiver on an AIP project.

F. Penalties/Enforcement

On federal procurements of supplies, the contractor must provide a written list of all foreign goods that it supplies to the government, and the contractor must certify that all other goods supplied to the government not included on that list are domestic goods.[211] Certifications that do not list all foreign goods supplied under the procurement are subject to action under the Federal False Claims Act.[212] In that event, the contractor could be required to reimburse the government up to three times the government's actual damages (e.g., the amount paid for the foreign goods), plus additional monetary penalties.[213] Furthermore, there are criminal penalties for knowingly and willfully making a fraudulent certification, including possible imprisonment.[214]

On federal construction contracts, when it is alleged that a construction contractor (or subcontractor) has used foreign construction materials, the CO must conduct a review.[215] First, the CO notifies the contractor, who is expected to respond to the allegation.[216] The contractor may deny the allegation, in which case the CO must determine whether the construction material complies with the BAA.[217] The contractor's response may admit noncompliance and propose corrective action, such as removal and replacement of the foreign construction material.[218] The CO may determine in writing that removal and replacement is unnecessary if it would be "impracticable, cause undue delay," or be contrary to the public interest.[219]

However, the CO's decision not to remove and replace the foreign construction material does not absolve the contractor from responsibility. Noncompliance with the BAA may be considered default, sufficient for the CO to terminate the contract.[220] If the alleged noncompliance is sufficiently serious, the federal agency may suspend the contractor's privilege to conduct business with the federal government for up to 18 months while the claim is investigated.[221] If the agency determines that serious noncompliance occurred, it may debar the contractor from conducting business with the federal government for up to 3 years.[222]

If the CO believes that the construction contractor's noncompliance with the BAA was fraudulent, then the CO must refer the matter to criminal investigators.[223] For example, if the contractor seeks a determination that foreign construction materials satisfy the Unreasonable Cost exception, the contractor must provide cost data for both the foreign and domestic construction materials.[224] The contractor could commit fraud by knowingly providing false cost data with intent to deceive the government, and therefore be subject to criminal prosecution.

These penalties are largely speculative, however. There is practically no public record of penalties being imposed on airport contractors for BAA violations. As the previous case summaries illustrate, the BAA requirements and exceptions are sufficiently flexible that COs can typically justify awards to foreign contractors, or to domestic contractors offering to supply significant foreign components.

III. BUY AMERICA AND FEDERAL GRANTEES

A. Airport Grants Prior to Buy America Provisions (1978–1983)

i. 1978 GAO Audit

In the 1970s, there was growing realization that federal transportation funds were being used to procure foreign goods, unaffected by the BAA, because the BAA requirements did not apply to federal grants. In 1978, at the request of Representative Charles Carney on behalf of the Congressional Steel Caucus, the U.S. General Accounting Office (GAO) performed an audit of the procurement of foreign goods with federal funds, including federal grant programs to states and other grantees.[225] In the final audit report, the Comptroller General noted that the BAA did not apply to FAA grants, "leaving such decision to the recipients' discre-

[211] 48 C.F.R. § 52.225-2 (2012).

[212] 31 U.S.C. §§ 3729–3733 (2012).

[213] 31 U.S.C. § 3729(a)(1) (2012).

[214] 18 U.S.C. § 1001 (2012).

[215] 48 C.F.R. § 25.206(a) (2012).

[216] 48 C.F.R. § 25.206(b) (2012).

[217] 48 C.F.R. § 25.206(c)(1) (2012).

[218] 48 C.F.R. §§ 25.206(b), 25.206(c)(2) (2012).

[219] 48 C.F.R. § 25.206(c)(3) (2012).

[220] 48 C.F.R. § 25.206(c)(4) (2012).

[221] 48 C.F.R. § 9.407-4 (2012).

[222] 48 C.F.R. § 9.406-4 (2012).

[223] 48 C.F.R. § 25.206(c)(4) (2012).

[224] 48 C.F.R. § 52.225-9(d) (2012).

[225] FOREIGN-SOURCE PROCUREMENT FUNDED THROUGH FEDERAL PROGRAMS BY STATES AND ORGANIZATIONS, COMP. GEN. REP'T. NO. ID-79-1, B-162222, B-156489 (1978, http://www.gao.gov/products/ID-79-1).

tion."[226] The report also noted the existence of Buy National preferences in state and local law, and that federal grant recipients may apply state and local Buy National preferences to procurements made with federal grant funds.[227]

In the airport context, the 1978 GAO audit focused primarily on Federal Airport Development Aid Program (ADAP) grants in the states of Ohio, Michigan, and Washington. The most significant findings were in the following areas:

• *Pavement construction materials*. The focus of the investigation was on bulk construction materials such as aggregate, asphalt, and Portland cement. In Washington, there were no procurements of these materials directly from foreign sources, and although the amount of foreign asphalt, cement, and aggregate purchased was unknown, it was believed that aggregate and asphalt would be "normally purchased close to the construction site," and therefore "not be subject to foreign competition."[228] Likewise, it was believed that almost all asphalt, cement, and aggregate purchased in Ohio and Michigan were domestic goods, because those materials "are available in substantial quantities in Ohio and Michigan," and "are normally purchased as close to the construction site as possible" due to their "bulky nature."[229] Therefore, the GAO did not identify any purchases of foreign pavement construction materials with ADAP funds.

• *Runway lighting fixtures*. In Washington, ADAP grant recipients apparently purchased all lighting fixtures from a single firm in Syracuse, New York, there being no competitive foreign supplier. Furthermore, the ADAP grant recipients understood that "the cost of any foreign material in an airport lighting package would be less than 10 percent."[230] In Ohio and Michigan, ADAP grant recipients believed that lighting fixtures were "not subject to foreign competition" because "[t]he lighting fixtures must be purchased from an FAA-approved list of domestic manufacturers."[231] Therefore, even though the BAA did not apply to airport grants, the GAO did not identify any significant purchases of foreign lighting fixtures, in part because the FAA allowed only domestic lighting fixtures to be purchased with ADAP funds.

• *Fencing*. In Washington, one ADAP grant recipient believed that one of its fencing subcontractors "may have used some imported pipe and fittings on a job," but "[t]he cost of the material in question amounted to only $3,500."[232] In Ohio, one contractor determined that he had unwittingly used Korean-manufactured "metal fence posts and top rails, costing about $20,000," which the contractor procured from a domestic supplier, on an ADAP project.[233] By all appearances, ADAP contractors generally attempted to purchase domestic fencing materials from domestic suppliers.

• *Snow removal equipment (SRE)*. In Michigan, the GAO determined that two German-manufactured snow removal vehicles were purchased using ADAP funds from a domestic supplier for the total cost of $151,560.[234] One snow removal vehicle had been purchased using ADAP funds in Washington, although the grant recipient understood the vehicle to be domestically manufactured.[235] The GAO expanded its review to other states in the Northwest Mountain Region, on the advice of FAA officials who believed there might be additional foreign purchases of snow removal vehicles with ADAP funds. However, the GAO identified only one additional foreign bid to supply SRE. In that case, the ADAP grant recipient rejected a Canadian bid to supply a snow removal vehicle for $56,764 in favor of a higher domestic bid, "[b]ecause FAA officials mistakenly advised the grantee that only American-made products could be procured under ADAP projects."[236] Except for the two Michigan purchases, all evidence indicated that the FAA and its grant recipients intended to purchase only domestic SRE, even though the BAA did not apply to ADAP funds.

• *Aircraft Rescue and Fire Fighting (ARFF) vehicles*. One ARFF vehicle had been purchased using ADAP funds in Washington, although it was believed to be domestically manufactured.[237] No such purchases were identified in Ohio and Michigan. However, in the course of its audit, the GAO learned that a British manufacturer had supplied U.S. airports with its ARFF vehicle. The GAO identified 16 purchases of the British-manufactured ARFF vehicle using ADAP funds: 2 in Massachusetts, 2 in California, and 12 in New York.[238] Grant recipients in those states justified the procurement of the British ARFF vehicle as "the best available," and the GAO estimated that 20 percent of the total cost of the British vehicle was attributable to domestic components. Of course, because the BAA did not apply to ADAP funds, there was no legal requirement to determine the percentage of domestic

[226] *Id.*, App. 1, at 14.

[227] *Id.*, App. 1, at 12–13.

[228] *Id.*, App. 2, at 53.

[229] *Id.*, App. 2, at 55.

[230] *Id.*, App. 2, at 53.

[231] *Id.*, App. 2, at 55.

[232] *Id.*, App. 2, at 53.

[233] *Id.*, App. 2, at 55.

[234] *Id.*, App. 2, at 55.

[235] *Id.*, App. II, at 53.

[236] *Id.*, App. II, at 54.

[237] *Id.*, App. II, at 53.

[238] *Id.*, App. II, at 52.

components or to determine that comparable domestic vehicles were unavailable domestically.

The list above contains all of the purchases of foreign goods under airport grants identified in the 1978 GAO audit. These purchases represented a negligible percentage of the $500 million to $600 million granted annually under the ADAP program.[239] For example, in Ohio and Michigan, foreign purchases were believed to account for only "about three-tenths of one percent of the dollar value of the contracts reviewed."[240] Therefore, in 1978, there did not appear to be strong reasons to extend Buy America requirements to airport grants, although there was some evidence that purchases of foreign vehicles could become significant.

The 1978 GAO report indicated that a significant percentage of ADAP funds were spent not on equipment or construction materials, but on projects such as land acquisition for which there could typically be no realistic foreign source.[241] Also, a large percentage of ADAP funds were spent not on goods but construction services, including the labor involved in paving runways and installing lighting fixtures at the airport site, which "are normally not subject to foreign competition."[242] Furthermore, even if the BAA applied to ADAP grants, it would apply only to purchases of goods, not construction services and land acquisition.

The 1978 GAO report further noted that legislation enacted shortly after the audit, namely the Surface Transportation Assistance Act of 1978,[243] extended Buy America requirements to a number of federally funded transportation grant programs.[244] Therefore, it was likely that there would be even fewer purchases of foreign goods with transportation grant funds in the future. (However, Buy America requirements were not extended to federal airport grant funds at that time.)

ii. 1983 GAO Audit

The GAO updated its report in 1983 at the request of Representative Joseph Gaydos on behalf of the Congressional Steel Caucus.[245] Instead of focusing on individual states as in the 1978 audit, the 1983 audit selected 50 ADAP grants at random from the 1,493 grants awarded in 1980–81. The GAO "did not identify any foreign purchases in the 50 grants reviewed," which was "consistent with the minimal foreign purchases reported in November 1978."[246] As in 1978, the 1983 report noted that a significant percentage of ADAP funding was used for land acquisition and contractor services "that are not readily amenable to foreign competition." With respect to the categories of foreign purchases identified in the 1978 report, the 1983 audit found:

- *Pavement construction materials*. "[B]ecause of their bulk and weight, [these] are generally produced locally."[247] As in 1978, no foreign purchases of these materials were identified.
- *Airport lighting equipment*. These items "must be made by FAA-approved manufacturers and only domestic manufacturers had been approved at the time of our review."[248] As in 1978, the GAO noted that the FAA did not allow foreign lighting fixtures to be purchased with ADAP funds, even though the BAA did not apply.
- *Fencing*. Foreign-manufactured "[m]etal fencing materials brought in via ocean transport require anti-corrosion coating, which *some* view as undesirable"[249] (emphasis added). Although the 1983 report did not identify any specific purchases of foreign steel and other metal materials, the finding was qualified to indicate that "some" opposed such purchases. This may indicate that, as in 1978, some ADAP grant funds were being spent on foreign fencing.
- *Vehicles*. "Although U.S. vehicles are higher priced than foreign vehicles, parts availability and lower labor and parts costs involved in maintaining U.S.-built vehicles makes them *competitive*"[250] (emphasis added). Once again, without identifying any specific purchases of foreign vehicles, the qualified language of the 1983 report suggests that purchases of foreign vehicles were taking place. As in 1978, it appeared that ADAP funds were most likely to be spent on foreign vehicles than on any other foreign goods.

The 1983 report noted that the ADAP program expired in 1981, and was replaced with the Airport

[239] *Id.*, App. II, at 51.

[240] *Id.*, App. II, at 54.

[241] *Id.*, App. II, at 53.

[242] *Id.*, App. II, at 52, 55.

[243] Pub. L. No. 95-599 (1978).

[244] FOREIGN-SOURCE PROCUREMENT FUNDED THROUGH FEDERAL PROGRAMS BY STATES AND ORGANIZATIONS, COMP. GEN. REP'T. NO. ID-79-1, B-162222, B-156489, at 1 (1978), http://www.gao.gov/products/ID-79-1.

[245] FOREIGN-SOURCE PROCUREMENT FUNDED THROUGH FEDERAL PROGRAMS BY STATES AND ORGANIZATIONS, COMP. GEN. REP'T. NO. GAO/NSIAD-83-9, B-208826 (1983), http://gao.justia.com/environmental-protection-agency/1983/7/foreign-source-procurement-funded-through-federal-programs-by-states-and-organizations-nsiad-83-9/NSIAD-83-9-full-report.pdf.

[246] *Id.*, App. II, at 17–18.

[247] *Id.*, App. II, at 18.

[248] *Id.*, App. II, at 18.

[249] *Id.*, App. II, at 18.

[250] *Id.*, App. II, at 18.

and Airway Improvement Act of 1982,[251] which has its own Airport Improvement Program (AIP).[252] The report noted that AIP, like the ADAP, had no Buy America provision in 1983. At the time, there did not appear to be serious justification for attaching Buy America requirements to airport grant funds, as foreign purchases constituted an insignificant percentage of the overall program. However, there were indications that foreign goods were being purchased with airport grant funds—primarily vehicles, and to a lesser degree, steel and other metal construction materials.

B. Buy America Provisions in Other Transportation Grant Programs (1978–Present)

The 1978 GAO audit was conducted in part because members of Congress had come to understand that the BAA did not apply to federal funds in transportation grant programs. By the time the 1978 GAO report was issued, Congress passed the first Buy America provision in transportation grant programs, although it did not apply to airport grant programs. As will be seen, the original 1978 transportation grant provision was only moderately different from the BAA. Congress iteratively revised the provision in 1982 and 1987, before adopting Buy America requirements for the AIP in 1990. As will be seen, the AIP Buy America provision is effectively an iteration of the Buy America requirements first adopted for other transportation grant programs in 1978. Therefore, it is helpful to briefly review the evolution of the transportation grant Buy America provisions to better understand the AIP provision.

i. Legislation

1. 1978 Surface Transportation Assistance Act.—The Surface Transportation Assistance Act (STAA) of 1978[253] authorized appropriations for federally aided highways, which were defined at the time to include "access roads to public airports,"[254] and mass transportation projects, including airport people movers, in urban areas. Although the STAA funded these projects to improve access to airports, it did not fund traditional airport development projects covered elsewhere by the ADAP program.

If grant funds for a *single project* under the 1978 STAA exceeded $500,000, only domestic unmanufactured goods and domestic manufactured goods (those manufactured in the United States "substantially all" from domestic components) could be used in the project,[255] unless the Secretary of Transportation determined that one of the following exceptions was present:

- *Public Interest*.[256] This requirement was identical to the BAA Public Interest exception.
- *Unavailability* (goods "that are not mined, produced, or manufactured in the United States in sufficient and reasonably available quantities and of a satisfactory quality").[257]
- *Unreasonable Cost* (where "inclusion of domestic material will increase the cost of the *overall project contract* by more than 10 per centum").[258]

This 1978 STAA Buy America provision was very similar to the BAA in the absence of specific language or guidance regarding Substantial Domestic Manufacture, Public Interest, and Unavailability.

The most notable change from the BAA was that the STAA provision codified a 10 percent differential for the Unreasonable Cost exception, which was stricter than the standard 6 percent surcharge in the BAA. By codifying the 10 percent differential directly in the statute, Congress effectively preempted any administrative action to dilute the Unreasonable Cost exception (as the 1954 executive order diluted the BAA).[259] Also, Congress clarified that the Unreasonable Cost differential applies to "the cost of the overall project contract," not just the individual line items of foreign goods as in the implementation of the BAA. The clarified language of the Unreasonable Cost exception in the STAA Buy America provision effectively preempted many of the issues raised in BAA bid protests. It also tended to make the STAA Buy America provision stricter than the BAA.

On the other hand, the STAA Buy America provision only applied to projects costing more than $500,000 (significantly higher than the BAA micropurchase threshold of $3,000). Therefore, the STAA Buy America provision originally applied largely to significant construction projects, not individual purchases of equipment such as vehicles, despite its express application to manufactured goods. The $500,000 project threshold (plus the involvement of the Congressional Steel Caucus) indicates that the original intent of the STAA Buy America provision was to promote the use of domestic construction materials.

[251] Pub. L. No. 97-248, 96 Stat. 324 (Sept. 3, 1982).

[252] *Id.*, App. II, at 17.

[253] Pub. L. No. 95-599 (1978).

[254] 23 U.S.C. § 105(g) (1978).

[255] Surface Transportation Assistance Act of 1978, Pub. L. No. 95-599, § 401(a) (1978).

[256] *Id.* § 401(b)(1).

[257] *Id.* § 401(b)(3).

[258] *Id.* § 401(b)(4).

[259] *See supra* Pt. II.C.

2. 1982 Surface Transportation Assistance Act.—The Surface Transportation Assistance Act of 1982[260] substantially modified the STAA Buy America provision. Although this legislation created a supplemental discretionary fund for airport improvement projects, the STAA Buy America provision expressly applied only to highway and transit projects. Under the revised STAA Buy America provision, highway and transit grant funds were authorized for projects where only domestic *steel*, *cement*, and *manufactured goods* were used.[261] The strict domestic goods requirement could be overcome if the Secretary of Transportation determined that one of the following exceptions was met:

- *Public Interest*[262] (unchanged from the 1978 version).
- *Unavailability*[263] (unchanged from the 1978 version).
- *Unreasonable Cost* (determined by applying a 10 percent differential to compare foreign and domestic bids "for the acquisition of rolling stock," and a 25 percent differential to "the cost of the overall project contract" to account for the use of foreign goods on all other types of projects).[264]
- *Substantial Domestic Manufacture* (for the acquisition of rolling stock only, defined as final assembly of the vehicle or equipment in the United States, and the cost of domestic components exceeds 50 percent of the cost of all components).[265]

The 1982 revision of the STAA Buy America provision was stricter in many ways than both the original 1978 STAA provision and the BAA. First, the 1982 STAA provision applied to all highway and transit grants, not just those exceeding $500,000.

Second, the "substantially all" language was removed from the definition of domestic manufactured goods. Instead, the legislation introduced for the first time a new Substantial Domestic Manufacture *exception*. The language of the Substantial Domestic Manufacture exception was identical to the BAA two-part component test from the FAR, except that it only applied to the acquisition of rolling stock. The implication was that all manufactured goods except for rolling stock had to be composed *entirely* of domestic components, barring the applicability of any other exception. Even in the case of rolling stock, a waiver from the Secretary of Transportation would thereafter be required for the purchase of vehicles that contained less than 100 percent domestic components. (In the original 1978 version, rolling stock manufactured in the United States "substantially all" from domestic components was treated as domestic goods, similar to the BAA, for which no waiver was required.)

Finally, the Unreasonable Cost exception in the 1982 STAA provision was significantly strengthened, applying a 25 percent differential to compare domestic bids against bids that include some foreign goods (except for rolling stock, which remained at 10 percent).

In other ways, the 1982 STAA Buy America provision was less strict than its predecessor or the BAA. Most importantly, the 1982 STAA provision expressly restricted the purchase only of steel, cement, and manufactured goods. There was no longer a requirement that *unmanufactured* goods be domestic, so grant recipients were allowed to supply unmanufactured goods that were "mined" or otherwise produced in foreign countries for use on grant projects.

The separate enumeration of steel, cement, and manufactured goods seems to imply that Congress did not consider manufactured goods to include steel and cement. Like the BAA, therefore, manufactured goods in the 1982 STAA provision appeared to refer primarily to mechanical and electronic equipment that was *assembled*, not to bulk construction materials that may have undergone some degree of production or processing. Furthermore, the 1982 STAA provision, unlike the BAA, did not restrict the purchase or use of unmanufactured goods *produced* in other countries. These subtle differences in language suggest that Congress did not intend to restrict the purchase of foreign bulk construction materials (e.g., aggregate), except for steel and cement, with the 1982 STAA Buy America provision.

The 1982 STAA provision was almost immediately weakened in practice. In 1983, the Federal Highway Administration (FHWA) issued a Public Interest waiver for all manufactured goods except for steel and cement.[266] The reasons offered by the FHWA were that manufactured goods (with the exception of construction materials) make up a small percentage of highway grant funds. The FHWA appeared to be of the opinion that manufactured goods included any bulk construction material (except for mined or "raw" goods), that had undergone some degree of processing or production. The FHWA noted that it had received a number of requests to waive the STAA Buy America requirements for steel, Portland cement, and asphalt. The FHWA declined to waive the Buy America requirements for steel and Portland cement, since

[260] Pub. L. No. 97-424 (1983).

[261] *Id.* § 165(a).

[262] *Id.* § 165(b)(1).

