

**FINAL REGULATORY EVALUATION,
REGULATORY FLEXIBILITY DETERMINATION,
TRADE IMPACT ASSESSMENT, AND
UNFUNDED MANDATES ASSESSMENT**

NOTICE OF FINAL RULEMAKING

AIR CARGO SECURITY REQUIREMENTS

(49 CFR Parts 1520, 1540, 1542, 1546, and 1548)

**Regulatory and Economic Analysis
Office of Transportation Security Policy
Transportation Security Administration
Department of Homeland Security
Arlington, VA 22202**

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LIST OF ABBREVIATIONS

AAAE	American Association of Airport Executives
ASAC	Aviation Security Advisory Committee
ATSA	Aviation and Transportation Security Act
CHRC	Criminal History Records Check
CFR	Code of Federal Regulations
CBP	Customs and Border Patrol
CCTV	Closed Circuit Television
C-TPAT	CUSTOMS-Trade Partnership Against Terrorism
DHS	Department of Homeland Security
DSIP	Domestic Security Integration Program
DOT	Department of Transportation
ETD	Explosive Trace Detector
FAA	Federal Aviation Administration
FBI	Federal Bureau of Investigation
GAO	General Accounting Office
IAC	Indirect Air Carrier
IACSSP	Indirect Air Carrier Standard Security Program
LEO	Law Enforcement Officer
OIG	Office of Inspector General
OPM	Office of Personnel Management
SIDA	Security Identification Display Area
TSA	Transportation Security Administration

REGULATORY EVALUATION SUMMARY

Changes to Federal regulations must undergo several economic analyses. First, Executive Order 12866 directs each Federal agency to propose or adopt a regulation only if the agency makes a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 requires agencies to analyze the economic impact of regulatory changes on small entities. Third, the Trade Agreements Act (19 U.S.C. § 2531-2533) prohibits agencies from setting standards that create unnecessary obstacles to the foreign commerce of the United States. In developing U.S. standards, this Trade Act requires agencies to consider international standards and where appropriate, as the basis of U.S. standards. Fourth, the Unfunded Mandates Reform Act of 1995 (Public Law 104-4) requires agencies to prepare a written assessment of the costs, benefits and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure by State, local or tribal governments, in the aggregate, or by the private sector, of \$100 million or more annually (adjusted for inflation).

In conducting these analyses, TSA has determined this rule:

- (1) Is a “significant regulatory action” as defined in the Executive Order;
- (2) Will not have a significant impact on a substantial number of small entities;
- (3) Imposes no significant barriers to international trade; and
- (4) Does not impose an unfunded mandate on State, local, or tribal governments, but does on the private sector.

TABLE 1
OMB A-4 ACCOUNTING STATEMENT
(Numbers in \$ millions, 2005)

OMB #: Agency/Program Office: TSA
Rule Title: Final Rule on Air Cargo Security Requirements **Date:** 9/13/2005
RIN#: 1652-AA23

<i>Category</i>	<i>Primary Estimate</i>	<i>Minimum Estimate</i>	<i>Maximum Estimate</i>	<i>Source Citation (RIA, preamble, etc.)</i>	
BENEFITS					
Monetized Benefits	Not estimated	Not estimated	Not estimated	N/A	
Annualized quantified, but unmonetized, benefits	0	0	0	N/A	
Unquantified Benefits	Increased protection of passengers and cargo from acts of terrorism. Prevent unauthorized persons, explosives, incendiaries, and other destructive substances or items from being introduced into the air cargo supply chain. Protect citizens on the ground, in buildings, and elsewhere in our society from acts of terrorism involving the use of aircraft			NPRM RIA; FR Preamble	
COSTS					
Annualized monetized costs	\$206.0	7%	Not estimated	Not estimated	RIA
	\$203.7	3%			
	\$202.1	0%			
Annualized quantified, but unmonetized, costs	0	0	0	N/A	
Qualitative (unquantified)costs	Not estimated	Not estimated	Not estimated	RIA	
TRANSFERS					
Annualized monetized transfers: “on budget”	0	0	0	0	
from whom to whom?	N/A	N/A	N/A	N/A	
Annualized monetized transfers: “off-budget”	0	0	0	0	
From whom to whom?	N/A	N/A	N/A	N/A	
Miscellaneous Analyses/Category	Effects			Source Citation (RIA, preamble, etc.)	
Effects on State, local, and/or tribal governments	None			RIA	
Effects on small businesses	Will not have a significant impact on a substantial number of small entities			RIA	
Effects on wages	None			N/A	
Effects on growth	None			N/A	