[263] *Id.* § 165(b)(2).

[264] *Id.* § 165(b)(4).

[265] *Id.* § 165(b)(3).

[266] 48 Fed. Reg. 53,099 (Nov. 25, 1983).

steel and cement were expressly named in the statute and were the focus of congressional debate regarding the 1982 STAA provision. However, the FHWA determined that asphalt was a manufactured good, and that the FHWA waiver for manufactured goods included asphalt. The FHWA justified its decision because there was little concern shown by Congress to protect the domestic asphalt industry, despite the large amount of grant funds spent on asphalt.

A few months later, in March 1984, Congress removed the express preference for domestic cement from the STAA Buy America provision.[267] Thereafter, the STAA Buy America provision only restricted the use of foreign steel on FHWA grant projects, or foreign steel and manufactured goods on Federal Transit Administration (FTA) grant projects.

3. 1987 Surface Transportation and Uniform Relocation Assistance Act.—The Surface Transportation and Uniform Relocation Assistance Act (STURAA) of 1987[268] updated the STAA Buy America provision once again. The STAA Buy America provision still applied only to highway and transit grants, not airport development grants. However, STURAA rescinded $148 million of previously authorized AIP airport development funds[269] and redirected those funds into a number of highway projects to improve access to specific airports.[270] Therefore, this legislation effectively extended the STAA Buy America provision to certain airport improvement funds.

The 1987 revisions included a number of changes to the STAA Buy America provision. First, the Unreasonable Cost differential in the STAA Buy America provision was increased to 25 percent for all projects, including the procurement of rolling stock.[271] Second, the Substantial Domestic Manufacture exception for rolling stock was modified to require an evaluation of the cost not just of components, but also *subcomponents*.[272] Finally, the required percentage of domestic components (and subcomponents) was increased from 50 to *60 percent* of the total cost of the end product in order to satisfy the Substantial Domestic Manufacture exception.[273] These changes all had the effect of creating a stricter domestic preference under the STAA Buy America provision.

4. 1991 Intermodal Surface and Transportation Efficiency Act.—The STAA Buy America provision was revised again by the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991.[274] This legislation authorized a number of both highway and transit projects to improve access to specific airports, and the STAA Buy America provision applied to those funds. However, the STAA Buy America provision did not apply to traditional airport grant projects under the AIP.

ISTEA amended the STAA Buy America provision to expressly include iron (along with steel) as goods that must be of domestic origin on ISTEA projects.[275] ISTEA also required the Secretary of Transportation to issue a report to Congress on all foreign goods that would be purchased as exceptions to the STAA Buy America provision in fiscal years 1992 and 1993.[276] ISTEA also established that contractors were subject to debarment, suspension, and ineligibility if they falsely represented that highway or transit grant funds were used to purchase domestic goods.[277] These changes all tended to strengthen the domestic preference requirements.

ii. Agency Regulations

Although the identical STAA Buy America legislation applies to both highway and transit grants, there are significant differences in the way the legislation has been implemented in regulations administered by the FHWA and the FTA. The following discussion shows how the current STAA Buy America language, which is very similar to the AIP Buy America provision in most respects, has been interpreted or implemented differently by these agencies.

1. Federal Highway Administration.—Because of the FHWA waiver for manufactured products, current FHWA regulations implementing the STAA Buy America provision only require the use of domestic steel and iron on federally aided highway construction projects.[278] Because the STAA Buy America provision has been waived for all manufactured goods, there is no need to consider whether goods on FHWA projects are manufactured substantially all from domestic components.

The FHWA regulations permit an *exception* for Unreasonable Cost where the use of domestic steel or iron increases the total bid by more than 25 percent.[279] No waiver is required for FHWA grantees where the Unreasonable Cost exception is satisfied.

FHWA grantees may request waivers for Public Interest or Unavailability of domestic steel and

[267] Pub. L. No. 98-229, § 10 (1984).

[268] Pub. L. No. 100-17 (1987).

[269] *Id.* § 209.

[270] *Id.* §§ 138, 149.

[271] *Id.* § 337(c).

[272] *Id.* § 337(b).

[273] *Id.* § 337(a)(1)(B).

[274] Pub. L. No. 102-240 (1991).

[275] *Id.* § 1048(a).

[276] *Id.* § 1048(b).

[277] *Id.* § 1048(b).

[278] 23 C.F.R. § 635.410(b)(1) (2011).

[279] 23 C.F.R. § 635.410(b)(3) (2011).

iron.[280] The FHWA response to any such waiver request must be in writing and made available to the public upon request.[281] The FHWA regulations do not require public disclosure of waivers for the Unreasonable Cost exception.

2. Federal Transit Administration.—FTA regulations implementing the identical STAA Buy America legislation differ significantly from the FHWA regulations, primarily because the FTA regulations apply to grantee purchases of steel, iron, and manufactured goods.[282] Manufactured goods are defined as those that result from a process in which its components are *substantially transformed*, "so that they represent a new end product functionally different" from the sum of the components.[283] This is a broader definition of manufactured goods than that implied in the BAA, which specifically allows for a category of unmanufactured goods that are "produced," which is differentiated from raw goods that are "mined." For example, refined construction materials such as asphalt may be considered manufactured goods under the FTA definition, whereas under the BAA they may be considered unmanufactured goods that are "produced" from raw goods.

In the FTA regulations, manufactured goods are domestic goods if 100 percent of the manufacturing processes (not just final assembly) take place in the United States, *and* 100 percent of the components are domestic goods.[284] Components are defined as "any article, material, or supply, whether manufactured or unmanufactured, that is directly incorporated into the end product at the final assembly location."[285] Note that this is a very different definition of domestic manufactured goods than the component test used in the BAA, in that it establishes a much stricter criterion for domestic content, and is more akin to the substantial transformation test of the TAA with regard to determining the location of manufacture.

FTA grantees may request *waivers* for Public Interest, Unavailability, and Unreasonable Cost.[286] Unavailability is presumed where there is no domestic bid in response to an open solicitation.[287] The Unreasonable Cost waiver will be granted if the lowest total bid, increased by 25 percent if any foreign goods are included in the bid, is still less than the lowest fully domestic bid.[288] The FTA Administrator must issue a written response to any waiver request (including justification for the waiver decision), and must make that decision available for public inspection.[289] In the case that a Public Interest waiver is granted, the FTA Administrator must publish the written justification in the *Federal Register*.[290]

The FTA regulations include the Substantial Domestic Manufacture exception from the STAA Buy America provision for rolling stock where final assembly takes place in the United States, and the value of domestic components and subcomponents exceeds 60 percent of the value of the rolling stock.[291] No waiver is required if that two-part test is satisfied (despite the statutory language that the Secretary of Transportation must determine that the Substantial Domestic Manufacture exception has been satisfied).

The FTA regulations provide extensive guidance for computing the foreign and domestic portions of the cost of goods for purposes of the Substantial Domestic Manufacture exception. The costs of components and subcomponents are treated as domestic if Unavailability or Unreasonable Cost waivers have been granted for those components and subcomponents.[292] The entire cost of a component is treated as domestic if it was manufactured (i.e., "substantially transformed") in the United States, and more than 60 percent of its subcomponents are of domestic origin.[293] The subcomponents are considered to be of domestic origin if they are merely manufactured in the United States, regardless of the origin of the sub-sub-components.[294]

The FTA's implementation of the STAA Buy America provision is clearly stricter than the FHWA's implementation, both because it applies to manufactured goods and because the FTA is required to publish its rationale for any waivers. The FAA APP-500 Office informed the author that it has relied on the voluminous public record of FTA rulemaking in this area to guide FAA interpretations of similar provisions in the AIP Buy America provision.

C. Airport Improvement Program Buy America Provision

i. Statutory Language

Since 1990, there have been statutory Buy America requirements that apply to the use of FAA grant funds.[295] This preference applies specifically

[280] 23 C.F.R. § 635.410(c)(1) (2011).

[281] 23 C.F.R. § 635.410(c)(6) (2011).

[282] 49 C.F.R. § 661.5 (2011).

[283] 49 C.F.R. § 661.3 (2011).

[284] 49 C.F.R. § 661.5(d) (2011).

[285] 49 C.F.R. § 661.3 (2011).

[286] 49 C.F.R. § 661.9 (2011).

[287] 49 C.F.R. § 661.7(c)(1) (2011).

[288] 49 C.F.R. § 661.7(d) (2011).

[289] 49 C.F.R. § 661.9(e) (2011).

[290] 49 C.F.R. § 661.7(b) (2011).

[291] 49 C.F.R. § 661.11(a) (2011).

[292] 49 C.F.R. § 661.7(f) (2011).

[293] 49 C.F.R. § 661.11(g) (2011).

[294] 49 C.F.R. § 661.11(h) (2011).

[295] 49 U.S.C. § 50101 (2010).

to FAA airport development grants under the AIP;[296] but also to appropriations for FAA operations (including infrastructure systems development for the aviation industry);[297] site preparation work associated with acquiring, establishing, or improving an air navigation facility;[298] demonstration projects necessary for research and development activities[299] (not including ground transportation demonstration projects[300]); and appropriations from the Airport and Airway Trust Fund[301] (except for air traffic controller performance research,[302] airway science curriculum grants,[303] civil aviation security research and development,[304] and advanced training facilities for air carrier aircraft maintenance technicians[305]).

The AIP Buy America provision permits the appropriation of FAA funds "for a project only if steel and manufactured goods used in the project are produced in the United States."[306] Whereas the BAA created a domestic preference for both manufactured goods and unmanufactured goods (those that had been mined or produced in the United States), the AIP Buy America provision (like the STAA Buy America provision at the time the AIP provision was enacted) only literally restricts the use of foreign steel and manufactured goods that have been *produced* in the United States. Therefore, at first glance, there is no restriction on purchases of foreign unmanufactured goods. However, AIP grant recipients should take heed of the waiver requirement for Substantial Domestic Manufacture.

As described previously, the Secretary of Transportation may waive the AIP Buy America requirements so as to permit the use of foreign steel or manufactured goods in the following cases:

- *Public Interest*. Where the use of domestic steel or manufactured goods would be "inconsistent with the public interest."[307]
- *Unavailability*. Where domestic steel and manufactured goods "are not produced in a sufficient and reasonably available amount *or* are not of a satisfactory quality."[308]
- *Unreasonable Cost*. Where the use of domestic steel and manufactured goods "will increase the cost of the overall project by more than 25 percent."[309]
- *Substantial Domestic Manufacture*. Where the project involves procurement of a *facility* or *equipment*, and final assembly of the facility or equipment occurs in the United States, and "the cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components of the facility or equipment."[310]

The Public Interest and Unavailability exceptions are repeated almost verbatim from the BAA and the STAA Buy America provision, with the same lack of clarity regarding what might constitute a public interest exception, insufficient quantity, or unsatisfactory quality. However, like the STAA Buy America provision and unlike the BAA, the AIP Buy America provision sets clear guidance, including numeric thresholds, for the following key elements.

1. Unreasonable Cost.—Unlike the BAA, the AIP Buy America provision replicates the STAA Buy America requirement that domestic goods must be used unless that would increase the total project cost by more than 25 percent.[311] Recall that the BAA Unreasonable Cost surcharge that entered the FAR and AMS was a surcharge of only 6 percent, or at most 12 percent (if the domestic offeror was a small business), which applied to bids to supply foreign goods. Therefore, there is a stronger preference for domestic goods in the Buy America provisions for transportation grants (including AIP grants), even if those goods are substantially more expensive than what would be considered "unreasonable" under the BAA.

2. Substantial Domestic Manufacture.—The allowance in the BAA for some percentage of the final product to be foreign as long as the final product was manufactured in the United States "substantially all" from domestic goods has been encoded in the AIP Buy American provision as a situation requiring a waiver. The Substantial Domestic Manufacture exception for rolling stock from the STAA Buy America provision was adopted in the AIP Buy America provision for *all* manufactured goods and *facilities*.[312] This requires that more than 60 percent of the cost of all components (and subcomponents) of the final equipment or facility be attribut-

[296] 49 U.S.C. ch. 471, subch. I (2011).
[297] 49 U.S.C. § 106(k) (2011).
[298] 49 U.S.C. § 44502(a)(2) (2011).
[299] 49 U.S.C. § 44509 (2011).
[300] 49 U.S.C. § 47127 (2011).
[301] 49 U.S.C. ch. 481 (2011).
[302] 49 U.S.C. § 48102(e) (2011).
[303] 49 U.S.C. § 48106 (2011).
[304] 49 U.S.C. § 48107 (2011).
[305] 49 U.S.C. § 48110 (2011).
[306] 49 U.S.C. § 50101(a) (2011).
[307] 49 U.S.C. § 50101(b)(1) (2011).
[308] 49 U.S.C. § 50101(b)(2) (2011).
[309] 49 U.S.C. § 50101(b)(4) (2011).
[310] 49 U.S.C. § 50101(b)(3) (2011).
[311] 49 U.S.C. § 50101(b)(4) (2011).
[312] 49 U.S.C. § 50101(b)(3) (2011).

able to domestic goods, and requires final assembly of the equipment or facility to take place in the United States. Therefore, although the AIP Buy America provision does not expressly prohibit the purchase of foreign unmanufactured goods, such goods must account for less than 40 percent of the cost of any equipment or facility procured with AIP funds.

This Substantial Domestic Manufacture waiver requirement in the AIP Buy America provision appears to create a more stringent requirement for airport grants than exists elsewhere in federal law. The application of the component test to *facilities* (rather than to manufactured construction materials) is unprecedented. Where the STAA Buy America provision was weakened to the point that steel and iron were the *only* construction materials that it governed on FHWA projects,[313] the AIP Buy America provision effectively governs *all* construction materials because AIP building construction projects are to be evaluated at the facility level. The AIP grant recipient must either use only domestic construction materials in the construction of a facility, or otherwise evaluate the cost of all components and subcomponents of the facility in order to obtain a Substantial Domestic Manufacture waiver.[314]

Based solely on the statutory language of the AIP Buy America provision, it appears that Congress intended to create a stronger domestic preference requirement for FAA-funded grant projects than for other transportation grant programs or direct procurements by the federal government. The following section investigates the congressional history of this provision.

ii. Legislative History

1. Airport and Airway Safety and Capacity Expansion Act of 1987.—The first Buy America provision that expressly applied to airport development grants was enacted as part of the Airport and Airway Capacity Expansion Act of 1987. This legislation originated as an amendment to the AIP sponsored by Senator Frank H. Murkowski entitled, "A bill to deny funds for projects using products or services of foreign countries that deny fair market opportunities."[315] Senator Murkowski explained that the bill was motivated by the Japanese government's refusal to allow American firms to compete for Japanese airport construction projects. "Given the internationally competitive strength of the United States industry in the area of airport construction and a growing services trade deficit with Japan," he said, "Japan's unwillingness to deliver with specific contractural [sic] opportunities in this market is unacceptable."[316] Therefore, Senator Murkowski proposed restricting AIP funds to U.S. "constructors and products," unless the Secretary of Transportation and the U.S. Trade Representative determined that one of the following exceptions was met:[317]

- *Public Interest*.
- *Unavailability* ("the products are not produced in the United States").
- *Unreasonable Cost* ("exclusion of foreign goods or contractors would raise cost by 50 percent").
- *Free Trade* ("the country of origin of the products or the bidder is offering fair reciprocity in access to public or substantially publicly funded construction projects").

Senator Murkowski's speech makes clear that his primary purpose was to open access to foreign markets for domestic firms; therefore, unlike most Buy America provisions, the Free Trade exception here was paramount: "Mr. President, the Federal Aviation Administration plans to spend some $11 billion over the next decade on the rehabilitation of American airports. My amendment set forth a challenge: Either cease unfair trade practices against American companies or forego participation in this project. The choice is simple."[318]

The proposed legislation did not impose any Buy America restrictions against purchases from, or contracts with, contractors from countries that did not discriminate against American manufacturers and construction providers. In the case of countries that did discriminate against American products and services, there were very strict thresholds proposed. As originally envisioned, domestic goods would have to be *absolutely* unavailable ("not produced in the United States") to justify foreign purchases. This was stricter than the BAA, which qualified the Unavailability exception by permitting foreign goods where domestic goods were not produced in "sufficient quantities or adequate qual-

[313] *See supra* Pt. III.B.i.2.

[314] The FAA's voluntary Buy America waiver request form for building construction projects (such as terminals, ARFF buildings, and SRE buildings) instructs the bidder that the "facility" in the AIP Buy America provision refers to the "AIP-funded building," and that 60 percent of the cost of components and subcomponents of the facility must be produced in the United States. Fed. Aviation Admin., Buy America Waiver Request for Terminals, ARFF Buildings, and SRE Buildings Funded Under the Airport Improvement Program, *available at* http://www.faa.gov/airports/northwest_mountain/engineering/design_resources/media/buy_america_waiver_building.doc and http://www.faa.gov/airports/central/airports_resources/media/BA_Waiver_Building.doc.

[315] S. 764, 100th Cong. (1987).

[316] 132 CONG. REC. S13257-02 (1986).

[317] *Id.*

[318] *Id.*

ity." More noticeably, as originally envisioned, the legislation would impose a 50 percent evaluation differential on the total cost of any contract where any portion of the funds would go to foreign suppliers or contractors, in comparison to the 6 to 12 percent Unreasonable Cost line-item surcharge in the BAA.

Senator Murkowski's bill was unique among Buy America provisions in that it preferred domestic services (e.g., "constructors" and "contractors") in addition to domestic goods ("products"). In a speech in the Senate on January 21, 1987, Senator Murkowski emphasized the need to amend the AIP in order to open the Japanese construction market to American contractors, including those providing "construction, architectural, and engineering design" services.[319] Shortly before the Senate voted on the provision on October 28, 1997, Senator Murkowski informed the Senate that the effect of the provision would be to "prohibit foreign firms from bidding on projects funded under the act unless their home country allows our design engineering, construction and architecture firms to participate on public works projects in their home market."[320] He stated that the legislation would "provide United States negotiators with important leverage in our efforts" to have U.S. contractors participate on the Kanzai airport project, "in addition to approximately $62 billion in other major projects which will be built in Japan over the next decade."[321] Senator Alfonse D'Amato, speaking of Senator Murkowski, said, "If an American company ever does get to participate in that airport construction, they ought to name a runway after him."[322]

By the time the legislation was introduced on March 18, 1987, it had been weakened significantly from Senator Murkowski's original concept. However, it still would deny AIP funds to "any project which uses any product or service of a foreign country" that the U.S. Trade Representative had determined failed to provide access to U.S. contractors.[323] No provision was made for even the insubstantial use of such foreign goods.

By transforming the Free Trade language from an exception (in his original proposal) into the affirmative purpose of the provision, Senator Murkowski argued, "This is not a 'Buy America' provision. It starts from the premise that our projects are open to foreign participation, but places the stipulation that participation be based on reciprocal opportunities for U.S. firms overseas."[324] As introduced, the bill provided for exceptions only where the Secretary of Transportation determined that one of the following applied:[325]

- *Public Interest*.
- *Unavailability* (where the same class or kind of goods or service is not produced or offered domestically or in a nondiscriminatory foreign country "in sufficient and reasonably available quantities and of a satisfactory quality").
- *Unreasonable Cost* (where the exclusion of the goods or services from the discriminatory foreign country "would increase the cost of the overall project contract by more than 20 percent").

Therefore, as introduced, unlike the BAA, the bill would treat goods and services from nondiscriminatory foreign trading partners as domestic, rather than as Public Interest exceptions requiring a waiver. Also, the Unreasonable Cost differential in the bill was reduced to 20 percent (from Senator Murkowski's original proposal of 50 percent), which still represented a significant increase over the 6 to 12 percent surcharge in the BAA.

Senator Murkowski's bill was eventually incorporated into the Airport and Airway Safety and Capacity Expansion Act (AASCEA),[326] which passed both houses of Congress nearly unanimously in October 1987. On December 2, 1987, a conference was initiated between members of the House and Senate to reconcile conflicting provisions of the versions of the AASCEA that had passed each house. Even though Senator Murkowski's Buy America provision was identical in both versions, so that it did not need to be reconciled, the Conference Report on December 15, 1987, reconciling the two bills addressed the Buy America provision:

> In order to focus *limited resources* on known *significant* barriers to U.S. trade, the conferees intend that the scope of USTR determinations for purposes of this Act be *limited* on[l]y to those foreign countries that are listed in the annual report as maintaining barriers to U.S. construction services for such projects. The conferees expect the annual report will describe *significant* barriers of any foreign country to such services and that *existing* authorities…will also be used against unfair trade practices.[327] (emphasis added.)

Therefore, despite the very strict language of the Buy America provision that had passed both houses of Congress, the conferees indicated that they intended its use to be limited, and implied that the

[319] 133 CONG. REC. S997-02 (1987).

[320] 133 CONG. REC. S29538-01 (1987).

[321] *Id.*

[322] 133 CONG. REC. S16641-01 (1987).

[323] 133 CONG. REC. S3327-02 (1987).

[324] 133 CONG. REC. S29826-01 (1987).

[325] 133 CONG. REC. S3327-02 (1987).

[326] H.R. 2310, 100th Cong. (1987).

[327] H.R. REP. NO. 100-484, at 69–70 (1987).

federal government had the existing legal authority to combat discrimination on airport construction projects by foreign countries without having to resort to this Buy America provision. Although clear majorities of both houses of Congress understood the legislation was intended to be used immediately to discriminate against goods and services from certain trading partners (specifically including Japan), it has never been used for that purpose.

Within days of the Conference report, the reconciled bill was signed into law by President Reagan,[328] and it remains in effect today.[329] However, it only operates to restrict the purchase of goods and services from countries that the U.S. Trade Representative determines to deny fair market opportunities to U.S. contractors. On April 29, 2011, the U.S. Trade Representative announced that it had "determined not to list any countries as denying fair market opportunities for U.S. products, suppliers, or bidders in foreign government-funded airport construction projects."[330] Therefore, the 1987 AIP Buy America legislation is not currently effective in restricting AIP funds to foreign contractors.

2. Aviation Safety and Capacity Expansion Act of 1990.—The primary AIP Buy America provision today is the result of a multi-year effort by Representative James Traficant to impose Buy America requirements on federal funds (including grant funds) throughout the government. In 1989, Representative Traficant stated that the 1987 efforts by Senator Murkowski and others to gain access to the Japanese airport construction industry had "failed so far. In my district we have lost the whole steel industry."[331] Representative Traficant went on to state that the U.S. government helped Japan to build its own steel industry, in the process harming the U.S. economy. This was the impetus for Representative Traficant's Buy America efforts.

a. Unsuccessful Attempts at Legislation (1989–1990).—In the AIP context, Representative Traficant's Buy America efforts first appeared as an amendment to the Aviation Security Act of 1989,[332] which would have authorized the FAA to provide grants for explosive detection equipment at airports. Representative Traficant's amendment to the Aviation Security Act[333] would have given the FAA the discretion to prefer domestic suppliers for purchases of explosive detection equipment. Introducing the amendment on the floor of the House, Representative Traficant stated, "I think an American firm located in our country, hiring American people, keeping Americans working, should have a preference, and this amendment gives the Administrator of the Federal Aviation Administration the opportunity to grant these awards to American firms. It does not compel it."[334] The Buy America amendment was agreed upon by voice vote in the House and it was added to the bill.

The amended Aviation Security Act passed the House overwhelmingly by a 392–31 vote on September 20, 1989, and was sent to the Senate, which never acted on the bill.[335] On May 15, 1990, the President's Commission on Aviation Security and Terrorism issued a report stating that the explosive detection equipment was immature. The report "recommended that the FAA defer the requirement for widespread application of [explosive detection] systems until the technology is developed further and that every possible effort be made to encourage the development of additional sources of [explosive detection] technology."[336]

Immediately thereafter, on May 24, 1990, Representative Robert Torricelli introduced the FAA Research, Engineering, and Development Authorization Act (FAA R&D Act) of 1990,[337] which appropriated funding for FAA research grants. The bill was referred to the House Committee on Science, Space, and Technology, which was chaired by Representative Robert Roe. On June 13, 1990, Representative Roe's Committee amended the bill by adding a Buy America provision that duplicated the language from Representative Traficant's Buy America amendment to the Aviation Security Act.

In reporting its amendment to Representative Torricelli's bill, the Committee explained that it "authorizes the FAA to favor domestic firms over foreign firms in the awarding of research contracts" because the "Committee is interested in supporting American industry."[338] The amended bill was never acted upon by the House.

b. Successful Legislation—Aviation Safety and Capacity Expansion Act (1990)

i. FAA Research Grant Buy America Provision.—On June 27, 1990, Representative James Oberstar introduced the Aviation Safety and Capacity Expansion Act (ASCEA) of 1990,[339] which would authorize continued AIP funding through fiscal year

[328] Airport and Airway Safety and Capacity Expansion Act of 1987, Pub. L. No. 100-223, 101 Stat. 1486 (1987).

[329] 49 U.S.C. § 50104 (2011).

[330] Notice with Respect to List of Countries Denying Fair Market Opportunities for Government-Funded Airport Construction Projects, 76 Fed. Reg. 24,082 (Apr. 29, 2011).

[331] 135 CONG. REC. H2354-04 (1989).

[332] H.R. 1659, 101st Cong. (1989).

[333] H. Amdt. 256 to H.R. 1659, 101st Cong. (1989).

[334] 135 CONG. REC. H5781 (1989).

[335] 135 CONG. REC. H5787 (1989).

[336] H.R. REP. NO. 101-585, at 9 (1990).

[337] H.R. 4949, 101st Cong. (1990).

[338] H.R. REP. NO. 101-585, at 12 (1990).

[339] H.R. 5170, 101st Cong. (1990).

1992. On July 19, 1990, Representative Roe offered an amendment to ASCEA incorporating the entire text of the FAA R&D Act.[340] This amendment included the Buy America provision for FAA research grants, which was originally drafted by Representative Traficant for explosive detection technology, and which had been incorporated into the FAA R&D Act by Representative Roe's Committee on Science, Space, and Technology.

The research grant Buy America provision would give the FAA the discretion to favor domestic firms for the award of research grants. The FAA would be allowed to provide grants to domestic firms, even if a foreign firm was the low bidder, as long as both of the following criteria were satisfied:[341]

- *Substantial Domestic Manufacture*. Any final product delivered under the research grant must be assembled in the United States of at least 50 percent domestic components.
- *Reasonable Cost*. The domestic firm's bid must be no more than 6 percent higher than the foreign bid.

However, even if both conditions were satisfied, the FAA would still be obligated to award the grant to the low foreign bidder if appropriate authorities determined that any of the following situations required it:[342]

- *Public Interest* (to be determined by the FAA Administrator, taking "into account United States international obligations and trade relations").
- *Free Trade* (to be determined by the U.S. Trade Representative if the failure to award to the low foreign bidder would violate an international trade agreement).
- *National Security* considerations.

The legislation as proposed would also require the FAA to submit a report to Congress describing all FAA research grant awards in fiscal years 1990 and 1991, including the grants made to foreign firms, any exceptions invoked to justify awards to foreign firms, and any awards to domestic firms as a result of the research grant Buy America provision.[343]

The research grant Buy America provision was unique among Buy America bills in that it did not mandate domestic preferences. Instead, it gave the FAA a defense against bid protests by foreign bidders in the event the FAA awarded a grant to a higher domestic bid.

One apparent problem with this provision, however, is that its language was clearly drafted to apply to competitive equipment procurements (i.e., explosive detection equipment) rather than research grants. First, it required the domestic bidder to establish that its "final product" was manufactured substantially of domestic components.[344] Generally, however, most research grant funds go toward research services rather than the cost of product manufacturing, so this requirement would not apply to most grants. Second, unlike procurement contracts, research grants typically do not have to be granted to the lowest competent bidder. The FAA could therefore reject a lower foreign bid to award the grant to a domestic bidder if the domestic grant application had more technical merit—the FAA did not need this Buy America authority to justify those domestic grant awards.

The research grant Buy America provision would appear to have very little impact on FAA grant awards. Nevertheless, Representative Roe's amendment (authorizing Buy America preferences for FAA research grants) was adopted by voice vote in the House with no recorded debate regarding the research grant Buy America provision.[345]

ii. AIP Buy America Provision.—Immediately after the House adopted the research grant Buy America provision, Representative Traficant offered a second Buy America amendment to the ASCEA that would restrict AIP funds to projects where "steel and manufactured products used in such project are produced in the United States."[346] There were four exceptions:

- *Public Interest*.
- *Unavailability* ("materials and products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality").[347]
- *Unreasonable Cost* ("inclusion of domestic material will increase the cost of the overall project contract by more than 25 percent").[348]
- *Substantial Domestic Manufacture* ("final assembly of the *facility* or equipment" in the U.S., and "the cost of components and subcomponents which are produced in the United States is more than 60 percent of the cost of all components.")[349] (emphasis added.)

This provision was markedly stricter than Representative Traficant's earlier attempts to enact

[340] H. Amdt. 583 to H.R. 5170, 101st Cong. (1990).

[341] 133 CONG. REC. H5075 (1990).

[342] *Id.*

[343] *Id.*

[344] *Id.*

[345] 133 CONG. REC. H5097 (1990).

[346] H. Amdt. 584 to H.R. 5170, 101st Cong. (1990).

[347] 133 CONG. REC. H5097 (1990).

[348] *Id.*

[349] *Id.*

Buy America provisions regarding airport grants. Unlike Representative Trafficant's earlier attempt to impose Buy America requirements on explosive detection equipment (which language was later adopted for FAA research grant funds), this new amendment adopted the STAA Buy America approach of codifying the Substantial Domestic Manufacture requirement as an *exception*, requiring a waiver. Therefore, unlike the BAA, the AIP provision would require facilities and equipment to be composed *entirely* of domestic goods unless there was an affirmative finding that the facility or equipment was *substantially* composed of domestic goods.

Also, like the STAA Buy America provision, the Substantial Domestic Manufacture in the AIP provision adopted the criteria of 60 percent domestic manufacture (in terms of cost), and required the cost analysis to extend to the subcomponent level. However, whereas the Substantial Domestic Manufacture exception to the STAA provision applied only to rolling stock, the AIP provision would apply to *all* equipment and facilities acquired with AIP grants. Although the bill only purported to restrict the purchase of foreign steel and manufactured goods, the cost of unmanufactured goods used as components (or subcomponents) of manufactured goods or facilities must be considered under the literal text of the Substantial Domestic Manufacture exception.

Also, this AIP Buy America provision adopted the STAA Unreasonable Cost differential of 25 percent applied to the overall project cost. This was much stricter than the standard 6 percent surcharge applied to foreign line items in the BAA, and also much stricter than Representative Traficant's own earlier attempts to enact Buy America provisions for airport funds.

Despite the much stricter Buy America language of Representative Traficant's AIP amendment in comparison to other Buy America requirements for federal transportation funds, there was very little debate on the amendment. The debate does not reflect that the legislators realized the revolutionary nature of applying the Substantial Domestic Manufacture test to the overall cost of facilities. Representative Glenn Anderson spoke in favor of the AIP Buy American provision, stating that it was "very similar to the provisions that apply to our surface transportation programs [which] have worked well since adopted by the Congress in 1982. There is no reason why we should not apply these provisions to the aviation programs."[350] Likewise, Representative Oberstar stated that the provision "is now law and has been statutory law in the Federal Highway Program since 1982. It has been tremendously successful in assuring that all of the steel that goes into the Federal Highway Program is American steel."[351] There were no remarks made in opposition to the amendment, and it was adopted by voice vote in the House on July 19, 1990.[352]

iii. Reconciliation and Passage.—On August 2, 1990, the amended ASCEA, containing the Buy America provisions for AIP grants and FAA research grants, overwhelmingly passed the House by a 405–15 vote and was sent to the Senate, where it was referred to the Committee on Commerce and never acted upon. However, on October 16, 1990, Representative Leon Panetta, Chairman of the House Committee on the Budget, introduced the Omnibus Budget Reconciliation Act of 1990 to resolve differences in spending bills passed by the House and the Senate.[353] This bill incorporated in its entirety the ASCEA, as approved by the House, including the two Buy America provisions for AIP grants and FAA research grants. In announcing the legislation, the House Committee on the Budget announced that it intended for the legislative history of the ASCEA "to also serve as the legislative history for similar provisions in Reconciliation."[354]

On October 27, 1990, a conference of House and Senate members reported a reconciled bill, adopting the two FAA Buy America provisions previously passed by the House, in the absence of similar provisions in the Senate budget. In describing the FAA research grant Buy America provision, the Conference Report stated that it "authorizes the Administrator of the FAA to award a contract to a domestic firm under certain circumstances that under the use of competitive procedures would be awarded to a foreign firm."[355] In reality, however, the research grant Buy America provision applied to research grants, which were not necessarily bound by competitive bidding requirements.

In describing the AIP Buy America provision, the Conference Report stated that it "[r]equires FAA to utilize products made in America, subject to exceptions," and "prohibits FAA contracts with foreign companies whose government is found by the President to be engaging in procurement practices which discriminate against U.S. companies."[356] This latter prohibition was not actually in the AIP Buy America provision, but rather had been federal law since 1987 by virtue of Senator Murkowski's amendment to the AASCEA. There is therefore little indication that most congressional members

[350] 133 CONG. REC. H5098 (1990).

[351] *Id.*

[352] *Id.*

[353] H.R. 5835, 101st Cong. (1990).

[354] H.R. REP. NO. 101-881, at 167 (1990).

[355] 136 CONG. REC. H12706 (1990).

[356] 136 CONG. REC. H12703 (1990).

fully understood how these Buy America provisions would impact FAA grant programs.

The reconciled budget was debated briefly in both houses, but there was no recorded debate regarding the two FAA Buy America provisions. The measure narrowly passed the House by a 228–200 vote, and passed the Senate by a 54–45 vote, on October 27, 1990. The measure, including the two FAA Buy America provisions, was signed into law by President George H.W. Bush on November 5, 1990.[357]

Airport development appropriations by Congress in subsequent years expressed the "sense of the Congress that, to the greatest extent practicable, all equipment and products purchased with funds made available in this Act should be American-made," and required the FAA to include a notice describing that sense of Congress in any grant instrument.[358] However, the FAA research grant provision and the AIP provision remained the only substantive Buy America provisions binding on subsequent appropriations for research grants and AIP grants, respectively.

iv. Regulatory Implementation.—After passage of the AIP Buy America provision, the FAA appears to have initially adopted the regulations imposed on FTA grantees implementing the STAA Buy America provision. The C.F.R. still states that the procedures in 49 C.F.R. § 660 (corresponding to the 1978 STAA Buy America provision) and 49 C.F.R. § 661 (corresponding to the revised STAA Buy America provision) are applicable to recipients of FAA grant funds due to the enactment of the AIP Buy America provision.[359] (The C.F.R. also states that "additional" nonregulatory Buy America guidance is available in FAA Order 5100.38, the AIP Handbook, and additional conditions may be contained in individual grant awards.[360])

It is unclear why the FTA grant regulations were initially adopted for FAA AIP grants. The 1978 STAA Buy America provision (which had a $500,000 threshold before it became applicable) was already obsolete when the AIP Buy America provision was enacted in 1990, and the requirements of the two provisions were markedly different. (49 C.F.R. § 660 was formally removed from the C.F.R. in 1995 as obsolete.[361]) The revised STAA Buy America provision was very similar to the AIP Buy America provision (with no project cost threshold, a 25 percent Unreasonable Cost surcharge, and a 60 percent Substantial Domestic Manufacture requirement for both components and subcomponents). However, the Substantial Domestic Manufacture exception in 49 C.F.R. § 661 expressly applied only to rolling stock, whereas in the AIP Buy America provision it applied to all equipment and facilities.

However, as discussed previously, the FAA was authorized in 1995 to adopt its own AMS, to which the FAR does not apply.[362] The AMS includes a clause to be inserted in FAA contract instruments for FAA lines of business where 49 U.S.C. § 50101 "takes precedence" over the BAA for AIP grant projects.[363] Similar notices are required to be inserted into contract instruments between AIP grant recipients and their contractors on AIP-funded projects. These notices require the contractor to certify that steel and manufactured products are produced domestically, and to treat components of unknown origin as if they are foreign goods. The contractor must identify foreign products in writing prior to contract award.

3. Trade Agreements and the AIP Buy America Provision.—In signing on to the WTO Agreement on Government Procurement, the United States defined "procurement" to exclude "non-contractual agreements or any form of government assistance, including cooperative agreements, grants, …and governmental provision of goods and services to persons or governmental authorities not specifically covered under U.S. annexes to this agreement."[364] Likewise, in NAFTA, "procurement" is defined to exclude "non-contractual agreements or any form of government assistance, including cooperative agreements, grants, …and government provision of goods and services to persons or state, provincial and regional governments."[365] Therefore, goods from foreign trading partners are not treated as domestic goods for purposes of the AIP Buy America provision.

In testimony before Congress on May 19, 1994, Allan Mendelowitz of the GAO explained that, during the 1993 Uruguay Round to improve the Agreement on Government Procurement, the European Union (E.U.) considered subjecting its telecommunications industry to the Agreement if the United States would eliminate Buy America requirements in its federally funded airport, high-

[357] Omnibus Budget Reconciliation Act of 1990, Pub. L. No. 101-508, 104 Stat. 1388 (1990).

[358] Department of Transportation and Related Agencies Appropriations Act, Pub. L. No. 104-50, § 329 (1995).

[359] 49 C.F.R. § 19.44(f)(1) (2011).

[360] *Id.*

[361] 60 Fed. Reg. 65,597 (Dec. 20, 1995).

[362] *See supra* Pt. II.D.ii.

[363] Fed. Aviation Admin., Acquisition Mgmt. Guidance, T3.6.4-5 (Apr. 1996).

[364] World Trade Org., Agreement on Government Procurement, App. 1, United States, General Notes, WT/Let/672 (Mar. 22, 2005), *available at* http://www.wto.org/english/tratop_e/gproc_e/usagen.doc.

[365] North American Free Trade Agreement, Part IV: Government Procurement, ch. 10, § A, art. 1001.

way, and transit projects.[366] The parties did not achieve a compromise, because "in the end the two sides considered these areas too sensitive to be included."[367] However, in a subsequent 1994 United States–E.U. bilateral agreement in Marrakesh, Morocco, the E.U. agreed to subject its electric utilities and ports to the Agreement, in return for the United States granting preferential treatment for E.U. contractors at "several port authorities (including their airports)."[368] Although the FAA is expressly excluded from the Agreement on Government Procurement, a number of government-controlled entities including Port Authorities are required to adhere to the Agreement. However, with respect to those entities, "the Agreement shall not apply to restrictions attached to Federal funds for airport projects."[369] Therefore, the AIP Buy America provision continues to restrict purchases of goods from foreign trading partners using AIP funds, even if the airport sponsor is a port authority who is otherwise bound by the Agreement.

4. Vision 100—Century of Aviation Reauthorization Act of 2003.—The AIP Buy America provision was revisited in 2003 when Congress reauthorized funding for the FAA with the Century of Aviation Reauthorization Act[370] (Vision 100), introduced by Representative Don Young and cosponsored by Representative Oberstar, Representative Peter DeFazio, and Representative John Mica. On June 11, 2003, Representative Don Manzullo introduced an amendment that would require the Secretary of Transportation to report to Congress on all waivers granted under the AIP Buy America provision.[371] As introduced, the legislation would have required the report to list all waivers granted since the 1990 enactment of the AIP Buy America provision and the reason for each waiver, including the specific exception that was invoked and the rationale for granting each specific waiver.

In introducing the legislation, Representative Manzullo expressed his concerns about subjective applications of the Substantial Domestic Manufacture requirement in most Buy American legislation:

> Most people would say that term "substantially all" means 80 to 90 percent or even 99 percent. However, the regulators at the Federal Government say "substantially all" means only 50 percent. I am glad to say that at the Federal Aviation Administration, "substantially all" is defined as 60 percent for the acquisition of steel or manufactured goods according to the 1995 acquisition regulations which the FAA authorized back then.[372]

Although Representative Manzullo was pleased that the AIP 60 percent Substantial Domestic Manufacture requirement was encoded in the legislation and implementing regulations, he was concerned that the lack of an oversight mechanism created the possibility of subjective application of the requirements:

> I am disturbed…at the instance of waivers allowed by the FAA. …It has been 8 years since the Secretary of Transportation was last required to report to Congress on procurements that were not domestic products. This amendment will require a report that will bring us current information on this subject.[373]

The amendment was agreed upon without opposition by a 426–0 vote in the House on June 11, 2003. However, many members of Congress (including possibly Representative Manzullo and the Vision 100 sponsors) appeared to be under the impression that this legislation was directed toward the procurement of aircraft. Speaking in support of the legislation, Representative Manzullo complained that "[c]ivil aircraft and aircraft components purchased by the FAA are not subject to the Buy American Act." Representative Manzullo encouraged passage because the FAA was soliciting bids for a "research and development multi-engine jet aircraft at $14.9 million that could be bought with U.S. taxpayers' dollars from foreign countries at a time when tens of thousands of air and space workers in this country are unemployed."[374] Representative DeFazio, speaking in support of the amendment, complained that domestic aircraft engine manufacturers were not eligible for certain "subsidies and development grants" made available to their foreign counterparts, and that the federal government was "using taxpayer resources to outsource to foreign vendors in this very critical sector."[375] Likewise, Representative Mica stated, "We have lost about half of the large aircraft manufacturing, we produce no regional jets in the United States, and I think the very least we can do is have a Buy America provision that has teeth, that has provisions that will ensure that our manufactured goods are respected by the mandates set down by Congress to Buy America."[376] Representative

[366] ALLAN MENDELOWITZ, INTERNATIONAL TRADE: EFFORTS TO OPEN FOREIGN PROCUREMENT MARKETS, REP. NO. GAO/T-GGD-94-155, at 7 (1994), http://www.gao.gov/assets/110/105571.pdf.

[367] *Id*. at 7.

[368] *Id*. at 4.