ECONOMIC IMPACTS

This summary highlights the costs and benefits of the final rule to amend the transportation security regulations to further enhance and improve the security of air cargo transportation. TSA has determined that this is a major rule within the definition of Executive Order (EO) 12866, as annual costs or benefits to all parties do pass the \$100 million threshold in any year. There are no significant economic impacts for each of the required analyses of small business impact, international trade, or unfunded mandates.

Details of the proposed rule and the associated analysis were provided to the public for comment. This final regulatory analysis covers changes to the previous analysis in response both to public comment and changes TSA has made with the final rule. The complete analysis and the associated references are **not** repeated here. Rather, TSA has responded to public comments and is providing only an analysis of change in this document. However, to simplify the review of total costs, tables are repeated. Each section provides a description of the changes and the tables reflect the same calculations but with new values which are explained below.

Costs

The following sections summarize the estimated costs of this rulemaking by general category of who pays. A summary table provides an overview of the cost items, section of the regulation that creates the requirement, and a brief description of cost elements. Both in this summary and the economic evaluation, descriptive language is used to try and relate the consequences of the regulation. Although the regulatory evaluation attempts to mirror the terms and wording of the regulation, **no attempt is made to precisely replicate the regulatory language and readers are cautioned that the actual regulatory text, not the text of the**

evaluation, is binding. Throughout the evaluation rounding in displayed values may result in minor differences in displayed totals.

Aircraft Operators will incur costs to comply with requirements of this rulemaking over the 10-year period of 2005-2014. Cargo aircraft operators are estimated to incur costs totaling approximately \$1.9 billion to comply with the requirements to require background checks for individuals who screen cargo for all-cargo airplanes, their supervisors, as well as for employees with unescorted access to the cargo. The rulemaking requires all-cargo aircraft operators to screen all persons entering the aircraft. This requirement is estimated to impose costs of approximately \$35.2 million over the ten-year period of this analysis. They also are required to take additional measures to secure the aircraft and facilities at an estimated cost of \$0.8 million. All-cargo aircraft operators with a maximum certificated take-off weight greater than 45,500kg (100,309.3 lbs) need to ensure they have coordinated law enforcement notification and response capability to comply with the requirements to extend or create new secure areas to encompass air cargo operations. This requirement is not an expansion of law enforcement staffing. As a result, costs previously attributed to the LEO function have been removed. Finally, the codifying of existing security directive requirements and costs for random screening of air cargo on passenger aircraft and all-cargo flights are estimated to cost \$1.491 billion, and \$328 million, respectively. Much of this increase is related to increased screening levels as mandated by Congress after the NPRM.

Airport Operators that have one or more SIDs are required to extend or create a new SIDA to encompass air cargo operations. This change applies only to aircraft operations conducted with airplanes having a maximum certificated take-off weight greater than 45,500 kg (100,309.3 lbs) operating a full or all-cargo program. TSA estimates the cost of this requirement

to be \$10.9 million over the ten-year period of this analysis. This cost reflects the cost of additional employee badges, additional airports, and the administrative costs of updating the airports' security plans.

Indirect Air Carriers are impacted in several ways by this rulemaking. They are now required to complete security threat assessments for certain individuals. This requirement is estimated to impose costs totaling \$4.6 million over ten years. IACs are also required to implement training and develop a testing tool for individuals who perform security related duties to meet the requirements of their security programs. These costs are estimated at \$35.2 million over the ten-year period 2005-2014. They include the cost of initial training for the entire IAC labor force and annual recurrent training for the IAC labor force. This rulemaking establishes new requirements for IACs to obtain approval, to amend, and for annual recertification of their security programs. The costs estimated to comply with these requirements are \$43.9 million over the period of this analysis. The 10-year total for IACs is \$83.6 million.