[369] World Trade Org., Agreement on Government Procurement, U.S. App. 1, Annex 3, WT/Let/672 (Mar. 19, 2010), *available at* http://www.wto.org/english/tratop_e/gproc_e/usa3.doc.

[370] H.R. 2115, 108th Cong. (2003).

[371] H. Amdt. 161 to H.R. 2115, 108th Cong. (2003).

[372] 145 CONG. REC. H5227 (2003).

[373] *Id.*

[374] *Id.*

[375] *Id.*

[376] *Id.*

Oberstar cautioned that an overly protective Buy America provision might cause foreign aircraft manufacturers to avoid using U.S. manufacturers, pointing to a decline in U.S. manufactured parts being used by Airbus.[377] In reality, the AIP Buy America provision has nothing to do with federal procurement of aircraft.

Immediately after voting to approve Representative Manzullo's amendment, Vision 100 passed the House by a 418–8 vote and was sent to the Senate. The following day, the Senate took up its version of the FAA reauthorization,[378] introduced by Senator John McCain without any provisions addressing the AIP Buy America provision. A conference between House and Senate members was arranged to resolve the differences between the two bills. The Conference Report reconciling the two bills adopted Representative Manzullo's provision, in the absence of any similar provision in the Senate version, but weakened it. The Conference Report indicates that the conferees agreed to insert Representative Manzullo's provision, but limited the scope of the report to be produced by the Secretary of Transportation "to waiver[s] granted during the previous 2 years,"[379] rather than all waivers ever granted under the AIP Buy American provision.

The reconciled bill, including the requirement for FAA to report on all AIP Buy American waivers over the previous 2 years, narrowly passed the House on October 30, 2003, by a 211–207 vote. Vision 100 passed the Senate by unanimous consent on November 21, 2003, and was signed into law by President George W. Bush on December 12, 2003.[380]

The author was unable to locate the FAA report to Congress covering all AIP Buy America waivers from 2002–03. The FAA's annual reports to Congress on the AIP program for that timeframe do not address AIP Buy America waivers.[381] However, in response to an inquiry from the author, in August 2011, the APP-500 Office contacted a now-retired employee, who confirmed that the report on AIP Buy America waivers was prepared and submitted to Congress in 2004 as required.

[377] *Id.*

[378] S. 824, 108th Cong. (2003).

[379] H.R. REP. NO. 108-334, at 178 (2003).

[380] Pub. L. No. 108-176, 117 Stat. 2490 (2003).

[381] FED. AVIATION ADMIN., REPORT TO CONGRESS: TWENTIETH ANNUAL REPORT OF ACCOMPLISHMENTS UNDER THE AIRPORT IMPROVEMENT PROGRAM—FISCAL YEARS 2001, 2002, AND 2003 (May 2004), http://www.faa.gov/airports/aip/grant_histories/media/annual_report_2001-03.pdf.

D. American Reinvestment and Recovery Act

i. Statutory Language

In 2009 Congress passed ARRA,[382] known popularly as the "stimulus bill." ARRA appropriated $200 million "for necessary *investments* in [FAA] infrastructure," including "improvements to power systems, air route traffic control centers, air traffic control towers, terminal radar approach control facilities, and navigation and landing equipment"[383] (emphasis added). According to the statutory language, the AIP Buy America provision applied to the $200 million for investments in FAA infrastructure.[384] ARRA also appropriated $1.1 billion for the FAA "to make *grants* for discretionary projects," including "the procurement, installation and commissioning of runway incursion prevention devices and systems at airports"[385] (emphasis added). According to the statutory language, the AIP Buy America provision appeared *not* to apply to the $1.1 billion in airport development grants.[386] However, ARRA included its own Buy American provision that applied specifically to the use of funds "appropriated or made available" as a result of ARRA, which included the discretionary grants.[387]

The ARRA Buy American provision prohibited the use of ARRA funds "for a project for the construction, maintenance, alteration, or repair of a public building or public work *unless all* of the iron, steel, and manufactured goods *used* in the project are *produced* in the United States."[388] One important distinction between the ARRA Buy American provision and both the BAA and AIP provision is that the ARRA Buy American provision applied only to construction projects, not procurement of supplies or equipment. Like the AIP Buy America provision (and unlike the BAA), the ARRA Buy America provision does not expressly apply to unmanufactured goods. Furthermore, like the AIP provision, the ARRA provision specifically applies to steel. Like the 1991 revision to the STAA Buy America provision, the ARRA provision extends domestic preferences to iron.

The ARRA Buy American provision included a number of waivers, which generally paralleled the

[382] Pub. L. No. 111-5, 123 Stat. 115 (2009).

[383] *Id.*, Div. A, Tit. XII.

[384] *Id.* (providing that "section 50101 of title 49, United States Code, shall apply to funds provided under this heading").

[385] *Id.*, Div. A, Tit. XII.

[386] *Id.* (providing that "the amount made available under this heading shall not be subject to any limitation on obligations for the Grants-in-Aid for Airports program set forth in any Act").

[387] *Id.* § 1605.

[388] *Id.* § 1605(a).

exceptions to the BAA and the waivers to the AIP Buy America provision. According to the text of the statute, the head of the federal department or agency could waive the domestic preference so as to permit the use of nondomestic iron, steel, or manufactured goods in the following cases:

- *Public Interest*. Where the use of domestic steel or manufactured goods would be "inconsistent with the public interest."[389]
- *Unavailability*. Where domestic iron, steel, and manufactured goods "are not produced in the United States in sufficient and reasonably available quantities *and* of a satisfactory quality."[390]
- *Unreasonable Cost*. Where the use of domestic iron, steel, and manufactured goods "will increase the cost of the overall project by more than 25 percent."[391]

It is important to note that there is no Substantial Domestic Manufacture exception in the ARRA Buy American provision. The implication is that all *manufactured* construction materials on projects subject to the ARRA provision must be made entirely of domestic components, unless another exception is satisfied, making this requirement appear to be stricter than the AIP Buy America provision. However, unlike the AIP provision, the ARRA Buy American provision contains no requirement to evaluate the cost of all components and subcomponents of the constructed *facility*. Therefore, it is conceivable that, in a project subject only to the ARRA provision, the constructed facility could be composed substantially of unmanufactured foreign goods (e.g., aggregate and Portland cement) so long as the reinforcing steel is domestic. In that regard, the ARRA Buy American provision may be weaker than the AIP Buy America provision for some construction projects.

The Public Interest exception is repeated almost verbatim from the BAA and the AIP Buy America provision. In addition, the ARRA provision makes clear that it "shall be applied in a manner consistent with United States obligations under international agreements."[392] This may indicate that some members of Congress intended goods from trading partners to be treated as domestic goods. If so, this would be a weaker domestic preference requirement than the AIP provision, which does not extend domestic treatment to goods from foreign trading partners.

The Unavailability exception differs from the AIP Buy America provision in its use of the word "and" rather than "or." Literally, it would appear that this imposes a two-part test for demonstrating that domestic goods are unavailable for ARRA-funded projects: insufficient quantities *and* unsatisfactory quality. If so, then this would be a somewhat stronger domestic preference requirement than the AIP provision, which only literally requires one of the conditions to be met.

Identical to the AIP Buy America provision, the ARRA provision imposes a fixed numeric value on the Unreasonable Cost differential, such that domestic goods must be used unless that would increase the total project cost by more than 25 percent.

Unlike the AIP Buy America provision, if a waiver to the ARRA provision is granted for *any* reason, the head of the federal department or agency is required to publish "a detailed written justification" for the waiver in the *Federal Register*.[393] Although this requirement has long applied to other transportation grants, publication of Buy America waivers was a new requirement for FAA grants.

Based solely on the statutory language, it is unclear whether Congress intended to create a stronger or weaker domestic preference requirement for ARRA-funded projects than that which applied generally to AIP grants. The following section investigates the congressional history of this provision.

ii. Legislative History

1. Reporting.—Prior to ARRA, there was very little publicly available information about Buy America requirements or waivers regarding airport grants. However, due to the magnitude of the ARRA stimulus package, paramount concerns for Congress were transparency and public disclosure (including the ARRA Buy America provision). Speaking in favor of the stimulus bill in the House, Representative Oberstar stated that it would create American jobs—"jobs that cannot be outsourced to another country, because the work must be done here in the U.S. on our roads, bridges, transit and rail systems, airports…."[394] Representative Oberstar indicated that both the supplemental transportation grant funding and the ARRA Buy American provision originated with a proposal he made in December 2008. He said that grant recipients would be held accountable for creating American jobs, as the bill would "require reporting by every State DOT, every transit agency, every airport authority, every 30 days on the contract awarded."[395]

[389] *Id.* § 1605(b)(1).

[390] *Id.* § 1605(b)(2).

[391] *Id.* § 1605(b)(3).

[392] *Id.* § 1605(d).

[393] *Id.* § 1605(c).

[394] 155 CONG. REC. H 556, 572 (2009).

[395] *Id.*

An architect of the Senate version of the ARRA Buy American provision, Senator Sherrod Brown, stated that public accountability was an important component of it. He said that 84 percent of Americans supported the Buy American provision: "They ask three things: first, that we be accountable in doing this right; second, they ask that the jobs be in the United States; third, they ask that the materials used for this infrastructure also be made in the United States."[396]

Senator Brown stated that the executive branch in the past "simply turned its back" on other Buy America requirements in federal law: "They simply did not enforce it. They granted waivers, waivers that were not even public."[397] Publicizing all waivers was an important part of the public accountability component of the ARRA Buy American provision.

2. Manufactured Goods and Unmanufactured Construction Materials.—As originally introduced in the House on January 26, 2009, the ARRA Buy American provision would require "all of the iron and steel used in the project [to be] produced in the United States."[398] Therefore, the original bill did not extend domestic preferences to other construction materials or manufactured goods, which probably explains why it contained no Substantial Domestic Manufacture exception (to allow manufactured goods that contain insubstantial foreign components).

The original bill expressly referenced the BAA, and expressly stated that the new ARRA Buy American provision, like the BAA, applied to contracts for the construction, alteration, maintenance, or repair of airports.[399] Unlike the BAA, however, the stimulus bill did not extend to equipment procurement. The bill was introduced with support of the National Association of Manufacturers (NAM). A letter from John Engler, President and Chief Executive Officer of NAM, was read on the floor of the House, which specifically endorsed the aviation grant funds:

> Providing additional funding to states and localities struggling to make progress on the growing backlog of transportation infrastructure projects will go a long way to strengthen our nation's transportation infrastructure, a critical priority for manufacturers. Similarly, funding a 21st century satellite-based air traffic control system will significantly enhance safety and energy efficiency while relieving congestion at our nation's crowded airports.[400]

However, the bill as introduced in the House appeared to have no funding for air traffic control equipment. Furthermore, because the House version did not extend Buy American protection to manufactured goods, there was no requirement for such equipment to be domestic.

During debate in the House, Representative Oberstar stated that his original proposal would have required "the steel, iron, and *manufactured goods* required for these projects [to] be manufactured in the United States," although he noted that the bill as introduced "does not include everything I had proposed."[401] Representative Tim Murphy also complained that Buy American amendments he proposed regarding software and construction materials were "mysteriously" omitted from the version of the bill introduced in the House.[402] He said that his construction materials amendment was targeted at avoiding "loopholes" that would permit the use of "Chinese steel. Our concrete, our rebar…ought to be made in America. From the iron mines to the manufacturers, to the mills, let's use it to buy America. Let's return those amendments to this bill."[403] Likewise, Representative Carolyn Kilpatrick complained that she "hoped for stronger 'Buy American' language for our automobile manufacturers and steel, concrete, asphalt, and aggregate suppliers."[404] She wanted to extend the ARRA Buy American requirements to "make sure that 100 percent of the stimulus plan dollars uses American steel, lumber, electronics, cement, asphalt, and other materials, services, and workers."[405]

However, aside from these complaints that the provision did not go far enough, there was no serious opposition recorded in the House to the ARRA Buy American provision. The House passed its version of ARRA 244–188 on January 28, 2009, without extending domestic preferences to additional construction materials or to manufactured goods. The version of ARRA that was introduced in the Senate on January 30, 2009, extended the Buy American provision to *manufactured goods* in addition to iron and steel.[406] Senator John McCain led opposition to the ARRA Buy America provision in the Senate. "The Senate version of the stimulus bill goes beyond the stark protectionism of its House counterpart in a way that risks serious damage to our economy," he stated, because the Senate version extended Buy American requirements to manufactured goods.[407] To counter the support of

[396] 155 CONG. REC. S2103 (2009).

[397] *Id.*

[398] H.R. 1, § 1110, 111th Cong. (2009).

[399] *Id.*

[400] 155 CONG. REC. H623 (2009).

[401] 155 CONG. REC. H572 (2009).

[402] 155 CONG. REC. H573 (2009).

[403] *Id.*

[404] 155 CONG. REC. H633 (2009).

[405] 155 CONG. REC. H634 (2009).

[406] S. Amdt. 98 to H.R. 1, § 1604, 111th Cong. (2009).

[407] 155 CONG. REC. S1392 (2009).

NAM, Senator McCain presented over 100 industry signatories to a statement that the ARRA Buy American provision would damage the U.S. economy, and he presented statements from world leaders, including President Barack Obama, in opposition to the ARRA Buy American provision.[408]

Senator McCain's opposition to coverage for manufactured goods was ineffective, and the final version of ARRA extends domestic preferences to iron, steel, and manufactured goods. However, because the ARRA Buy American provision applied only to construction projects, its domestic preference for manufactured goods could only protect manufactured construction materials, not equipment procurement. The question naturally arises, then, whether manufactured goods include such common construction materials as asphalt, Portland cement, and lumber. Under the BAA, these might fit the category of unmanufactured goods that are "produced" (as opposed to either manufactured goods or raw goods that are "mined"). Some members of Congress clearly wanted the ARRA Buy American provision to apply to cement and asphalt. However, those same members wanted the ARRA Buy American provision to apply to mined goods such as aggregate. The term "manufactured goods" was simply not defined in the statute, nor was the definition debated in Congress, and different members of Congress undoubtedly had different opinions as to what it meant.

3. Grants vs. Direct Procurements.—As originally introduced in the House on January 26, 2009, ARRA would have provided $3 billion for federal airport grants.[409] In the original version, there was no express application of the AIP Buy America provision to those funds. It may have been implied because the funds were for discretionary airport development grants, subject to "the conditions, certifications, and assurances required for grants under" the "Airport Improvement" subchapter of the U.S. Code.[410] Although the AIP Buy America provision itself is not found in that subchapter, it applies to grants under that subchapter. Regardless of whether the ARRA authors intended to apply AIP Buy America requirements to airport grant funding under ARRA, they certainly intended to apply the ARRA Buy American provision to purchases of iron and steel with ARRA funds.

In the version of ARRA introduced in the Senate on January 30, 2009, funding for discretionary airport grants was reduced from $3 billion (in the House bill) to $1.1 billion for airport development grants.[411] However, the Senate version allocated an additional $200 million for direct investment in FAA infrastructure, including "air route traffic control centers, air traffic control towers, terminal radar approach control facilities, and navigation and landing equipment."[412] The original Senate version of ARRA expressly stated that the AIP Buy America provision would apply to both types of airport funds (airport development grants and FAA infrastructure investments) appropriated under ARRA.[413]

On February 4, 2009, Senator McCain proposed an amendment that would not only strike the ARRA Buy American provision in its entirety, but also stated affirmatively that ARRA funds "shall not be subject to any Buy American requirement," such as the AIP Buy America provision or the BAA.[414] Senator McCain's amendment was rejected by a vote of 65–31. The following day, Senator McCain proposed a substitute version of ARRA that also contained no Buy American provision.[415] This version would have increased discretionary airport grant funding to $1.5 billion, and further expressly provided that those funds would not be subject to any Buy American restriction in any statute, including the AIP Buy America provision and the BAA.[416] Speaking in favor of his proposal, Senator McCain said that "airport infrastructure improvements are necessary."[417] However, he said that the ARRA Buy American provision would be counterproductive: "We alarmed the world with the 'Buy American' provisions which are included in this bill."[418] Senator McCain's proposed substitute was rejected by a 57–40 vote in the Senate.[419] Therefore, the Senate twice rejected attempts to remove either the ARRA Buy American provision or the AIP Buy America provision from airport funding under ARRA.

On February 11, 2009, a conference was initiated between members of the House and Senate to reconcile conflicting provisions of the versions of ARRA that had passed each house. The reconciled bill that emerged from the conference adopted the Senate-approved appropriations of $1.1 billion for airport development grants ("to repair and improve

[408] 155 CONG. REC. S1529 (2009).

[409] 155 CONG. REC. H665 (2009).

[410] *Id.*

[411] 155 CONG. REC. S1153 (2009).

[412] *Id.*

[413] *Id.*

[414] S. Amdt. 297 to H.R. 1, 111th Cong. (2009); 155 CONG. REC. S1494 (2009).

[415] S. Amdt. 364 to H.R. 1, 111th Cong. (2009); 155 CONG. REC. S1692–S1707 (2009).

[416] 155 CONG. REC. S1703 (2009) (providing that "the amount made available under this heading shall not be subject to any limitation on obligations for the Grants-in-Aid for Airports program set forth in any Act").

[417] 155 CONG. REC. S1619 (2009).

[418] 155 CONG. REC. S1619 (Feb. 5, 2009).

[419] 155 CONG. REC. S1659 (Feb. 5, 2009).

critical infrastructure at our nation's airports") and $200 million in supplemental FAA funding (to upgrade, modernize, and replace FAA air traffic control towers and equipment; power systems; and lighting, navigation, and landing equipment).[420]

Curiously, the version of ARRA that emerged from the conference dropped the express requirement for the AIP Buy America provision to apply to the $1.1 billion appropriated for airport development grants. Instead, the Conference Report adopted Senator McCain's proposed language (which had been twice rejected in the Senate) that the $1.1 billion in airport improvement grants would "not be subject to any limitation on obligations for the Grants-in-Aid for Airports program set forth in any Act."[421] However, the Conference Report retained the requirement for the AIP Buy America provision to apply only to the $200 million in supplemental FAA funding (which ordinarily would be subject to the BAA rather than the AIP provision). This may suggest that the conferees intended there to be no Buy American requirements (either the AIP provision or the ARRA provision) attached to the $1.1 billion in airport development grants. However, the conference changes to the airport improvement funding were not addressed in further recorded congressional debate.

4. Free Trade.—Senator McCain's primary opposition to the ARRA Buy American provision was his contention that it violated several international agreements, including the WTO Agreement on Government Procurement and the government procurement provisions of NAFTA, and he expected foreign trading partners to retaliate.[422]

Senator Byron Dorgan, one of the authors of the Senate version of the ARRA Buy American provision, responded to this criticism by saying that the ARRA provision "does not violate trade agreements because it will largely come from State grants for public works projects,"[423] implying that trade agreements do not apply to grants. Senator Dorgan questioned how the ARRA Buy American provision could possibly violate U.S. trade agreements since it was similar to the BAA and other Federal Buy America requirements such as the AIP Buy America provision.[424]

In response to the criticism, Senator Dorgan introduced an amendment that replaced the express reference to the BAA with a statement that the ARRA Buy American provision "shall be applied in a manner consistent with United States obligations under international agreements."[425] However, this did not directly address Senator McCain's position that the ARRA Buy American provision itself was inconsistent with such obligations. Opponents of domestic preferences could interpret the language to mean that the ARRA Buy American provision did not restrict purchases from trading partners using grant funds. Supporters of domestic preferences could interpret it to mean that the ARRA Buy American provision does restrict purchases from foreign trading partners using grant funds, because international trade agreements do not apply to grants. (For example, the AIP Buy America provision does not confer domestic goods status on goods from foreign trading partners.)

Senator McCain clearly believed that the Dorgan amendment was a subterfuge and a "direct contradiction" to the ARRA Buy American provision itself.[426] However, Senator Charles Grassley, an opponent of domestic preferences, spoke in favor of it. Senator Grassley said he understood that the ARRA Buy American provision would "carveout" an "exemption for countries that provide reciprocal access for the United States in the area of government procurement."[427] The Dorgan amendment was adopted by voice vote in the Senate on February 4, 2009, although it is unclear whether most Senators understood it to mean that goods from foreign trading partners would be treated as domestic goods where grant funds are concerned. The Senate version of ARRA, containing Senator Dorgan's amended Buy American provision, passed the entire Senate by a 61–37 vote on February 10, 2009.

The Conference Report of February 12, 2009, reconciling the House and Senate versions, adopted the Dorgan amendment. The Conference Report stated that the conferees understood the ARRA Buy American provision to be subject to the Trade Agreements Act, the WTO Agreement on Government Procurement, and other "U.S. free trade agreements and so that [the ARRA Buy American provision] will not apply to least developed countries to the same extent that it does not apply to the parties to those international agreements."[428] Therefore, members of Congress voting on the reconciled version of ARRA were put on notice that the domestic preference in the ARRA Buy American provision probably did not restrict purchases from foreign trading partners.

In congressional debate on the reconciled version of ARRA, Senator McCain reiterated his opinion that the ARRA Buy American provision might trigger retaliation from trading partners of the

[420] H.R. REP. NO. 111-16, at 469 (2009).