Foreign Air Carriers costs inside the United States are considered domestic costs for the purpose of this analysis, and therefore are not estimated separately from domestic carrier costs; a separate discussion for these costs is not included. This costing method reflects the way DOT reports data on foreign aircraft operations in the U.S. and the way it reports the cost impact of such aircraft operations on the U.S. economy. Security requirements of this rulemaking apply to foreign air carriers just as they apply to domestic carriers. For their overseas operations, individual foreign carriers are expected to experience financial impacts at levels similar to those experienced by domestic carriers and are not estimated here.

TSA will incur costs as a result of the rule. Development of training for IAC employees will cost the agency approximately \$450K. TSA also will incur costs of approximately \$24.5

million to administer the Known Shipper program. The cost to TSA for the vetting of IACs is estimated at \$2.6 million. TSA will also be modifying its current IAC compliance management system to accommodate the Security Threat Assessments in this rule. The costs of utilizing this system and some STA support costs are captured in the unit costs used to develop the fee costs for the aircraft operators and indirect air carriers.

In summary, the cost impacts of this rulemaking are estimated to total approximately \$2.0 billion undiscounted (discounted: \$1.5 billion at 7%, \$1.8 billion at 3%), over the period 2005-2014. Aircraft operators will incur costs totaling \$1.9 billion, airport operators \$10.9 million, IACs \$83.6 million and TSA anticipates cost expenditures to administer the provisions of the rulemaking at \$27.6 million over the ten year analysis period. Details on how estimates were developed, as well as the discounted value comparisons, were presented in the original evaluation. Where possible, this document focuses on the changes from the NPRM evaluation. The following tables summarize the changes in estimated costs from the NPRM, year by year constant dollar detail, 7% discount rate detail, and 3% discount rate detail.

To assist the readers the following two tables provide, at the summary level, the changes from the NPRM to the final rule. The details of these changes are found in the corresponding sections of this evaluation.

TABLE 2A
Changes from NPRM to Final Rule*

	10 Year Cost (undiscounted)			
Requirement	NPRM	Final Rule	Delta	Remarks
Security Threat Assessment	\$3.7M	\$4.6M	+\$1.0M	Population Increase but admin cost greatly reduced
Security Identification Display Area (SIDA)	\$0.9M	\$10.9M	+\$10.0M	Costs Identified in comments
CHRCs for individuals inspecting cargo	\$0.5M	\$5.7M	+\$5.2M	Increased Population
Implementation of All-Cargo security program for aircraft over 45,000 kg	\$26.6M	\$0.7M	-\$25.9M	Removed LEO costs
Require All-Cargo operators to screen persons entering aircraft (currently done under SD)	\$33.7M	\$35.2M	+\$1.5M	Implementation cost change
New aircraft inspection requirements	\$36.6M	\$38.2M	+\$1.6M	Implementation cost change
All-Cargo Security Coordinators (currently done under SD)	\$0.2M	\$0.0M	-\$0.2	Double Counted in NPRM
Passenger Flight Cargo Screening (currently done under SD)	\$493.1M	\$1,491.1M	+\$998.0M	Cost driven by congressional mandate to triple cargo inspections and public comment
All-Cargo Flight Cargo Screening	\$166.4M	\$328.0M	+\$161.6M	Public inputs on costs
TSA Managed Known Shipper Database	\$24.5M	\$24.5M	-	Remained the same
Develop/implement IAC and Agent Training	\$15.1M	\$35.6M	+\$20.6M	Increase in population requiring training and training development cost
IAC Security Program Requirements	\$36.0M	\$46.5M	+\$10.5M	Change in Population
TOTAL	\$837.3M	\$2,011.9M	+\$1,183.8M	

*Numbers may not sum due to rounding

TABLE 2B
FINAL RULE VERSUS NPRM, TEN-YEAR UNDISCOUNTED COST SUMMARY

Change in Undiscounted Costs, Year by Year													
(starting year moved out 1 year so this shows 11years)													
Section	Who \ Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total*
1540 ; 1548.15; 1544.228	Expand security threat assesments for IAC employees w/unescorted access to cargo and U.S. air carrier employees w/access to cargo but have not had a CHRC.	-2.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	1.0
1542.205	Extend SIDA to all-cargo areas.	-0.1	2.4	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	10.0
1544.229	(all cargo) Expand background check requirements to individuals who screen cargo for all-cargo planes with unescorted access to cargo in the SIDA and new ID requirements.	-0.2	2.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	5.2
1544.101	Implement all-cargo AO std sec program (for all-cargo operations and operations >45.5kg).	-2.7	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	-2.6	0.1	-25.9
1544.101; 1544.202	Require all-cargo AO to screen all persons entering the aircraft (new for all-cargo AO and upgrades 12.5 program).	-3.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	1.5
1544.101; 1544.225	New requirements for inspecting the aircraft (tampering; items not belonging).	-2.4	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	5.5	1.6
1544.101; 1544.215; 1544.305	Require that all-cargo AO designate security coordinators.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2
1544.205	Passenger Flight Cargo Screening	-56.2	112.6	109.3	117.5	95.5	95.5	95.5	95.5	95.5	95.5	141.5	998.0
1544.205	All-Cargo Flight Cargo Screening	-18.8	37.6	35.3	20.0	10.3	10.3	10.3	10.3	10.3	10.3	25.7	161.6
1546	Foreign Air Carriers		{FAA data doesn't separate data by carrier registration, so foreign flag carrier cost in U.S. is reflected in other detail lines. Costs incurred overseas will be similar to those of domestic carriers}										
1544.239; 1546.215; 1548.17	TSA-managed web-based Known Shipper Database.	-2.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0
1548.11	Develop and implement an IAC and Agent training (on pax acft); Develop a TSA testing tool.	-3.1	5.5	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	3.2	20.6
1548.7	IAC security program requirements	-4.2	1.6	1.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	4.6	10.5
	Total*	-95.7	160.3	146.5	139.2	107.5	107.5	107.5	107.4	107.4	107.4	188.9	1,183.8

*Note: Totals may not sum due to rounding.

**TABLE 3A
TEN-YEAR UNDISCOUNTED COST**

Ten-Year Costs (Undiscounted, Millions of Constant 2005 Dollars)												
Section	Who \ Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total*
1540 ; 1548.15; 1544.228	Expand security threat assessments for IAC employees w/unescorted access to cargo and U.S. air carrier employees w/access to cargo but have not had a CHRC.	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	4.6
1542.205	Extend SIDA to all-cargo areas.	2.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	10.9
1544.229	(all cargo) Expand background check requirements to individuals who screen cargo for all-cargo planes with unescorted access to cargo in the SIDA and new ID requirements.	2.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	5.7
1544.101	Implement all-cargo AO std sec program (for all-cargo operations and operations >45.5kg).	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.7
1544.101; 1544.202	Require all-cargo AO to screen all persons entering the aircraft (new for all-cargo AO and upgrades 12.5 program).	3.1	3.0	3.1	3.3	3.4	3.5	3.7	3.9	4.0	4.2	35.2
1544.101; 1544.225	New requirements for inspecting the aircraft (tampering; items not belonging).	2.5	2.7	3.0	3.3	3.5	3.9	4.2	4.6	5.0	5.5	38.2
1544.205	Passenger Flight Cargo Screening	168.7	168.4	163.5	141.5	141.5	141.5	141.5	141.5	141.5	141.5	1,491.1
1544.205	All-Cargo Flight Cargo Screening	56.3	56.2	35.4	25.7	25.7	25.7	25.7	25.7	25.7	25.7	328.0
1546	Foreign Air Carriers	{FAA data doesn't separate data by carrier registration, so foreign flag carrier cost in U.S. is reflected in other detail lines. Costs incurred overseas will be similar to those of domestic carriers}										
1544.239; 1546.215; 1548.17	TSA-managed web-based Known Shipper Database.	2.9	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	24.5
1548.11	Develop and implement an IAC and Agent training (on pax acft); Develop a TSA testing tool.	6.8	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	35.6
1548.7	IAC security program requirements	5.3	4.8	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	46.5
	Total*	251.1	242.5	217.0	185.7	186.2	186.6	187.1	187.7	188.3	188.9	2,021.1

***Note: Totals may not sum due to rounding.**

TABLE 3B
TEN-YEAR DISCOUNTED COST SUMMARY (7%)