[421] H.R. REP. NO. 111-16, at 92 (2009).

[422] 155 CONG. REC. S1494–S1496 (2009).

[423] 155 CONG. REC. S1389 (2009).

[424] 155 CONG. REC. S1530 (2009).

[425] S. Amdt. 300 to H.R. 1, 111th Cong. (2009).

[426] 155 CONG. REC. S1528 (2009).

[427] *Id.*

[428] H.R. REP. NO. 111-16, at 512 (2009).

United States.[429] However, Senator Richard Durbin responded that any concerns had been alleviated by Senator Dorgan's amendment requiring "whatever we do [to] be consistent with our international trade agreements."[430] On February 13, 2009, the reconciled version of ARRA was approved by the House on a 246–183 vote, and approved by the Senate on a 60–38 vote. The bill was signed into law by President Barack Obama on February 17, 2009.[431]

iii. Federal Regulations

The ARRA Buy American provision was encoded in the FAR, which purports to govern *all* of the funds appropriated or otherwise made available by ARRA for construction projects, specifically including construction projects involving airports and terminals.[432] Presumably this includes both the FAA discretionary funds and airport development funds in ARRA, despite the 1995 statute making the FAR inapplicable to most FAA procurements.

The FAR confirms that, because the ARRA Buy American provision only applies to construction projects, it only restricts the use of foreign "iron, steel, and manufactured goods used as construction material in the project."[433] The FAR states that the BAA (rather than the ARRA Buy American provision) applies to the purchase of unmanufactured construction material used on ARRA-funded construction projects.[434] However, the BAA probably applies only to construction contracts made by the federal government, because nothing in the ARRA statute would apply the BAA to contracts made by airport grant recipients.

1. Manufactured Goods.—Because there was no explicit Substantial Domestic Manufacture exception in the ARRA Buy American provision, one might expect this to mean that manufactured construction materials must be assembled in the United States entirely of domestic components. This would be consistent with interpretations of other Buy America provisions in federal law, which permitted some components to be foreign only because there was a Substantial Domestic Manufacture exception in those statutes.

However, the FAR interpretation of the absence of any Substantial Domestic Manufacture exception in ARRA is that "[t]here is no restriction on the origin or place of production or manufacture of components or subcomponents that do not consist of iron or steel."[435] Therefore, only the *location* of assembly, production, or manufacture must be in the United States to satisfy the ARRA Buy American provision. Where components of the manufactured construction material are made of iron or steel, those iron or steel components must also be "produced in the United States" only if the manufactured construction material consists "wholly or predominantly of iron or steel."[436]

For example, in the case of a wooden window frame that is delivered to the construction site preassembled in the United States, "there is no restriction on any of the components, including the steel lock on the window frame."[437] Therefore, all of the components (and subcomponents) could potentially be of foreign origin, and the manufactured construction material would still be compliant with the ARRA Buy American provision so long as final assembly took place in the United States. This method of determining whether manufactured goods are domestic is unique in federal law, and is a very liberal interpretation of the ARRA Buy American provision.

2. Free Trade.—Most federal agencies take the position that concrete poured at the construction site is excluded from the ARRA Buy American provision. The logic for this exclusion is that the concrete is transformed into a manufactured construction material when all the components of concrete (e.g., Portland cement, aggregate, sand, water) are mixed, which typically takes place domestically—at or near the construction site.[438] Under the FAR implementation of the ARRA Buy American provision, the origin of the components does not matter, so there is no limitation on foreign Portland cement incorporated into an ARRA-funded construction project.

The FAR interprets the Free Trade language of the ARRA Buy American provision to mean that manufactured construction materials that are "wholly the product of or [are] substantially transformed" within the borders of a trade agreement partner will be treated as domestic manufactured construction materials, "[i]f trade agreements ap-

[429] 155 CONG. REC. S2261 (2009).

[430] 155 CONG. REC. S2265 (2009).

[431] Pub. L. No. 111-5, 123 Stat. 115 (2009).

[432] 48 C.F.R. §§ 25.600, 25.601, 25.602-1(a) (2011).

[433] 48 C.F.R. § 25-602-1(a)(1) (2011).

[434] 48 C.F.R. § 25.602-2 (2011).

[435] 48 C.F.R. § 25.602-1(a)(1)(iii) (2011).

[436] 48 C.F.R. § 25.602-1(a)(1)(ii) (2011).

[437] 48 C.F.R. § 25.602-1(a)(1)(iv)(B) (2011).

[438] *See, e.g.*, NAT'L INST. OF STANDARDS & TECH., AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) SUPPLEMENTAL BUY AMERICAN GUIDANCE FOR NIST CONSTRUCTION GRANTS 10 (2011), *available at* http://www.nist.gov/recovery/upload/FINAL-NCG-SBAG.pdf; U.S. ENVTL. PROTECTION AGENCY, BUY AMERICAN PROVISIONS OF ARRA SECTION 1605—QUESTIONS AND ANSWERS PART 2 at 6 (2009), *available at* http://water.epa.gov/aboutow/eparecovery/upload/2009_11_20_eparecovery_2009_11_18_BA_Q-As_Part2-final.pdf.

ply."[439] Since trade agreements typically do not apply to airport development grant funds, this qualifying language could be interpreted to mean that grant recipients are not to extend domestic status to goods from foreign trading partners. However, the legislative history seems clear that Congress intended to extend domestic status to goods from foreign trading partners purchased with ARRA funds.[440]

Also, according to the FAR, "if trade agreements apply, unmanufactured construction material mined or produced in a designated country may also be used."[441] Since the ARRA Buy American provision does not apply at all to unmanufactured construction materials, this latter provision appears to be surplusage. However, it is worth noting that Congress appeared to make the AIP Buy America provision inapplicable to airport development grant funds appropriated under ARRA. Therefore, for ARRA-funded airport development projects, there was no requirement to evaluate the domestic and foreign content of the constructed *facility*, so there was no limitation on purchases of foreign unmanufactured construction materials.

3. Other Exceptions.—Aside from the Free Trade exception, the FAR lists the following exceptions that could permit the purchase of foreign goods on an ARRA-funded airport development project:

- *Unavailability*. The FAR expressly adopts the BAA list of unavailable items, as well as the BAA procedural requirements for the purchasing entity to first perform market research to ensure that items on the list are not available domestically.[442] Under the AIP Buy America provision, there was no market research requirement. Therefore, there is a somewhat heightened burden on airport development grant recipients to demonstrate Unavailability when ARRA funds are involved.
- *Unreasonable Cost*. The FAR requires the 25 percent evaluation surcharge to be applied to the total bid price if the bid incorporates *any* foreign construction material.[443] This is identical to the AIP provision, but very different from the BAA, where the surcharge would only apply to the foreign goods incorporated in the offer. On ARRA-funded projects also subject to the BAA, in addition to the 25 percent ARRA Buy American surcharge on the total contract, the FAR imposes an additional 6 percent BAA surcharge to the cost of any foreign unmanufactured construction material incorporated into the bid.[444] However, this double tax on foreign purchases with ARRA funds would not apply to airport development grants, which are not subject to the BAA.
- *Public Interest*. This determination must be made by the head of the federal agency.[445] No guidance is provided for when a Public Interest exception may be warranted. However, it is clearly distinct from either the Free Trade exception or Impracticability. The FAR expressly states that Impracticability can be used only to justify the purchase of foreign unmanufactured construction materials,[446] which are not addressed in any way by the ARRA Buy American provision. It is unclear what conditions would have to exist to justify the Public Interest exception.

4. Reporting.—If any exception to the ARRA Buy American provision is invoked on a project (except for the Unavailability exception where the materials are included on the BAA list of unavailable items), the head of the federal agency is required to publish a notice of exception. The notice is to be published in the *Federal Register* within 3 days after its determination, and is to include a "detailed justification as to why the [ARRA Buy American] restriction is being waived."[447] More than anything else, it is the reporting requirement in the ARRA Buy American provision that appears to be responsible for the information that is publicly available today regarding Buy America waivers for airport development grants.

E. Penalties/Enforcement

Under the AIP program, the FAA provides airport development grants directly to the airport sponsor, with the condition that the sponsor will not purchase foreign steel or manufactured goods without a waiver from the FAA. In turn, the airport sponsor enters into procurement contracts or construction contracts with the private contractor. The sponsor is required to make AIP Buy American compliance a term of the contract. The private contractor must either certify to the airport sponsor that its bid complies with the AIP Buy American provision, or prepare a waiver request, which the airport sponsor will forward to the FAA for approval. If the contractor is unable to perform the contract in compliance with these terms, the airport sponsor would be justified in terminating the contract. In fact, the airport sponsor is probably obligated to terminate the contract under the terms of its AIP grant from the FAA.

[439] 48 C.F.R. § 25.602-1(a)(2) (2011).

[440] *See supra* Pt. III.D.ii.4.

[441] 48 C.F.R. § 25.602-2 (2011).

[442] 48 C.F.R. § 25.603(a)(1)(i) (2010).

[443] 48 C.F.R. § 25.605(a)(1) (2010).

[444] 48 C.F.R. § 25.605(a)(3) (2010).

[445] 48 C.F.R. § 25.603(a)(1)(iii) (2010).

[446] 48 C.F.R. § 25.603(a)(2) (2010).

[447] 48 C.F.R. § 25.603(b)(2) (2010).

Unlike procurement contracts and construction contracts subject to the BAA, the contractor on an AIP-funded project is not in privity with the federal government. The contractor's certification of compliance with the AIP Buy America provision is made directly to the airport sponsor, not to the federal government. Therefore, it is unlikely that a contractor could be held liable under the Federal False Claims Act for false certifications of compliance. A more interesting question is whether the contractor could be liable for false statements in its waiver request (e.g., false claims of origin of some components and subcomponents in order to qualify for the Substantial Domestic Manufacture exception). The contractor is generally aware that only the FAA (not the airport sponsor) may grant waivers, so it is at least arguable that the waiver request could contain a false statement made to the federal government. At any rate, contractors should be aware that individual states may have their own false claims statutes that would make the contractor liable for false certifications to a public airport sponsor. State false claims statutes may be stricter than the Federal False Claims Act, in that the contractor could be held liable for unknowingly making false statements (e.g., concerning the origin of components supplied by its subcontractor) and then failing to correct the information after becoming aware that it is false.

Penalties under the AIP Buy America provision are largely speculative, however, because the public record of enforcement is very sparse. There are no known instances of contracts being terminated for noncompliance, nor of additional penalties (e.g., suspension, debarment, or criminal charges) being pursued. As will be shown, however, the FAA has recently stepped up its efforts to enforce Buy America requirements on airport grant projects. Therefore, contractors should not rely on the FAA's enforcement history as a guide for the future.

i. Increased Investigation by the APP-500 Office

In the summer of 2008, the APP-500 Office selected 10 AIP projects at random to determine how the AIP Buy America provision was being enforced.[448] The audit showed that only 2 of the 10 projects satisfied the AIP Buy America requirements.[449] The APP-500 Office has not provided details of specific types of violations that were uncovered. Instead, it says that it found "an almost universal misapplication of the requirements" of the AIP Buy America provision by grant recipients.[450] There is no public record of any disciplinary measures taken in response to the violations. However, as a result of this audit, the APP-500 Office began to prepare the written guidance that eventually became PGL 10-02.[451] Also, the APP-500 Office began to review products of certain manufacturers, to establish which products contained sufficient domestic content to qualify for nationwide waivers.[452]

The APP-500 Office's increased role in enforcing AIP Buy America requirements is displayed in recent litigation between competing manufacturers of asphalt sealant,[453] which is the only known judicial or administrative case involving the AIP Buy America provision. In 2007, K.A.E. Paving Consultants (KAE) reported to the FAA that the asphalt sealant produced by its competitor, Pavement Rejuvenation International (PRI), did not comply with the AIP Buy America provision. According to KAE, the FAA confirmed that there were "violations" of the AIP provision involving the PRI product, but took no action in response.[454] In July 2009, KAE again reported to the APP-500 Office its belief that the PRI product did not comply and that PRI had made false certifications of its Buy America compliance.[455] This time, the APP-500 Office contacted PRI directly and asked PRI to complete a cost calculation worksheet to determine whether its product was domestic or qualified for a Substantial Domestic Manufacture waiver.[456] PRI's response on July 31, 2009, suggests that it believed that its product was only required to comply with the less stringent requirements of the BAA or the FAR, which do not apply to AIP projects.[457] For example,

[448] Nancy S. Williams, Buy American, Complying with the Buy American Preference Requirements for AIP Grant Projects 6 (Oct. 16, 2008), available as a download at http://conference.iesalc.org/technical-papers-documents/.

[449] *Id.* at 7.

[450] *Id.*

[451] *Id.* at 9.

[452] *Id.*

[453] Pavement Rejuvenation Int'l, L.P. v. K.A.E. Paving Consultants, Inc., No. SA-09-CA-853-H (W.D. Tex. Sep. 3, 2010).

[454] Complaint, Exh. DD, *Pavement Rejuvenation*, No. SA-09-CA-853-H (W.D. Tex. Sep. 3, 2010), *available at* 2009 WL 3636862.

[455] Complaint at 54-55, *Pavement Rejuvenation*, No. SA-09-CA-853-H (W.D. Tex. Sep. 3, 2010), *available at* 2009 WL 3636862.

[456] Pl.'s First Mot. for Partial Summary Judgment, Decl. of Brian Becker, *Pavement Rejuvenation*, No. SA-09-CA-853-H (W.D. Tex. Sep. 3, 2010), *available at* 2010 WL 4633651.

[457] Pl.'s First Mot. for Partial Summary Judgment, Decl. of Brian Becker, Exh. A, *Pavement Rejuvenation*, No. SA-09-CA-853-H (W.D. Tex. Sep. 3, 2010), *available at* 2010 WL 4633651 (providing the cost calculation worksheet "solely for the purpose of determining the Federal Aviation Administration's compliance with the BAA and the FAR").

PRI only listed the components, not subcomponents, of its product. It said that those three components (coal tar, refined coal tar, and petroleum distillate) all qualified as domestic construction materials under the FAR because they all were manufactured (i.e., "refined") domestically. PRI declined to provide the country of origin of the raw goods that were inputs to the refinement process. Therefore, PRI appeared to rely on the "substantial transformation" test used in the FAR implementation of ARRA to determine whether manufactured goods are domestic, which ignores the country of origin of the components.[458] Nevertheless, the APP-500 Office approved the submission on August 5, 2009, concluding that PRI's product "meets the Buy American Preference requirements in 49 USC 50101" based on PRI's "breakdown," and that "[a]dditional waiver paperwork is not required for AlP or ARRA projects."[459] (It is unclear why the APP-500 Office did not require PRI to demonstrate the country of origin of its raw goods or subcomponents—it may have determined that some of those subcomponents qualified for Unavailability waivers as "petroleum products" or otherwise.)

In this case, the APP-500 Office directly contacted a party that was not an AIP grant recipient or direct contractor to an AIP grant recipient, but may have been a subcontractor or supplier on an AIP-funded project, to verify that party's compliance with AIP Buy America requirements. The FAA confirmed to the author that it is not unusual for the FAA to reach out directly to a manufacturer. In some cases, the FAA has asked manufacturers to provide documentation from their subcomponent suppliers articulating the domestic content percentage of those subcomponents. AIP grant recipients should take note that the FAA will not rely solely on the grant recipients to verify the Buy America certifications of their contractors. Furthermore, in this case, the APP-500 Office made a proactive determination for the manufacturer's product, without considering the competitor's allegation in the context of a specific project or contract. For example, the PRI product would typically only be a subcomponent of a single contract for facility construction (or maintenance). In that context, even if the PRI product was foreign, it could typically qualify for a Substantial Domestic Manufacture waiver if 60 percent of the remaining components and subcomponents of the AIP-funded construction contract were domestic. However, that approach would require each contractor who proposed to supply the PRI product to request a waiver for each such contract. By proactively making a determination that this product complied with the AIP Buy America provision, the APP-500 Office eliminated future waiver requests involving this product—contractors could thereafter simply treat the product as domestic. Furthermore, on August 21, 2009, the FAA informed airport sponsors that no Unavailability waivers would be granted for asphalt sealants because it had identified two qualified domestic suppliers—PRI and KAE.[460] This newly proactive approach taken by the APP-500 Office helps airport sponsors by avoiding duplicative waiver requests and reducing the uncertainty about the compliance of specific products.

ii. Other Federal Investigation Mechanisms

In addition to the more proactive role taken by the FAA, airport grant recipients may be subject to other investigations and audits by the federal government regarding Buy America compliance on federally funded projects.

For example, in the ARRA stimulus bill, Congress created a Recovery, Accountability, and Transparency (RAT) Board to ensure transparency and prevent fraud regarding those funds.[461] The RAT Board would appear to have the authority to investigate whether expenditures of ARRA funds on airport development projects satisfied the ARRA Buy American provision.

Also, the Office of Management and Budget (OMB) has the authority to conduct audits of recipients of federal funds, including airport grants.[462] In one case, the OMB hired auditors to investigate the use of transportation grant funds by the City and County of San Francisco in fiscal year 2009.[463] The audit included $22.0 million in AIP grant funds and $1.8 million in ARRA airport development funds.[464] The auditor did not identify any violations involving San Francisco's use of transportation grant funds.[465] However, in its quality control review of the audit, the Department of

[458] *See* 48 C.F.R. §§ 25.602-1(a)(1)(iii) and 25.602-1(a)(2) (2011).

[459] Pl.'s First Mot. for Partial Summary Judgment, Decl. of Brian Becker, Exh. B, *Pavement Rejuvenation*, No. SA-09-CA-853-H (W.D. Tex. Sep. 3, 2010), *available at* 2010 WL 4633651.

[460] Pl.'s First Mot. for Partial Summary Judgment, Decl. of Mark Miller, Exh. A, *Pavement Rejuvenation*, No. SA-09-CA-853-H (W.D. Tex. Sep. 3, 2010), *available at* 2010 WL 4633651.

[461] American Reinvestment and Recovery Act of 2009, Pub. L. No. 111-5, §§ 1521–1530, 123 Stat. 115, 289–94 (2009).

[462] Single Audit Act Amendments of 1996, Pub. L. No. 104-156, 110 Stat. 1396 (1996); OFFICE OF MGMT. AND BUDGET CIRCULAR NO. A-133 (2003).

[463] Earl C. Hedges, U.S. Dept. of Transportation, Memorandum, Quality Control Review of Single Audit on the City and County of San Francisco (Feb. 23, 2011), *available at* http://www.oig.dot.gov/library-item/5504.

[464] *Id.* at 1.

[465] *Id.* at 2.

Transportation Office of Inspector General indicated that documents examined by the auditor were insufficient to determine whether San Francisco complied with the Buy America requirements attached to those funds.[466] The auditor was directed to better document Buy America compliance in future audits.[467] Airport sponsors should be prepared to provide documentation of Buy America compliance in the event that they are audited.

Clearly, the ARRA bill, with its focus on transparency, is responsible for much of the federal government's increased interest and enforcement of transportation grant Buy America provisions. Although the ARRA provisions do not apply to new funding, there is no sign that the federal government plans to relax its enforcement of Buy America provisions. Airport grant recipients should enforce applicable Buy America requirements in their grant projects, and be prepared to document their enforcement actions to the federal government.

F. Guidance for FAA Grantees

i. Airport Improvement Program Handbook

As mentioned previously, the FAR directs AIP grant recipients to FAA Order 5100.38 and the AIP Handbook for additional Buy America guidance. The most recent version of the AIP Handbook[468] contains only limited guidance for compliance with the AIP Buy America provision. First, the Handbook clarifies that "steel and manufactured products used for AIP-assisted projects must be produced in the United States."[469] Limited guidance is provided for applying the "four exceptions:"[470]

- *Public Interest* ("This is reserved for significant public interest determinations").
- *Unavailability* ("this refers to the manufacturing capability of the United States and whether it can meet demand").
- *Unreasonable Cost* ("applying this provision would increase the cost of the overall project by more than 25 percent").
- *Substantial Domestic Manufacture* ("the cost of components and subcomponents produced in the United States is more than 60 percent of the total components of a facility or equipment, and final assembly has taken place in the United States").

Discussion of the Substantial Domestic Manufacture exception in the AIP Handbook clarifies that, for equipment purchases, "'final assembly' for purposes of this provision should be substantial rather than a light bulb put in a vehicle."[471] The Handbook also clarifies that the term "component" is project-specific, and depends on whether the project is facility construction or equipment procurement. On a construction project, "the components would cover things such as rebar, lights, etc." However, for a standalone procurement of runway lighting equipment, "the components would be the lenses, etc." The Handbook does not provide guidance regarding subcomponents.