Ten-Year Costs (7% Discount Rate, Millions of Constant 2005 Dollars)												
Section	Who \ Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total*
	7% Discount Factor	1.0000	0.9346	0.8734	0.8163	0.7629	0.7130	0.6663	0.6227	0.5820	0.5439	
1540 ; 1548.15: 1544.228	Expand security threat assessments for IAC employees w/unescorted access to cargo and U.S. air carrier employees w/access to cargo but have not had a CHRC.	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	3.5
1542.205	Extend SIDA to all-cargo areas.	2.5	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.5	0.5	8.6
1544.229	(all cargo) Expand background check requirements to individuals who screen cargo for all-cargo planes with unescorted access to cargo in the SIDA and new ID requirements.	2.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	4.8
1544.101	Implement all-cargo AO std sec program (for all-cargo operations and operations >45.5kg).	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.5
1544.101; 1544.202	Require all-cargo AO to screen all persons entering the aircraft (new for all-cargo AO and upgrades 12.5 program).	3.1	2.8	2.7	2.7	2.6	2.5	2.5	2.4	2.3	2.3	25.9
1544.101; 1544.225	New requirements for inspecting the aircraft (tampering; items not belonging).	2.5	2.6	2.6	2.7	2.7	2.8	2.8	2.9	2.9	3.0	27.4
1544.205	Passenger Flight Cargo Screening	168.7	157.4	142.8	115.5	107.9	100.9	94.3	88.1	82.4	77.0	1,135.0
1544.205	All-Cargo Flight Cargo Screening	56.3	52.5	30.9	21.0	19.6	18.3	17.1	16.0	15.0	14.0	260.9
1546	Foreign Air Carriers	{FAA data doesn't separate data by carrier registration, so foreign flag carrier cost in U.S. is reflected in other detail lines. Costs incurred overseas will be similar to those of domestic carriers}										
1544.239; 1546.215; 1548.17	TSA-managed web-based Known Shipper Database.	2.9	2.2	2.1	2.0	1.8	1.7	1.6	1.5	1.4	1.3	18.5
1548.11	Develop and implement an IAC and Agent training (on pax acft); Develop a TSA testing tool.	6.8	3.0	2.8	2.6	2.4	2.3	2.1	2.0	1.9	1.7	27.7
1548.7	IAC security program requirements	5.3	4.4	4.0	3.7	3.5	3.2	3.0	2.8	2.7	2.5	35.2
	Total*	251.1	226.7	189.5	151.6	142.0	133.1	124.7	116.9	109.6	102.7	1,547.9

*Note: Totals may not sum due to rounding.

TABLE 3C
TEN-YEAR DISCOUNTED COST SUMMARY (3%)

Ten-Year Costs (3% Discount Rate, Millions of Constant 2005 Dollars)												
Section	Who \ Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total*
	3% Discount Factor	1.0000	0.9709	0.9426	0.9151	0.8885	0.8626	0.8375	0.8131	0.7894	0.7664	
1540 ; 1548.15; 1544.228	Expand security threat assessments for IAC employees w/unescorted access to cargo and U.S. air carrier employees w/access to cargo but have not had a CHRC.	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	4.1
1542.205	Extend SIDA to all-cargo areas.	2.5	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.7	0.7	9.8
1544.229	(all cargo) Expand background check requirements to individuals who screen cargo for all-cargo planes with unescorted access to cargo in the SIDA and new ID requirements.	2.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	5.2
1544.101	Implement all-cargo AO std sec program (for all-cargo operations and operations >45.5kg).	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.6
1544.101; 1544.202	Require all-cargo AO to screen all persons entering the aircraft (new for all-cargo AO and upgrades 12.5 program).	3.1	2.9	2.9	3.0	3.0	3.1	3.1	3.1	3.2	3.2	30.6
1544.101; 1544.225	New requirements for inspecting the aircraft (tampering; items not belonging).	2.5	2.7	2.8	3.0	3.2	3.3	3.5	3.7	4.0	4.2	32.9
1544.205	Passenger Flight Cargo Screening	168.7	163.5	154.1	129.5	125.7	122.1	118.5	115.1	111.7	108.4	1,317.3
1544.205	All-Cargo Flight Cargo Screening	56.3	54.6	33.4	23.5	22.9	22.2	21.5	20.9	20.3	19.7	295.4
1546	Foreign Air Carriers	{FAA data doesn't separate data by carrier registration, so foreign flag carrier cost in U.S. is reflected in other detail lines. Costs incurred overseas will be similar to those of domestic carriers}										
1544.239; 1546.215; 1548.17	TSA-managed web-based Known Shipper Database.	2.9	2.3	2.3	2.2	2.1	2.1	2.0	2.0	1.9	1.8	21.6
1548.11	Develop and implement an IAC and Agent training (on pax acft); Develop a TSA testing tool.	6.8	3.1	3.0	2.9	2.8	2.8	2.7	2.6	2.5	2.5	31.8
1548.7	IAC security program requirements	5.3	4.6	4.3	4.2	4.0	3.9	3.8	3.7	3.6	3.5	41.0
	Total*	251.1	235.5	204.5	170.0	165.4	161.0	156.7	152.6	148.6	144.8	1,790.2