The Handbook includes the following Special Condition that applies to any AIP grant:

> Buy American Requirement: Unless otherwise approved by the FAA, the Sponsor will not acquire or permit any contractor or subcontractor to acquire any steel or manufactured products produced outside the United States to be used for any project for airport development or noise compatibility for which funds are provided under this grant. The Sponsor will include in every contract a provision implementing this special condition.[472]

The Special Condition makes it clear that, if any airport sponsor or its contractor believes that an exception to the AIP Buy America provision is satisfied, it must obtain a waiver from the FAA. The Handbook also clarifies that it is the responsibility of the FAA to ensure that the airport sponsor inserts AIP Buy America requirements (i.e., "the appropriate Federal clauses") into its contracts and solicitations.[473]

The Handbook is currently undergoing a major revision, and it is expected that the Buy America guidance will be significantly updated.

ii. FAA Program Guidance Letter 10-02

On February 24, 2010, the APP-500 Office issued PGL 10-02, directed toward compliance with both the AIP Buy America provision and the ARRA Buy American provision.[474] The PGL was intended to expand upon the guidance in the AIP Handbook, in response to questions from FAA field offices.

The PGL clarifies that all steel or manufactured products acquired or used on either an AIP- or ARRA-funded project must be "wholly produced in

[466] *Id.* at 2.

[467] *Id.* at 3.

[468] FED. AVIATION ADMIN. Order No. 5100.38C, http://www.faa.gov/airports/resources/publications/orders/media/aip_5100_38c.pdf (Jun. 28, 2005).

[469] *Id.* at 162, § 922(h).

[470] *Id.*

[471] *Id.* § 922(h)(3).

[472] *Id.*, App. 7, § T, at 5.

[473] *Id.* at 162, § 922(h).

[474] FED. AVIATION ADMIN., PROGRAM GUIDANCE LETTER NO. 10-02, GUIDANCE FOR BUY AMERICAN ON AIRPORT IMPROVEMENT PROGRAM (AIP) OR AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) PROJECTS (Feb. 24, 2010), http://www.faa.gov/airports/aip/guidance_letters/media/PGL_10_02.pdf.

the US of US materials," or else a waiver must be obtained.[475] The PGL states that waivers are available only for the following four reasons:

- Public Interest.
- Unavailability.
- Substantial Domestic Manufacture.
- Unreasonable Cost.

The PGL states that only FAA Headquarters can issue a Public Interest or Unavailability waiver. FAA field offices (Airport District Offices (ADO), or Regional Offices where there is no ADO) may issue the Substantial Domestic Manufacture and Unreasonable Cost waivers.[476] The PGL mainly addresses the Substantial Domestic Manufacture exception. The process for obtaining a waiver follows.

The airport sponsor, upon receiving an AIP grant for a project, issues requests for bids. The selected contractor must either certify to the airport sponsor that it can comply with the AIP Buy America provision, or otherwise submit waiver requests to the airport sponsor, who forwards the requests to the ADO or Regional Office. The number of AIP grants issued in a given year ranges from 2,500 to 4,000, and each grant may include from 5 to 10 projects. The PGL estimates that the majority of projects will require at least one waiver.[477] Because there are so many project-specific waiver requests or waiver certifications in any given year, and because the AIP Buy America provision (unlike the STAA Buy America provision or the ARRA Buy American provision) does not require all waivers to be published or made public, there is no public record of AIP waivers and waiver requests. Therefore, when an airport sponsor or contractor makes a project-specific waiver request, they do not know whether waivers have been granted in similar situations at other airports. Also, final decision-making authority for most project-specific waiver requests is delegated down to the field office level, and it is possible that one field office might grant waivers in situations where another field office would not. In the absence of a public record of precedential decisions, the PGL was intended to provide additional guidance for both the field offices and airport sponsors to ensure more consistent application of the AIP Buy America requirements nationwide. The PGL guidance is summarized below.

1. Equipment.—Regarding equipment purchases, the PGL directs grant recipients to the "nationwide waiver list" (also known as the Buy American conformance list) maintained by the APP-500 office.[478] The airport sponsor need not request a project-specific waiver for equipment on the list.[479] The list indicates whether a particular manufacturer's equipment has been determined to satisfy the AIP Buy America requirements (or an exception to the AIP Buy America provision), whether no determination has been made regarding a particular manufacturer's equipment, or whether no determination has been made because the FAA has been unable to obtain necessary information from the manufacturer. There is no indication if specific equipment has been determined to not satisfy the AIP Buy America requirements. If equipment is not on the list, or if the list does not indicate that the equipment satisfies the Buy America requirements, then the contractor must either certify that the equipment satisfies the Buy America requirements or else seek a waiver for the equipment.

Most items on the list are airfield lighting equipment items from the FAA's Airport Circular (AC) 5345-53C, which lists airfield lighting equipment that has been certified to meet the FAA's technical requirements. Recall that, in the 1978 and 1983 GAO audits, the FAA only certified lighting equipment from domestic manufacturers. However, the PGL makes it clear that today the list of FAA-certified equipment only "certifies that technical standards have been met," not that the equipment complies with the AIP Buy America provision.[480]

Although airfield lighting equipment items from AC 5345-53C constitute most items on the nationwide waiver list, the list has been expanded to include Daimler trucks, AWOS equipment, airport lighting and control systems (ALCMS), snow removal equipment, bituminous pavement rejuvenators, dynamic friction testers and dynamic friction decelerometers, foreign object debris (FOD) detection systems, windows, and even bolts and washers. All determinations are manufacturer-specific. The APP-500 office informed the author that all products on the list that received waivers were determined to meet the Substantial Domestic Manufacture exception, except for the AWOS equipment and some transformers that were determined to meet the Unavailability exception.

2. Construction Materials

a. Steel.—The PGL takes the position that waivers are not available for steel because "[s]teel is specifically identified in the statute."[481] Therefore,

[475] *Id.* at 1.

[476] *Id.*

[477] *Id.*

[478] *Id*.

[479] The list is currently available in spreadsheet form at http://www.faa.gov/airports/aip/buy_american/media/buyAmericanConformance.xls.

[480] FED. AVIATION ADMIN., *supra* note 474, at 5.

[481] *Id.* at 3.

domestic steel apparently must be used even if one of the exceptions to the AIP or ARRA provisions would otherwise apply (e.g., even if domestic steel would increase the cost of the project by 25 percent). Also, according to the PGL, all reinforcing steel used in concrete (including specifically rebar, ties, and stirrups) must be domestically manufactured even if the finished concrete product would otherwise qualify for the Substantial Domestic Manufacture exception in the AIP Buy America provision.[482] Likewise, all "discrete, identifiable steel components" of equipment purchased under an AIP grant must be domestically manufactured even if the equipment would otherwise qualify for the Substantial Domestic Manufacture exception.[483] This appears to be a much stricter preference for steel than Congress intended, since the text of the AIP Buy America provision appears to allow waivers for both steel and manufactured goods. Also, the FAR implementation of the ARRA provision, as described above, permits foreign steel components in domestically assembled construction materials.[484] This is also stricter than the BAA's preference for domestic components of manufactured construction materials. Recall that in the *Strand Hunt Construction* dispute under the BAA, foreign reinforcing steel in concrete was permitted as long as the Substantial Domestic Manufacture exception was satisfied.[485] However, unlike the BAA, waivers to the AIP Buy America provision and the ARRA Buy American provision are not automatically granted when one of the exceptions is satisfied. It is within the FAA's discretion under the statutes to decide, as it apparently has, that waivers will not be permitted for foreign steel. AIP grant recipients are cautioned not to rely on guidance provided by other federal agencies, concerning other statutes, regarding the use of foreign steel.

b. Paving Materials—

i. Asphalt.—Although the FAA takes a very strict position with regard to steel, it is less strict regarding other construction materials. Although the PGL states that only FAA Headquarters may grant an Unavailability waiver, the PGL appears to adopt the BAA list of unavailable items from the FAR. For example, the PGL takes the position that asphalt has been "waived" under the AIP Buy America provision[486] because "petroleum, crude oil, unfinished oils, and finished products" are on the FAR list of unavailable items, and because the FAA's AMS defines asphalt as a finished petroleum product.[487] The PGL effectively constitutes publication of a nationwide Unavailability waiver for asphalt, allowing AIP grant recipients to treat foreign asphalt as domestic when reporting the cost of foreign and domestic components of constructed facilities. It is within the FAA's discretion under the AIP Buy America provision to determine that asphalt is domestically unavailable in sufficient quantities or satisfactory quality. This waiver for asphalt is consistent with the FAA's implementation of the BAA in the AMS. Furthermore, this publication of the asphalt waiver in the PGL exceeds the FAA's publication requirements under the AIP Buy America provision.

However, this position (that asphalt qualifies for the Unavailability exception as a "petroleum product") appears to be unique to the FAA. Recall that the FHWA excluded asphalt from the identically worded STAA Buy America requirements as part of its blanket Public Interest waiver for all manufactured goods published in the *Federal Register*.[488] Under the AIP Buy America provision, however, there has been no such waiver for all manufactured goods. Also, there is evidence that, by expanding the ARRA Buy American provision to include manufactured construction materials, some individual members of Congress intended it to impose domestic preferences on asphalt. However, there is sufficient room for interpretation in both the terms "manufactured goods" and "petroleum products" in the various statutes and regulations to justify the FAA's waiver for asphalt products, even though it is a unique position. AIP grant recipients are reminded not to rely on guidance provided by other federal agencies, concerning other statutes, regarding the use of foreign asphalt.

ii. Portland Cement.—The PGL also takes the position that Portland cement and concrete (except for the reinforcing steel) are "excluded" from the AIP Buy America provision, but does not cite any authority for this waiver.[489] Unlike asphalt, Portland cement is not readily classified under any category on the BAA list of unavailable items. It is likely that the FAA relied on the decision by Congress to remove the express Buy America requirement for Portland cement from the STAA Buy America provision. Like the revised STAA Buy America provision, the AIP Buy America provision and the ARRA Buy America provision name steel and manufactured goods, but not cement, as items that must satisfy domestic preferences. The FAA's position that Portland cement and concrete are "excluded" from Buy America requirements is con-

[482] *Id.*

[483] *Id.*

[484] *See* 48 C.F.R. §§ 25.602-1(a)(1)(ii) and 25.602-1(a)(2) (2011).

[485] *See supra* Pt. II.E.i.2.a.

[486] FED. AVIATION ADMIN., *supra* note 474, at 3.

[487] Fed. Aviation Admin., Acquisition Mgmt. Guidance, T.3.6.4 § 13.y.2(a) (Jan. 2011).

[488] *See* 48 Fed. Reg. 53,099 (Nov. 25, 1983).

[489] FED. AVIATION ADMIN., *supra* note 474, at 3.

sistent with the position of most federal agencies that Portland cement and concrete are excluded from the ARRA Buy American provision.[490] However, the AIP Buy America provision (unlike the STAA provision or the ARRA provision) effectively defines manufactured goods to include constructed facilities, in that it requires a *facility* to be composed of domestic components. Based on the statutory text, it appears that Congress intended to prohibit the use of all foreign construction materials (including cement and concrete), unless compensated by other domestic construction materials so that 60 percent of the cost of the overall facility is attributable to domestic construction materials. Congress did not exclude Portland cement and concrete from this requirement for AIP-funded construction projects. Nevertheless, the PGL again effectively constitutes publication of a nationwide waiver for Portland cement and concrete (including aggregate). It would be within the FAA's discretion to issue a nationwide waiver for these materials, if the FAA determined that these materials satisfy the statutory requirements for the Unavailability, Unreasonable Cost, or Public Interest waivers. AIP grant recipients are reminded not to rely on guidance provided by other federal agencies, concerning other statutes, regarding the use of foreign Portland cement and concrete.

3. Substantial Domestic Manufacture.—The primary focus of the PGL is to provide guidance for applying the two-part component test to obtain a waiver for the Substantial Domestic Manufacture exception to the AIP Buy America provision. There is no such exception in the ARRA Buy American provision, so this only applies to AIP projects. The PGL guidance differs depending on whether AIP funds are granted for a construction project or for procurement of equipment, since the two-part component test is applied to either the "facility" or the "equipment."

a. Facilities.—For construction projects involving buildings (such as a terminal or an ARFF building), the "facility" is "the portion of the building that is being funded under the AIP or ARRA grant."[491] (The reference to ARRA appears to be in error, as the Substantial Domestic Manufacture requirement only applies to the AIP Buy America provision, and expressly does not apply to grant projects funded by ARRA.) Often it may take several years to complete the project, and funding for the complete project may come from multiple grants over a period of several years. In such cases, it is impossible for the contractor to know at the start of the project what proportion of the project costs will be attributable to foreign goods. Therefore, the FAA has limited the definition of the facility to the portion of construction for which bids are requested at a given time. AIP Buy America compliance is not evaluated across multiple construction contracts, even though construction of a single facility may continue for multiple years and involve multiple contracts.

For construction projects, the location of "final assembly" is "the airport building site."[492] Therefore, for construction projects, the requirement of final assembly in the United States is typically satisfied. The more difficult determination will be whether 60 percent of the cost of the components and subcomponents of the facility is attributable to domestic goods. The PGL says that for a construction project, the total facility cost is computed as "the costs of the materials as they are delivered to the airport site," not including the cost of construction labor at the job site.[493] Likewise, the FAA's voluntary Buy America Waiver Request Form for construction projects advises the contractor to use "delivered costs at the 'facility site'" and to exclude "assembly costs at the 'facility site'" when reporting the costs of components and subcomponents.[494] This guidance is based on the statutory mandate in the AIP Buy America provision that "labor costs involved in final assembly shall not be included in the calculation" of component costs.[495]

The PGL does not provide guidance for determining what constitutes a component or subcomponent of a construction project. However, the voluntary Buy America Waiver Request Form for construction projects states, "The component breakout shall be along major specification divisions or building systems." The APP-500 Office confirmed to the author that it considers the major specification divisions to be the components of a constructed facility. (Note that this is different from the guidance in the AIP Handbook, which says that components include such things as rebar.) Although the major specification divisions or building systems constitute the *components* of the facility, the FAA does not specify how to define the *subcomponents*. Instead, the FAA leaves it up to the AIP grant recipient (or its contractor) to document the materials incorporated into the facility, within each major specification division or building system, in a manner that is appropriate for the project. As shown in Figure 2, the AIP grant recipient (or its

[490] *See supra* note 438 and accompanying text.

[491] *Id.* at 2.

[492] *Id.*

[493] *Id.*

[494] Fed. Aviation Admin., Buy America Waiver Request for Terminals, ARFF Buildings, and SRE Buildings Funded Under the Airport Improvement Program (2010), *available for download at* http://www.faa.gov/search/?omni=MainSearch&q=Buy+America+Waiver+Request+for+Terminals&x=22&y=16.

[495] 49 U.S.C. § 50101(c) (2011).

contractor) must report the cost of all such materials and report what portion of the cost is of domestic origin and what portion of the cost is of foreign origin. Therefore, the AIP grant recipient (or its contractor) effectively must further divide each subcomponent (e.g., construction material) into its sub-subcomponents to report the cost of domestic materials and foreign materials that comprise each subcomponent of a facility.

For purposes of the Substantial Domestic Manufacture cost calculation, the contractor may treat foreign subcomponents as domestic goods if the FTA has granted a waiver for those subcomponents. For example, under the PGL guidance, foreign cement has been waived, so the cost of all foreign cement in the facility contributes to the portion of the facility cost that is attributed to domestic goods. Also, where equipment listed on the FAA nationwide waiver/conformance list is incorporated into the construction project as a subcomponent of the overall facility, the entire cost of that equipment is attributed to domestic goods even if it includes a significant amount of foreign constituent parts.

AIP grant recipients are cautioned that (unless the FAA has granted a waiver for a particular construction material or equipment item), the Substantial Domestic Manufacture cost calculation is based on the domestic and foreign percentage of the cost of each subcomponent, as shown in Figure 2. This is very different from the approach used elsewhere in federal law. Recall that, under the BAA, if a component satisfies the two-part component test (i.e., final assembly in the United States and 50 percent domestic content), then the entire cost of the component is treated as domestic for purposes of the Substantial Domestic Manufacture cost calculation.[496] The FAR implementation of the ARRA Buy America provision is even more liberal, in that a construction material is considered to be domestic, regardless of the origin of its components and subcomponents, as long as the construction material is finally assembled in the United States.[497] However, the FAA takes a much stricter approach to the Substantial Domestic Manufacture cost calculation in the AIP Buy America provision. The foreign and domestic composition of a facility is calculated from the actual foreign and domestic compositions of all of the facility components (i.e., major specification divisions or building systems), which in turn are calculated from the actual foreign and domestic composition of all subcomponents (e.g., construction materials) that comprise the major specification divisions or building systems. AIP grant recipients should not rely on guidance provided by other federal agencies, concerning other statutes, regarding how to determine the domestic cost of a component or subcomponent.

b. Equipment.—In standalone procurements of manufactured goods (where the goods are not themselves components or subcomponents of a construction project), the PGL provides guidance for defining the "equipment" for which a waiver must be requested. For the procurement of an individual large equipment item, such as snow removal equipment or an ARFF vehicle, it is clear that the large item is the equipment for which a cost calculation must be performed.[498] For procurements of multiple items, a cost calculation must be performed for the individual bid items. The bid items will typically be those that are defined in FAA Advisory Circular (AC) 5370-10, or in the case of airfield electrical equipment, in the Addendum to AC 5345-53C.[499]

For equipment procurement, the PGL states that "the final assembly location is the location where the equipment is assembled, not the project site itself."[500] Furthermore, "final assembly" is defined as "the substantial transformation of the various components and subcomponents into the equipment."[501] This appears to adopt the FTA definition of manufactured goods as goods that have been "substantially transformed," which is broader than the BAA definition of manufactured goods as mechanical or electronic equipment that has been "assembled." According to the APP-500 Office, the substantial transformation test was adopted in the PGL based on the FAR definition of manufactured goods for the ARRA Buy American provision. However, the APP-500 Office is reconsidering whether that test is appropriate. The FAA is moving toward a unique test that focuses on whether final assembly involves skilled labor (e.g., whether training is required for the task of final assembly). In some instances, the APP-500 Office has sent people to the final assembly site to see whether it appears that skilled labor was actually involved. In all such cases, the APP-500 Office has concluded that final assembly was actually in the United States (based on job complexity, training, etc.).

In addition to showing that final assembly of the equipment took place in the United States, the AIP grant recipient must demonstrate that 60 percent of the cost of all components and subcomponents is of domestic origin. The FAA has not issued any guidance on how to determine the origin of sub-

[496] *See* 48 C.F.R. § 25.101(a) (2011).

[497] *See* 48 C.F.R. §§ 25.602-1(a)(1)(ii), (iii), and (iv)(B) (2011).

[498] FED. AVIATION ADMIN., *supra* note 474, at 2.

[499] *Id.*

[500] *Id.*

[501] *Id.*

components and has typically left that determination to manufacturers and their suppliers.

In determining whether the equipment qualifies for a Substantial Domestic Manufacture waiver, the AIP grant recipient (or the manufacturer) must report the domestic and foreign portion of the cost of all components and subcomponents. This is very different from the approach used elsewhere in federal law. For example, in the FTA implementation of the STAA Buy America provision, the entire cost of a component of rolling stock equipment is counted as domestic as long as the component was finally assembled in the United States and 60 percent of its subcomponents (measured by cost) are of domestic origin.[502] The FTA thus treats as domestic the cost of any foreign subcomponents as long as the Substantial Domestic Manufacture test is satisfied at the component level. Also, in the FTA approach, the subcomponents themselves are considered entirely domestic as long as they were manufactured in the United States, regardless of the origin of their sub-subcomponents.[503] However, the FAA takes a much stricter approach to the Substantial Domestic Manufacture cost calculation in the AIP Buy America provision.

The AIP grant recipient (or the manufacturer) must identify the domestic and foreign percentages of the cost of *all* subcomponents, and use those percentages to compute the domestic and foreign percentages of the cost of the equipment. For example, in Figure 2, Subcomponent 1C is clearly composed of greater than 60 percent domestic content. If the entire cost of Subcomponent 1C were considered to be domestic (as it might be under other Federal Buy America provisions), then 60 percent of the Total Cost of the overall equipment would be considered domestic. However, under the FAA's method of applying the AIP Buy America provision, the domestic and foreign portions of the cost of all subcomponents must be reported, and those subcomponent costs are used to calculate the domestic and foreign percentages of the overall cost. In this example, less than 60 percent of the cost of the overall equipment is considered domestic, so no Substantial Domestic Manufacture waiver can be granted.

	Domestic	**Foreign**
TOTAL COST (Percentage)	**$ 46,000 (57%)**	**$ 35,000 (43%)**
Component 1	$41,000	$29,000
Subcomponent 1A	$5,000	$8,000
Subcomponent 1B	$20,000	$15,000
Subcomponent 1C	$12,000	$3,000
Subcomponent 1D	$4,000	$3,000
Component 2	$5,000	$6,000
Subcomponent 2A	$5,000	$0
Subcomponent 2B	$0	$6,000

Figure 2. Sample cost calculation for the Substantial Domestic Manufacture waiver under the AIP Buy America provision, showing the portion of foreign and domestic cost attributed to all subcomponents.