*Note: Totals may not sum due to rounding.

Benefits

No comments were received and no new calculations were made. The benefit discussion is unchanged and not repeated here.

PUBLIC COMMENTS RELATED TO ECONOMIC ISSUES

The public provided several comments on the economic issues. A summary of those comments and responses follows.

Comment: ACI-NA and the Atlanta International Airport believe that airports and IACs should not be obligated to obtain equipment and staff to support these regulations. They believe that TSA or DHS should either fund the new security mandates or take responsibility for securing cargo operations. United Airlines believes that the NPRM's economic analysis fails to consider the impact on U.S. passenger carriers. For example, United Airline states air carriers will have to absorb a number of costs, including those incurred by domestic airports for SIDA expansion, costs incurred by IACs, and by foreign carriers operating with a U.S. alliance partner. United Airlines believes the solution is to enact a cargo-screening program based on Federal screening of freight as Congress intended. United Airlines believes that TSA should review methods of defraying costs borne by carriers before they pursue screening initiatives that burden carriers.

TSA response: As stated previously, in the preamble of the NPRM at 69 FR 65266, TSA stated that while Congress specified in § 44901(a) that a Federal employee must conduct screening of passenger operations § 44901(f) has no such requirement for all-cargo operations. Aircraft operators incur the cost for the screening of cargo transported aboard their aircraft because § 44901 does not require or mandate TSA personnel to screen cargo that goes into all-cargo aircraft.

Comment: RACCA estimates that because of the high turnover rate in the industry, actual STA cost per employee is \$150. RACCA believes that air carriers need this money for applications that have direct bearing in safety, like pilot training and aircraft maintenance. RACCA states that the threat is minimal, but the cost may be crippling for an industry that operates with narrow margins. They state further that these costs are a burden for many small air cargo operators and may precipitate cost-cutting measures that will have a negative impact on overall safety.

TSA response: Although TSA acknowledges that carriers will evaluate how to spend available dollars, RACCA did not provide information useful to understand the relationship between “high turnover rate in the industry” and how they computed actual STA costs per employee. TSA is providing relief in that subsequent to NPRM publication, TSA decided not to include the Automated Case System component in its STA. As our vetting and credentialing capabilities have grown, we are now able to accomplish these checks more expeditiously and economically.

Comment: IATA estimates implementation will be 2 to 4 times higher than the TSA estimate (\$3.7 million), or \$7.4 to 14.8 million over 10 years. For the expansion of SIDA, IATA estimates that the cost to the industry is 4 times the TSA estimate (\$1.4 million), or \$5.6 million over 10 years. IATA estimates that the actual cost to implement all-cargo security programs will be 3 to 4 times the TSA estimate (\$26.6 million), or \$80 to 106 million over 10 years. Although TSA did not provide any cost estimates for the implementation of the known shipper database, IATA estimates the cost to the industry to be between \$1 and 2 million per year. For the enhancements to the IAC security program, IATA estimates that the costs are 25 to 30 percent greater than the TSA estimate (\$36 million), or \$45.0 to 47.0 million over 10 years. IATA

estimates that the training requirements for IACs will be 2 times that TSA estimate (\$15.1 million), or \$30 million over 10 years. Overall, IATA estimates that the proposed rules will cost the industry 80 percent more than the TSA estimate (\$49 million), or \$88 million a year.

TSA response: TSA has reevaluated the costs IATA addressed. Although the population numbers did in fact increase, there was a corresponding decrease in the unit costs of the STA as TSA was able to eliminate some costs. The new number for the STA is \$4.6 million for the 10 years. TSA accepted recommendations from IATA and others and the SIDA expansion rounds to \$10.9 million over 10 years. The all-cargo security programs, other than the cargo screening, are \$79.8 million for 10 years. Due to a change in the population size, the IAC security program costs are \$43.9 million. The new IAC training numbers are \$35.2 million. The total IAC number is \$83.6 million over 10 years.

Comment: ATA and British Airways question the distribution of the funding for the proposed rules. They state that as currently allocated, the costs fall disproportionately on air carriers, because estimated air carrier allocation (\$758 million) constitutes 90 percent of the total estimated security costs (\$837million). They state further that the annual costs to all parties will exceed the \$100 million annual threshold and would make the NPRM significant under Executive Order 12866.

TSA response: The rule is economically significant under the Executive Order 12866 guidelines. TSA has listened to concerns both about cost and security. TSA has drafted the rule to provide the security at the points security is best provided rather than by attempting to evenly distribute costs.

Comment: Delta estimates that the financial impact to aircraft operators in year one will be \$56.2 million, or \$493.1 million in 10 years, and states the proposed unfunded security mandates add significant costs to their business. Delta believes that TSA's assumptions about aircraft operator's ability to secure operating and capital funding for screening are not correct. Delta believes further that TSA-based calculations from an early 2002 report are significantly inaccurate, and expresses concern about the continued viability of cargo in the passenger air carrier market.

TSA response: Several parties provide estimates during the comment period to assist TSA in computing new numbers. TSA computes the ten year impact to the carriers at \$1.9 billion. The largest portion of these costs, the screening costs have been in place for sometime and are being codified at this time.

Comment: FedEx states that as proposed, the rules will require STAs for over 500,000 drivers that have potential access to cargo. According to this estimate, STA implementation will cost the industry \$27.5 million for only truck drivers (\$55 per individual). NACA expresses that the TSA estimate of employees that will require training is below the actual number, and NACA estimates that in their industry alone, 20,000 people will need the proposed training.

TSA response: TSA has examined the need for STAs in passenger and cargo operations and has reworded the scope of the new requirements to more clearly state which employees and agents of a carrier do require the STA in accordance with security considerations. TSA has adjusted the training costs with these new population estimates.

Comment: NCBFAA states that TSA underestimates the cost of the new measures for air forwarders, many of which are small businesses. NCBFAA questions the basis for TSA's

estimate of 3,800 IAC entities and 26,600 IAC employees. NCBFAA questions the lack of underlying support for this conclusion, and believes more employees will be affected by the proposed rules. To support this, NCBFAA states that most IACs are also surface and ocean forwarders, non-vessel operating common carriers, customs brokers, warehousemen, and motor carrier brokers. Hence, the number of employees directly involved in airfreight operations is only a portion of the total employees that might have access to cargo. Consequently, NCBFAA states that the TSA estimate for total compliance (\$51 million) is an understatement of the true cost to the industry. NCBFAA recommends TSA undertake a more comprehensive impact and regulatory flexibility analysis of the IAC industry for more accurate assessment of the IAC population.

TSA response: TSA has a database that reflected 3800 IACs. Public input during the comment period and discussions at TSA revealed that there was a misunderstanding of the STA coverage. Clearer language has been provided and consequentially this evaluation expanded the numbers to use the latest Census of Business numbers, which were unavailable at the time of the original evaluation. Please see the detailed charts for more detail.

Comment: AAAE believes that the proposed rules are an unfunded mandate for airports. They state further that the cost of expanding SIDA involves more than just the physical expansion of the space; airports with more remote cargo operating locations will need to increase the number of law enforcement personnel on the cargo ramp while diverting law enforcement resources away from the passenger terminal facility. In addition, AAAE states that airports may need to significantly expand their offices of badges to accommodate the additional cargo personnel and states that the Memphis-Shelby Airport will have to badge 15,000 FedEx personnel.

TSA response: TSA reiterates that not every worker requires a background check, SIDA clearance, and a new badge. The SIDA guidelines have been adjusted to allow the airports to work with aircraft operators to minimize the expansion of the SIDA while still providing the necessary security. TSA believes that the new calculations provided are representative of the requirements. Memphis is an example of several locations that have national hubs for the nations largest parcel and express shippers. TSA invites the airport and shippers to work with TSA to use the flexibility and alternatives provided by TSA.