Under the AIP Buy America provision, the FAA is under no obligation to grant a waiver, even if the AIP grant recipient (or manufacturer) shows that the Substantial Domestic Manufacture cost calculation would justify a waiver. The FAA may elect not to grant a waiver if the cost calculation involves questionable judgment calls as to whether certain subcomponents are foreign or domestic. In some cases, the FAA has asked manufacturers for letters from their subcomponent suppliers articulating the domestic content percentage of those subcomponents. This typically occurs when a manufacturer identifies subcomponents as largely of domestic origin although such materials are not typically manufactured in the United States (e.g., electronic subcomponents).

iii. Unpublished Guidance

1. Mixed Projects (Facility Construction and Equipment Procurement).—Although not directly addressed in the PGL, the APP-500 Office has to deal with a number of AIP projects involving both facility construction and significant equipment procurement. In those cases, the APP-500 Office must decide whether to evaluate AIP Buy America compliance at the facility level (e.g., have the airport sponsor seek a Substantial Domestic Manufacture waiver based on the costs of all components and subcomponents of the entire project) or at the equipment level (e.g., have the airport sponsor seek a Substantial Domestic Manufacture waiver based on the costs of the components and subcomponents of each equipment item).

In particular, airfield development projects such as runway construction or rehabilitation often involve significant amounts of both paving and installation of lighting equipment. Because the FAA has waived the domestic preference requirements for both asphalt and Portland cement, the cost of domestic goods plus waived goods (asphalt and ce-

[502] 49 C.F.R. § 661.11(f) (2010).

[503] 49 C.F.R. § 661.11(g) (2010).

ment) in any such runway project involving pavement will easily exceed 60 percent of the cost of the project even if there are significant purchases of foreign equipment. Therefore, the APP-500 Office says that it does not consider the entire runway project to be the "facility" for purposes of applying the Substantial Domestic Manufacture exception. Instead, the office says that it has determined that congressional intent is better satisfied by defining the facility according to the approval requirements of AC 5345-53C. In other words, for construction projects that involve installation of lighting equipment, AIP Buy America compliance is evaluated for each individual lighting fixture. Effectively, these construction projects are evaluated instead as equipment procurements. By shifting the Buy America focus away from pavement construction materials and instead toward mechanical and electrical equipment, the FAA's approach ensures that, to the maximum extent possible, airfield lighting equipment is domestic.

However, in other types of mixed construction and procurement projects, such as installation of in-ground snow removal equipment, the FAA takes the opposite approach of including the cost of bulk construction materials in its evaluation of the project cost. These projects involve installing the snow removal equipment in a pit below ground. A large percentage of the cost of these projects is the cost of concrete. In this case, the FAA defines the "facility" to include both the snow removal equipment and the concrete. Any reinforcing steel in the concrete must be domestic under the FAA's interpretation of its Buy America requirements. However, the FAA has waived Buy America requirements for Portland cement (and concrete), effectively treating those products as domestic goods. Therefore, the entire cost of concrete will be attributed to domestic goods even if the cement and aggregate are of foreign origin. As long as the cost of the concrete accounts for 60 percent of the cost of the entire project, then the snow removal equipment could be foreign and the FAA would still consider the project to satisfy the Substantial Domestic Manufacture exception. Therefore, the FAA's decision to evaluate Buy America compliance at either the facility or equipment level can be critical in determining whether an airport can obtain foreign equipment under a mixed construction and procurement project.

The APP-500 Office has developed a rule of thumb to determine whether to evaluate a mixed construction and procurement project as facility construction (e.g., in-ground snow removal equipment) or as equipment procurement (e.g., runway development) for purposes of the Substantial Domestic Manufacture exception. First, figuratively remove the equipment (e.g., the lighting equipment or the snow removal equipment) from the project. In the case of a runway development project, if you remove the lighting equipment, you are left with a usable project (an unlighted runway). In those cases, the procured equipment is evaluated independently, without considering the cost of the construction materials. However, in the case of in-ground snow melting equipment, if you remove the equipment, all that is left is an unusable hole in the ground with some concrete. In those cases, project cost is evaluated as a facility, and its subcomponents include both the equipment and the construction materials.

2. Software.—Although not directly addressed in the PGL, AIP grants often cover airport purchases of software (e.g., computer-controlled lighting). Although Congress excluded software from the BAA in 2004, it did not provide similar exclusions for Buy America provisions in federal transportation grants. It is unclear whether software should be considered goods, and if so, how to define the components and subcomponents of the software. Where grants cover multiple procurements, or where the software is a component of equipment or a facility, airports may attempt to list the cost of domestically-produced software, or exclude the cost of foreign software, in order to achieve 60 percent domestic content for purposes of the Substantial Domestic Manufacture exception. The APP-500 Office acknowledges that it is unclear how to handle these purchases. The approach taken in the *Print-O-Tape* bid protest under the BAA (before software was formally excluded from the BAA) was to disregard the cost of foreign software—effectively treating it as a service rather than a good.[504] This would be a reasonable approach for the FAA to take in evaluating AIP Buy America compliance.

3. Reimbursable Agreements.—Often FAA-owned and –operated equipment (purchased under procurement regulations and subject to the BAA, not subject to the AIP Buy America provision) must be relocated to make room for an AIP-funded construction project. In some cases, the FAA equipment must be operated continuously, so the airport must first install new equipment before it can move the existing equipment. In those cases, the airport sponsor enters into a reimbursable agreement with the FAA Facilities and Equipment (F&E) group. The airport sponsor purchases the new equipment, to be reimbursed by the FAA, and often that equipment is not domestically manufactured. This presents a challenge for the APP-500 Office, since it is unclear whether the replacement equipment must comply with the BAA or the much stricter AIP Buy America provision, since it is not a direct federal procurement but is a substitute for a direct federal procurement. If the procurement is subject

[504] *See supra* Pt. II.E.ii.1.a.

to the BAA, the replacement equipment would either have to be manufactured in the United States from at least 50 percent domestic components, or else satisfy one of the BAA exceptions (such as the 6 percent Unreasonable Cost surcharge). On the other hand, if subject to the AIP provision, then the replacement equipment would either have to be manufactured in the United States from at least 60 percent domestic components, or else satisfy one of the AIP exceptions (such as the 25 percent Unreasonable Cost surcharge). Once again, the APP-500 Office acknowledges that it is unclear how to handle these purchases. However, because the replacement equipment is supplied by the F&E offices, the cost of that equipment is not part of the contractor's bid for the AIP-funded construction project. Therefore, the contractor preparing a Substantial Domestic Manufacture waiver request form for the construction project generally need not concern itself with the origin of the replacement equipment.

G. *Federal Register* Notices

Because there was no statutory requirement for publication of waivers in the AIP Buy America provision, and the number of annual waivers is potentially very large, the waivers have not historically been made publicly available by the FAA. However, due to the ARRA requirement to publish all waivers granted under the ARRA Buy American provision, the FAA has recently begun to make use of the *Federal Register* to publish waivers and other notices regarding Buy America compliance.

i. ARRA Project-Specific Waivers

On November 27, 2009, the APP-500 Office published a notice in the *Federal Register* of the "handful" of project-specific waivers that had been granted out "of the over 300 airport projects" funded under ARRA.[505] The notice reiterated that ARRA requires "the use of American iron, steel, and manufactured goods." The notice stated that the FAA applied the AIP Buy America provision to ARRA-funded airport grant projects. This probably was stricter than Congress intended, since ARRA expressly stated that the AIP Buy America provision was not to apply to ARRA-funded airport grants.

1. Project-Specific Waivers.—The *Federal Register* notice stated that items on the FAA's nationwide waiver list had been previously determined to be eligible to receive a Substantial Domestic Manufacture waiver. Therefore, under the FAA's interpretation, the ARRA grant recipient was not required to seek a waiver for equipment on the nationwide waiver list, even though there is no Substantial Domestic Manufacture waiver in the ARRA Buy American provision. In other words, the FAA would provide waivers for manufactured goods that contained up to 40 percent foreign components and subcomponents, even though Congress made no such provision for manufactured goods with foreign content in ARRA. However, the FAA's interpretation was stricter than the FAR implementation of the same ARRA Buy American provision, which could treat some manufactured goods as "domestic" even if they were composed entirely of foreign components and subcomponents.

2. Nationwide Waivers.—The *Federal Register* notice then listed 11 products for which the FAA granted Substantial Domestic Manufacture waivers on specific ARRA projects. The products were mainly airfield lighting equipment (light bases, conduit) and ARFF vehicles (at Muskegon County Airport in Michigan and Mid-Continent Airport in Kansas). The notice stated that nationwide waivers had subsequently been granted for nearly all of the products. Recall that the ARRA Buy American provision only applied to construction projects and not to direct purchases of equipment. Therefore, the term "manufactured goods" in the ARRA Buy American provision refers to manufactured construction materials. This would probably include airfield lighting equipment, which would typically be purchased as part of an improvement project. However, Congress probably did not intend the ARRA Buy American provision to extend to purchases of ARFF vehicles. Furthermore, Congress expressly stated that the AIP Buy America provision did not apply to ARRA grants. Therefore, the FAA probably imposed a much stricter requirement on grant recipients by applying Buy America requirements to ARFF vehicle purchases by ARRA grant recipients.

Notably, the *Federal Register* notice did not state which exception was used to waive each product, much less provide the detailed justification for each individual waiver, which is required by ARRA. However, all of the products were said to have a "final assembly location" in the United States, so presumably the FAA determined that all of these products satisfied the Substantial Domestic Manufacture exception to the AIP Buy America provision. Once again, there is no such statutory exception for ARRA grants. However, the Substantial Domestic Manufacture waiver in the AIP Buy America provision (which requires over 60 percent of the components and subcomponents of manufactured goods to be domestic) is a much stronger domestic preference than that used by other federal agencies for manufactured construction materials under ARRA. Therefore, it was reasonable for the

[505] Notice of Waivers to Buy American Under the American Reinvestment and Recovery Act for Grants-in-Aid for Airports, 74 Fed. Reg. 62,388 (Nov. 27, 2009).

FAA to impose this requirement to manufactured goods purchased under ARRA.

Most importantly, this *Federal Register* notice would help AIP grant recipients in the future by letting them know that equipment on that list could be purchased with AIP funds. Regardless of whether it was appropriate to apply the Substantial Domestic Manufacture waiver to ARRA grants, the requirement certainly applied to AIP funds. Without ARRA's requirement to publish waivers in the *Federal Register*, AIP grant recipients would have had no notice that these equipment items could be purchased with AIP funds. Therefore, the 2009 *Federal Register* notice could be the most useful formal guidance provided to AIP grant recipients to date.

ii. Foreign Object Debris (FOD) Detection Equipment

On September 30, 2009, the FAA Airport Engineering Division (AAS-100) published an AC 150/5220-24 containing performance specifications for airport FOD detection equipment procured with AIP funds.[506] The FAA said that, during preparation of AC 150/5220-24, it was unable to identify enough domestic manufacturers to produce sufficient quantities of FOD detection equipment and make the equipment reasonably available. Therefore, on August 5, 2010, the APP-500 Office published a notice in the *Federal Register* requesting all manufacturers (foreign and domestic) of FOD detection equipment to advise the FAA of equipment they manufactured that would satisfy the performance specifications in AC 150/5220-24.[507] The notice indicated that the FAA would consider issuing a nationwide Unavailability waiver under the AIP Buy America provision for FOD detection equipment if it was unable to identify enough domestic manufacturers who could satisfy the technical performance requirements.

Manufacturers were asked to complete a request for qualifications (RFQ) form[508] to demonstrate that their equipment satisfied the technical performance requirements. Manufacturers were required to demonstrate that their products met all *required* specifications in AC 150/5220-24, but not necessarily some of the *recommended* specifications related to more computationally intensive features such as digital recording, data display, and image storage and retrieval. As part of their response to the RFQ, manufacturers were also asked to prepare a cost calculation worksheet[509] similar to the one that an airport sponsor or its contractor would prepare if seeking a Substantial Domestic Manufacture waiver for equipment procurement under the AIP Buy America provision. Manufacturers were instructed that their FOD detection equipment would be treated as the equipment for which waiver is sought. In other words, the FOD detection equipment was not to be evaluated as a component or subcomponent of a constructed facility, and manufacturers were instructed to provide costs of all components and subcomponents of the FOD detection equipment. Manufacturers were instructed to exclude their own costs for labor, installation, assembly, overhead, and profit. Also, manufacturers were not required to include the cost of any commercial off-the-shelf computer system used to receive and record data.

On December 28, 2010, the APP-500 Office published a second *Federal Register* notice regarding FOD detection equipment.[510] This notice indicated that the FAA had identified "two manufacturers with products containing 60% or more U.S. content and U.S. final assembly [who] are able to produce sufficient and reasonable amounts of FOD detection equipment meeting the requirements of FAA Advisory Circular 150/5220–24." One manufacturer was a California firm and the other was a foreign firm with a Massachusetts manufacturing location. Therefore, because there were two sources of domestically manufactured FOD detection equipment, the FAA determined it could not justify issuing a nationwide Unavailability waiver for FOD detection equipment. The FAA indicated that this decision was consistent with its internal standard for issuing a nationwide Unavailability waiver for airfield lighting equipment and AWOS equipment, which was whether there were at least two domestic manufacturers.

Although the FAA could not issue an Unavailability waiver for FOD detection equipment, the *Federal Register* notice announced a nationwide Substantial Domestic Manufacture waiver for FOD detection equipment manufactured by the two domestic sources. Based on information submitted in response to the RFQ, the FAA determined that the

[506] FED. AVIATION ADMIN. ADVISORY CIRC. NO. 150/5220-24 (Sept. 30, 2009), http://www.faa.gov/documentLibrary/media/Advisory_Circular/150_5220_24.pdf.

[507] Notice to Manufacturers of Foreign Object Debris (FOD) Detection Equipment, 75 Fed. Reg. 47,344 (Aug. 5, 2010).

[508] Fed. Aviation Admin., Foreign Object Debris (FOD) Detection Equipment Request for Qualifications, *available at* http://www.faa.gov/airports/aip/buy_american/media/buyAmericanFODDetectionRequest.pdf.

[509] Fed. Aviation Admin., Foreign Object Debris (FOD) Detection Equipment Percent Calculation Worksheet, *available at* http://www.faa.gov/airports/aip/procurement/federal_contract_provisions/media/fod_percent_calculation.xls.

[510] Notice of Decision To Issue Buy American Waivers for Foreign Object Debris (FOD) Detection Equipment, 75 Fed. Reg. 81,708 (Dec. 28, 2010).

two manufacturers both had a final assembly location in the United States and that their FOD detection equipment was composed of more than 60 percent domestic components and subcomponents. Therefore, airport sponsors or contractors seeking to purchase FOD detection equipment with AIP funds could purchase the equipment manufactured by those two manufacturers without seeking a project-specific Buy America waiver.

This use of the *Federal Register* was not required under the AIP Buy America provision, but it provided a great deal of public visibility and credibility to the FAA's Buy America waiver process. Without going through the public notice process, the APP-500 Office may have simply issued an Unavailability waiver because it was unaware of the existence of domestic manufacturers. Also, by having the manufacturers submit information regarding the cost of their components and subcomponents, AIP grant recipients were effectively relieved of the responsibility of gathering that data. AIP grant recipients wishing to purchase FOD detection equipment know that there are two compliant sources. The nationwide waiver for these two manufacturers should incentivize their competitors to demonstrate directly to the FAA that their own products qualify for the Substantial Domestic Manufacture exception, or else forego future sales to AIP grant recipients.

iii. Additional Notices

The FAA's successful experience with *Federal Register* notices regarding FOD detection equipment has apparently led the FAA to increase the use of this approach.

On October 28, 2011, the APP-500 Office issued two notices seeking qualified manufacturers of equipment to be purchased with AIP funds. The first notice requested all manufacturers (foreign and domestic) of airport avian radar systems to advise the FAA of equipment they manufactured that would satisfy the performance specifications in AC 150/5220-25.[511] The second notice requested all manufacturers of airport in-pavement stationary runway weather information systems to advise the FAA of equipment they manufactured that satisfied both the technical requirements of AC 150/5220-30 ("Airport Winter Safety and Operations") and SAE Aerospace Recommended Practice 5533 ("Stationary Runway Weather Information System (In-Pavement)").[512]

On December 13, 2011, the APP-500 Office issued another notice seeking qualified manufacturers of various types of airport lighting equipment and navigation aid equipment that incorporates light-emitting diode (LED) lighting.[513] This notice requested manufacturers (foreign and domestic) to advise the FAA of all equipment they manufactured that would satisfy the technical requirements in either AC 150/5345–46D ("Specification for Runway and Taxiway Light Fixtures"), AC 150/5345–51B ("Specifications for Discharge-Type Flashing Light Equipment"), or AC 150/5345–28G ("Precision Approach Path Indicator (PAPI) Systems Safety and Operations").

As of this writing, the FAA has not published notices of waivers for any of the above-mentioned equipment. However, the technical requirements of the various ACs are mandatory for AIP grant recipients. Therefore, if this process does not identify equipment satisfying the technical requirements that is manufactured domestically entirely of domestic content, the FAA will probably issue Buy America waivers of some sort. Presumably, if the FAA does not identify at least two domestic manufacturers of any of the types of equipment, it will issue blanket Unavailability waivers for those items. Otherwise, if the FAA identifies domestically manufactured equipment that contains less than 40 percent foreign components and subcomponents, it may issue Substantial Domestic Manufacture waivers for the equipment supplied only from specifically-identified manufacturers.

This process is far removed from the conditions identified in the 1978 and 1983 GAO audits, where the FAA's list of technically-approved equipment included only domestic manufactured goods. Since that time, AIP grant recipients have been required to seek out domestic goods that also satisfy the FAA's technical specifications. If AIP recipients could not identify domestic manufactured goods, then they were required to seek waivers from the FAA, and they had no public record of waivers for similar foreign equipment obtained by other AIP grant recipients. With this new approach to publishing RFQs in the *Federal Register*, the FAA has relieved AIP grant recipients of the burden of searching for domestic sources. Also, by publishing in the *Federal Register* the results of its RFQs as justification for nationwide waivers, the FAA relieves AIP grant recipients from having to repeat the waiver process on each project.

[511] Notice to Manufacturers of Airport Avian Radar Systems, 76 Fed. Reg. 67017 (Oct. 28, 2011).

[512] Notice to Manufacturers of Airport In-Pavement Stationary Runway Weather Information Systems, 76 Fed. Reg. 67018 (Oct. 28, 2011).

[513] Notice to Manufacturers of Airport Lighting and Navigation Aid Equipment, 76 Fed. Reg. 77585 (Dec. 13, 2011).

H. Grantee Experiences (Questionnaire Results)

The author delivered the questionnaire in Section V to 500 randomly selected airport sponsors who received AIP and ARRA grants in fiscal years 2005 through 2009. Twenty-three questionnaires were completed and returned. The author was also contacted by telephone by two airport consultants on behalf of airports who received the survey but declined to respond in writing. Because of the low number of questionnaires that airport sponsors completed and returned, responses cannot be interpreted as generalizable to the population of sponsors. Rather, responses should be interpreted as anecdotal evidence.

Survey responses tended to come from airport sponsors who received a higher than average amount of federal grant funding. The 500 questionnaire recipients represented a wide distribution of funding amounts, which closely tracked the funding distribution of all AIP/ARRA grant recipients, as shown in Figure 3. The questionnaire recipients received, on average, $7.63 million in combined ARRA and AIP grants from the FAA in fiscal years 2005 through 2009, with the median (50th percentile) grantee receiving $1.35 million in that period. The 23 survey respondents, on the other hand, received, on average, $17.34 million in FAA grants in fiscal years 2005 through 2009, with the median (50th percentile) grantee receiving $3.92 million in that period. Therefore, the survey responses may skew somewhat toward airport sponsors who receive a higher-than-average amount of AIP funding. Those airports are more likely to engage in significant construction projects or purchase state-of-the-art equipment for which Buy America questions are more likely to arise.

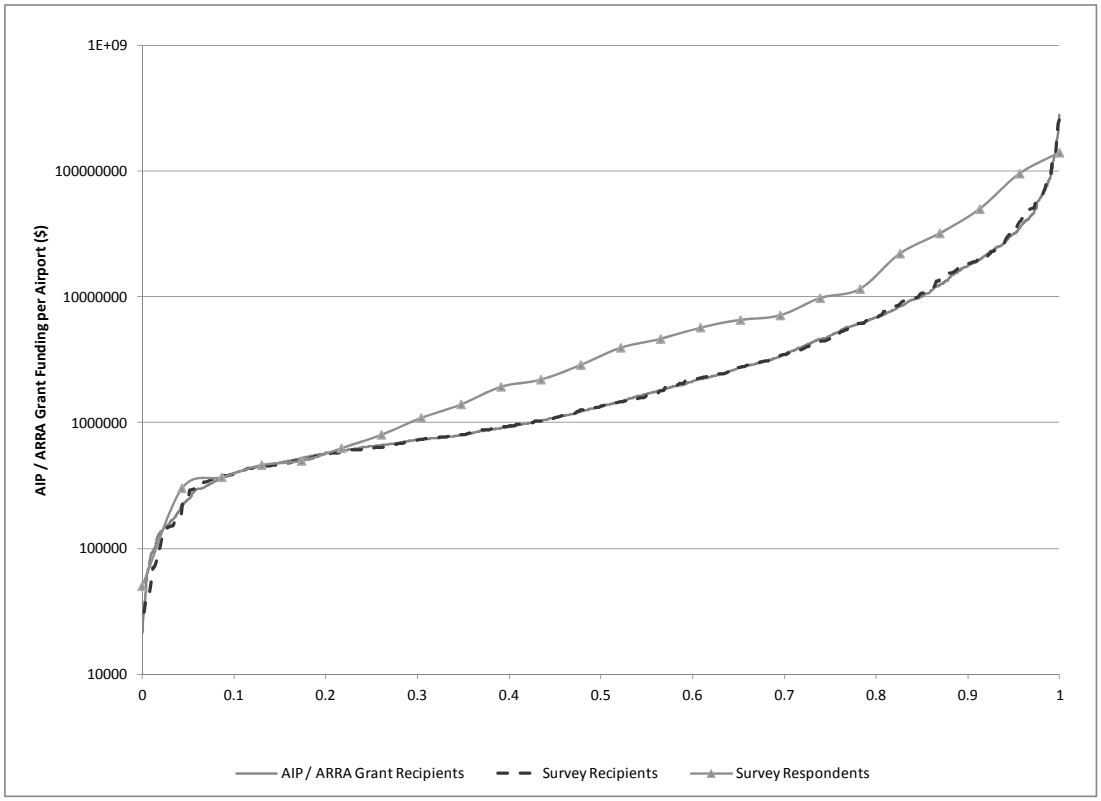

Figure 3. Cumulative distribution of survey recipients, survey respondents, and all airport grant recipients by airport grant funding.

Most of the survey respondents (15 out of 23) indicated that Buy America requirements had no impact (or negligible impact) at their airports. The remaining eight respondents described the following issues:

i. Construction Projects

1. Steel.—Only one respondent indicated that it had any issues purchasing domestic steel. That respondent indicated that it experienced delay costs in excess of 30 days due to fabrication backlogs of domestic structural steel. Also, the respondent indicated that the use of domestic steel rather than foreign steel increased the cost of construction by more than $100,000. Because the FAA takes the position that all steel must be domestic, grant recipients may experience significantly higher costs and can not avail themselves of the Unreasonable Cost exception in the AIP Buy America provision.

2. Pavement Construction Materials.—None of the respondents were of the impression that they had ever taken advantage of waivers for the list of domestically-unavailable goods that is published in the FAR and the AMS. One respondent said, "None of the waivered items have any relevance to construction contracts we enter." In reality, of course, the FAA has determined that asphalt is waived as a "petroleum product," which is on the list of unavailable goods. Therefore, the list of unavailable goods actually applies to many (perhaps most) runway development projects. Any airport that has used foreign asphalt on an AIP-funded construction project has taken advantage of the Unavailability waiver.

There was some evident confusion among the survey respondents regarding the various exceptions and lists of waived goods. One respondent was of the impression that "petroleum products" and "cement and cement products" are on the FAA's nationwide waiver/conformance list. However, those items are not on the FAA waiver/conformance list, which primarily includes manufactured equipment for which a Substantial Domestic Manufacture waiver has been granted. The FAA has determined that asphalt qualifies for an Unavailability waiver as a petroleum product. The FAA has also effectively waived the AIP Buy America requirements for Portland cement, although it is unclear what authority supports that waiver.

Most respondents were of the opinion that the AIP Buy America provision has little impact on pavement construction materials. Two respondents stated that *all* construction materials typically

comply with Buy America requirements, so no waiver is necessary. Two other respondents said that the AIP Buy America provision has no impact on *pavement* rehabilitation projects because those bidders typically fully comply with Buy America requirements. One survey respondent indicated that state law also imposes Buy National requirements so its bidders supply only domestic construction materials. Due to the large amounts of foreign Portland cement and foreign constituents in asphalt used in construction today, these survey respondents may be overly confident about the domestic content of their construction materials. However, because the FAA effectively issued a nationwide waiver for foreign asphalt and Portland cement on AIP projects in PGL 10-02, it is reasonable for AIP recipients to focus Buy America attention elsewhere.

Only one respondent indicated that it had ever sought an FAA interpretation regarding the applicability of Buy America requirements to asphalt and cement. That respondent stated "large amounts of cement come from Canada," and indicated that existing FAA guidance did not fully address how to handle "raw materials," apparently referring to asphalt and cement. As mentioned above, PGL 10-02 appears to indicate that foreign asphalt and cement may be treated as domestic goods for purposes of the AIP Buy America provision.

Because there is some confusion among grant recipients, and the FAA's treatment of asphalt and Portland cement is unique, these goods probably warrant more guidance than the brief treatment in PGL 10-02. Specifically, such additional guidance would address how asphalt and cement are to be considered in evaluating the cost of a facility and its components and subcomponents under the Substantial Domestic Manufacture exception. The published guidance would clarify the FAA's test for whether to include the cost of asphalt and cement in mixed procurement and construction contracts. This may be an appropriate topic for a future *Federal Register* notice.

ii. Equipment Procurement

1. Airfield Lighting Equipment.—Only one survey respondent indicated that it ever sought an FAA interpretation regarding Buy America compliance of airfield lighting equipment. Two other respondents indicated that they had taken advantage of FAA nationwide waivers to purchase airfield lighting equipment. (One of those respondents had also purchased an AWOS from the FAA nationwide list.)

As the APP-500 Office has observed, there is some evident confusion regarding the various lists of waived goods and FAA-certified equipment that may be purchased with AIP funds. Unlike the conditions observed in the 1978 and 1983 GAO audits, equipment that has been technically approved by the FAA is not necessarily domestically manufactured. However, one airport consultant who contacted the author in response to the questionnaire stated that he was under the impression that products on the lists of FAA-certified equipment are also certified to comply with Buy America requirements.

Since the questionnaire was sent out, the FAA has issued numerous *Federal Register* notices indicating that equipment that satisfies FAA technical specifications does not necessarily satisfy AIP Buy America requirements. Therefore, the FAA has taken steps both to increase awareness of this issue and to identify equipment that satisfies both technical specifications and domestic preferences.

2. Vehicles.—One survey respondent noted that its attempt to use AIP grant funds for the "purchase of electric vans has been stymied by Buy America rules." It noted that it originally applied to its ADO for a Substantial Domestic Manufacture waiver for a Ford/Azure Dynamics van, but subsequently concluded that the van did not satisfy the two-part component test. Therefore, the grant recipient appealed to FAA Headquarters for an Unavailability waiver. It anticipated that the FAA would begin the process by publishing a *Federal Register* notice "any day," and hoped to receive approval in fiscal year 2011. However, as of this writing, there has been no notice in the *Federal Register* regarding the van.

Another respondent sought a Substantial Domestic Manufacture waiver for a runway friction testing system (continuous friction measuring equipment (CFME)). The selected contractor completed the component cost tabulation for the system, which showed "The Ford truck has some components manufactured outside the U.S. The printer and laptop were manufactured outside the U.S." However, apparently the contractor was able to demonstrate that 60 percent of the cost of components and subcomponents was attributable to domestic goods. The respondent stated that the FAA approved the waiver request "within a working day." However, as of this writing, the FAA does not appear to have included the CFME on its nationwide waiver/conformance list.

Another respondent sought and obtained a Substantial Domestic Manufacture waiver for a John Deere tractor with a loader and snow bucket, based on final assembly in Waterloo, Iowa, and 60 percent domestic components and subcomponents. This respondent indicated that the FAA needs to provide a "clearer definition of what documentation is needed on equipment to determine the 60% cost of components and assembly in the USA." This respondent noted that it had to request bids for the

tractor twice, because responses to the original bid request did not satisfy Buy America requirements. The respondent indicated that it did not seek an Unavailability waiver despite the lack of compliant domestic bids in response to an open solicitation, as FAA Headquarters would have to approve any Unavailability waiver. The respondent stated that the domestic tractor eventually procured had less horsepower and cost $15,700 more than the rejected foreign bid. Due to the relatively high threshold for obtaining an Unavailability or Unreasonable Cost waiver for manufactured goods under the AIP Buy America provision, vehicle procurement is one of the areas where domestic preferences most significantly impact AIP grant recipients.

3. Electronic Equipment.—A common complaint by survey respondents was that many items of electronic equipment (and their components) were not manufactured domestically. Also, the manufacturers often do not know the country of origin of many components (such as circuit boards, bolts, and belts). One respondent questioned how the AIP Buy America requirement could realistically be enforced, "given the fact that very little is made in this country any longer"—specifically referring to "all items with electronic components."

Grant recipients typically are able to purchase foreign electronic components as insubstantial components or subcomponents of larger equipment procurement projects. One respondent indicated that it determined that less than 5 percent of the components of its airport beacon and windcone equipment were electrical components and subcomponents of foreign origin. Another respondent noted that some electronic components of a checked baggage inspection system, funded under an ARRA grant, were not manufactured domestically. In that case, the Transportation Security Administration issued a waiver after determining that less than 5 percent of the ARRA project funds were attributable to foreign components.

Likewise, grant recipients are able to purchase foreign electronic equipment that is incorporated into a facility as part of an overall construction project. One respondent indicated that items including heating-ventilation-air conditioning equipment, programmable thermostats, and smoke and carbon monoxide detectors are simply not manufactured domestically. However, by treating those items as manufactured construction materials, and evaluating project cost at the constructed facility level, "the domestic content of the entire project would easily be greater than 60%," even when accounting for the cost of the foreign subcomponents.

iii. Reimbursable Agreements

Three survey respondents indicated that they had entered into reimbursable agreements with the FAA to replace FAA equipment in AIP-funded development projects. Two indicated that they included Buy America requirements in the equipment procurement contract, and another indicated that the project engineer reviewed to ensure that the procured equipment satisfied Buy America requirements. However, none of the respondents indicated whether the AIP Buy America requirements or the BAA requirements were satisfied for the replacement equipment. The APP-500 Office is aware that there are questions regarding this issue, and future written guidance may be expected to address reimbursable agreements.

iv. General Delays

Aside from the handful of delays mentioned above (related to fabrication backlogs for domestic materials or rebids due to noncompliant bids), most respondents estimated their AIP Buy America delays to be minimal, measured in hours rather than days. These minimal-duration compliance tasks included drafting AIP Buy America requirements in bid provisions, responding to vendor requests for clarification, searching nationwide waivers for the bid items, and preparing waiver requests for items not on the nationwide waiver lists. Respondents appeared to be generally satisfied with the procedures established by the APP-500 Office.

IV. CONCLUSION

Until recently, Buy America requirements for federal airport grant funds had not been the subject of significant scrutiny, guidance, or enforcement. That changed as a result of the 2009 ARRA stimulus bill, which required the FAA to publish Buy America waivers granted with ARRA funds. Since then, the FAA has published some guidance and some waivers, including a number of notices in the *Federal Register*. However, there remains very little administrative material directly related to the AIP Buy America provision. In particular, there is almost no record of allegations or investigations of noncompliance. The administrative record is expected to grow in the coming years as a result of the FAA's increased attention to the issue.

In general, the AIP Buy America provision is a stricter domestic preference requirement than exists elsewhere in federal law. For example, the Unreasonable Cost exception is much higher in the AIP Buy America provision than in the BAA. This means that AIP grant recipients are often not allowed to purchase certain foreign goods, but the federal government can directly purchase the same

foreign goods, where comparable domestic goods are only moderately more expensive.

The most unique feature of the AIP Buy America provision is that, for construction projects, it applies the Substantial Domestic Manufacture exception to the entire facility rather than to individual construction materials. For federal construction projects subject to the BAA, the CO may have to evaluate whether each manufactured construction material (e.g., hangar door system) is manufactured substantially all of domestic components. If not, then those materials may have to be rejected. On AIP projects, on the other hand, each such manufactured construction material is only one subcomponent of the overall construction project (with the major specification divisions constituting components). AIP grant recipients may use foreign manufactured construction materials as long as 60 percent of the subcomponents of the constructed facility are domestic. The FAA has made it easier for grant recipients to satisfy this criteria by allowing them to treat foreign asphalt and cement used on the construction project as domestic construction materials. However, grant recipients should be aware that, unlike federal construction projects subject to the BAA, the FAA has a strict requirement that all steel used in an AIP-funded project (including rebar) must be domestic.

As the above examples (and other examples in this digest) demonstrate, Buy America provisions can be deceptive. Although most use very similar statutory language, subtle differences in language or implementing regulations can result in significant differences in practice. As demonstrated by the FHWA and FTA regulations implementing the STAA Buy America provision, different agencies can have different interpretations of the identical statutory language. Therefore, although interpretations of other Buy America statutes can be instructive or persuasive, AIP grant recipients should not rely on decisions involving non-AIP provisions. Instead, the key to compliance with the AIP Buy America provision is for AIP grant recipients to closely cooperate and communicate with the FAA.

For equipment purchases, the grant recipient should first check the nationwide waiver and conformance list to determine if equipment from certain manufacturers has been approved for purposes of the AIP Buy America provision. If the equipment is not on the list, the grant recipient should check other AIP Buy America notices published in the *Federal Register* regarding certain types of equipment. This may indicate that the APP-500 Office has not yet determined whether certain types of equipment supplied by foreign manufacturers qualify for any AIP Buy America waivers.

If there is no published guidance available for the type of equipment being purchased, the grant recipient must ask the manufacturer to complete a cost calculation worksheet, showing the cost of domestic and foreign components and subcomponents. This worksheet will be provided to the FAA field office, which will forward it to the APP-500 Office for a determination.

For construction projects, before bids are solicited, the grant recipient should work with its FAA field office to confirm which foreign construction materials may be treated as domestic (e.g., Portland cement and asphalt), and which absolutely must be domestic (e.g., steel). Furthermore, the grant recipient should check the nationwide waiver/conformance list to determine if certain manufactured construction materials (e.g., asphalt sealant) may be treated as domestic. Therefore, when bids are received, the grant recipient will be able to narrow the list of subcomponents (contract line items) that need to be scrutinized. Where any of the bid items are foreign goods for which no nationwide waiver exists, the bidder must complete a cost calculation worksheet showing that 60 percent of the cost of the facility is attributable to domestic goods. The grant recipient must submit this cost calculation worksheet to its FAA field office, which in turn submits it to the APP-500 Office, to obtain a Substantial Domestic Manufacture waiver before entering into the contract.

Keep in mind that there may be project-specific requirements for completing the cost calculation worksheet, especially for "mixed" projects that include both construction and equipment procurement. If there is any question, grant recipients should seek an interpretation from the APP-500 Office before soliciting bids. Specifically, it is important to know ahead of time whether the cost of construction materials will be included in the total project cost, or whether the FAA will require the bids to be evaluated solely on the basis of equipment. Understanding the FAA's expectations ahead of time will help avoid delays and unforeseen expenses in complying with the AIP Buy America provision.

V. APPENDIX—BUY AMERICA QUESTIONNAIRE

In support of this project, the attached questionnaire was delivered to 500 randomly selected airport sponsors who received AIP and ARRA grants in fiscal years 2005 through 2009.

Appendix A: Buy America Questionnaire

NATIONAL ACADEMY OF SCIENCES
TRANSPORTATION RESEARCH BOARD
AIRPORT COOPERATIVE RESEARCH PROGRAM (ACRP)
PROJECT 11-01, STUDY TOPIC 04-04: BUY AMERICA REQUIREMENTS FOR FEDERALLY FUNDED AIRPORTS

The Transportation Research Board has retained a consultant to perform a study with the goal of producing an easy-to-use guide that addresses all of the Buy America requirements applicable to federally funded airport projects, with an emphasis on the specific requirements associated with the Airport Improvement Program (AIP) and the American Recovery and Reinvestment Act (ARRA).

The purpose of this survey is to elicit information from grant recipients to develop an industry-wide perspective on the impact of Buy America on federal airport grants, with the goal of identifying areas where the streamlining of the federal statutory and regulatory requirements could be accomplished without jeopardizing the public policy goals of Buy America.

Please have this survey completed by the individual in your organization who is primarily responsible for Buy America matters. Contact information to return completed surveys is at the end of the document. Thank you in advance for your cooperation with this survey.

I. IDENTIFICATION

a. Please provide the name and address of your airport.

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b. Please provide the name, telephone number, and email address of an appropriate contact person who is primarily responsible for Buy America matters for your airport.

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II. GENERAL IMPACT OF BUY AMERICA

a. Please describe the impact, if any, of Buy America requirements on procurement of equipment at your airport, making reference to specific procurements or specific procurement items if necessary.

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b. Please describe the impact, if any, of Buy America requirements on construction contracting at your airport, making reference to specific construction projects or specific types of facilities if necessary.

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c. What, if any, project delays and additional project costs would you attribute directly to Buy America Compliance? Please explain the basis for your belief that Buy America requirements contributed directly to delays or project costs.

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d. Please estimate your airport's cost of compliance with Buy America. Please explain the basis for your estimate of the cost of compliance with Buy America requirements.

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III. WAIVERS OF BUY AMERICA REQUIREMENTS

a. Has your airport or one of its contractors ever taken advantage of the nationwide Buy America waivers published by the FAA?
[*The complete list of items is available at* http://1.usa.gov/FAAwaivers]
If so, please describe which equipment items on that list have been procured for your airport using AIP or ARRA funds.

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b. Has your airport or one of its contractors ever taken advantage of the nationwide "nonavailable" Buy America waivers published in the Federal Acquisition Regulations (FAR) Part 25.104?
[*The complete list of items is available at* http://1.usa.gov/BAAwaivers]
If so, please describe which articles on that list have been procured for your airport using AIP or ARRA funds.

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c. Has your airport or one of its contractors or suppliers ever requested a Buy America waiver based on 60% domestic content? If so, please describe the request and the FAA response. [*Feel free to enclose copies of any waiver requests submitted to the FAA and the FAA's communications in response.*]

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d. Has your airport or one of its contractors ever prepared a Component Cost Calculation to demonstrate that 60% of the cost of a facility or manufactured item is attributable to U.S. content? If so, please describe the type of facility or manufactured item for which you prepared the calculation, and describe significant components or subcomponents that were of foreign origin. [*Feel free to enclose copies of the component cost calculations prepared.*]

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e. Has your airport or one of its contractors ever sought an FAA interpretation regarding the calculation of component costs? If so, describe the request and the FAA response. [*Feel free to enclose copies of the communications.*]

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f. Has your airport or one of its contractors ever sought an FAA interpretation regarding whether an item is a component or subcomponent? If so, describe the request and the FAA response. [*Feel free to enclose copies of the communications.*]

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g. Has your airport or one of its contractors ever requested a Buy America waiver based on the expectation that U.S. content would increase the project cost by 25%? If so, please describe the request and the FAA response. [*Feel free to enclose copies of waiver requests submitted to the FAA and the FAA's communications in response.*]

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IV. BUY AMERICA DISPUTES

a. Has your airport or one of its contractors ever been challenged by an unsuccessful bidder or supplier on the basis of Buy America compliance? If so, please describe the protest and its outcome, if any. [*Feel free to enclose copies of any communications from the protestor and any communications in response.*]

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b. Has your airport or one of its contractors ever been the subject of an FAA investigation into Buy America compliance for activities at your airport funded by AIP or ARRA? If so, please describe the investigation and its outcome. [*Feel free to enclose copies of any communications with the FAA regarding the investigation.*]

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c. Are there any Buy America questions or issues that you feel are not fully addressed by existing FAA guidance? If so, please list those questions or issues.

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Please mail, email, or fax completed surveys no later than 20 September 2011 to the attention of:

Timothy R. Wyatt
Conner Gwyn Schenck PLLC
P.O. Box 20744
Greensboro, NC 27420
Fax: (336) 691-9259
Email: twyatt@cgspllc.com

If you would prefer to receive this survey by email as an electronic fill-in document, please request an electronic copy from Mr. Wyatt at twyatt@cgspllc.com.

To the extent that you may have in your possession written responses from the FAA or other information or correspondence with regard to any of the matters discussed above, please send those materials to Mr. Wyatt using the contact information above. If you have any confidentiality requests or concerns regarding the information or correspondence, please direct your requests to Mr. Wyatt. Again, thank you very much for your responses to this survey.

ACKNOWLEDGMENTS

This study was performed under the overall guidance of the ACRP Project Committee 11-01. The Committee was chaired by TIMOTHY KARASKIEWICZ, General Mitchell International Airport, Milwaukee, Wisconsin. Members are THOMAS W. ANDERSON, Metropolitan Airports Commission, Minneapolis, Minnesota; CARLENE MCINTYRE, Port Authority of New York & New Jersey, New York, New York; BARRY MOLAR, Unison Consulting, Inc., Wheaton, Maryland; MARJORIE PERRY, Tucson Airport Authority, Tucson, Arizona; E. LEE THOMSON, Clark County, Las Vegas, Nevada; and KATHLEEN YODICE, Yodice Associates, Aircraft Owners and Pilots Association, Washington, DC.

DAPHNE A. FULLER provides liaison with the Federal Aviation Administration, FRANK SANMARTIN provides liaison with the Federal Aviation Administration, MONICA HARGROVE KEMP provides liaison with the Airports Council International-North America, and MARCI A. GREENBERGER represents the ACRP staff.

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