Comment: IATA expresses that TSA underestimates the number of affected employees, and two IATA members indicate that depending on the definition of unescorted access to cargo, they will have at least 63,000 impacted staff, mainly cargo handlers and drivers. The Airforwarders Association states that TSA's estimate of the number of IACs is correct, but that the number of affected IAC employees is incorrect, and recommends revaluation. ATA states that depending on the scope of the requirement, the number of individuals subject to either a STA or CHRC could be ten times greater than the 63,000 estimated by TSA.

TSA response: TSA has re-evaluated the numbers as discussed above. The Census numbers do not support a 3-fold expansion of the population while keeping the number of businesses constant. As stated in other responses, there has been confusion on to the extent the STA or CHRC were going to be required. Based on extensive internal discussion of very knowledgeable subject matter experts, TSA believes the new language provides much clearer guidance and the Census number adjustments are an appropriate estimate.

ALTERNATIVES CONSIDERED

TSA asked for input on a number of alternative concepts throughout the NPRM. Additionally, the public suggested some alternatives not proposed by TSA. Some of the

comments and resolutions are repeated here to make it easier to follow. Based on the exchange of information, the following alternatives were considered. The associated TSA use of the information is included.

Alternative: TSA requested comments on alternatively requiring 100 percent inspection of air cargo. The general consensus of the related comments is that requiring 100 percent inspection of air cargo, absent advances in technology, would be impractical in an industry dependent on just-in-time deliveries. The ATSA does not require 100 percent inspection.

Resolution: TSA considered the feasibility of physically screening 100 percent of all air cargo. When working with the ASAC Cargo group, TSA provided the group a 2002 report on screening options. This report, “Contingency Plan Cargo Security Scenario Analysis,” (FAA 2002) is SSI but provided both the government and the working group a number of screening scenarios. Although these scenarios are not exactly the same as this final rule, the magnitude of costs was considered similar. The report presented several scenarios ranging from \$3-5 billion in 2001 dollars for the 100 % screening costs. Based on public comments, TSA considers the original deliberative process conclusions correct: limitations of technology and infrastructure make such an undertaking impractical, from both a flow-of-commerce and resource point of view. For this reason, the Strategic Plan calls for the focused deployment of currently available tools, resources, and infrastructure in a targeted manner to provide effective security in the air cargo environment today, and lays out a path for accelerated research and development of even more effective and comprehensive tools for tomorrow.

TSA has tailored the air cargo security program to manage various security risks in a cost effective manner. It is based on the Department’s goal of securing the air cargo supply chain,

including cargo, conveyances and aircraft, through the implementation of a layered solution that includes:

- Screening all cargo shipments in order to determine their level of relative risk;
- Working with our industry and federal partners to ensure that 100% of items that are determined to be of elevated risk are inspected; and,
- Developing and ensuring that new information and technology solutions are deployed.

With finite resources and limited technological capabilities 100% inspection of all air cargo, whether through physical or non-intrusive means, would cause extensive delay in the air cargo system and damage both to the air cargo industry and the United States economy. Random inspections, such as the phased-in measure discussed above, when implemented effectively will act as a deterrent to illicit activity, including terrorism, by decreasing the odds that an attack will succeed. However, if suspicious or elevated-risk shipments can be identified prior to loading, the limited inspection resources available can be focused on those items, swinging the pendulum back in favor of the security regime by reducing the size of the haystack that must be searched to find the proverbial needle.

Alternative: TSA considered direct regulation of all shippers including known shippers. The alternative would extend the scope of this requirement to any entity whose employee might have unescorted access to cargo. Federal Express recommended that TSA limit the STA, to the extent permitted by applicable law, to employees who have unescorted access to the aircraft or cargo that will be flown on a passenger aircraft.

Resolution: TSA concluded that extending the scope of this requirement to any entity whose employee might have unescorted access to cargo is inefficient and unnecessary. This

position is similar to that submitted by the National Industrial Transportation League (NITL).

Additionally, TSA has clarified which employees need to complete the STA.

An individual must have an STA if:

- They are unescorted and take control of cargo for shipment on passenger aircraft; or
- They are authorized to have unescorted access to cargo in a location where the regulated entity consolidates or inspects cargo until it is loaded on an aircraft; or
- They are a general partner, officer, director, or individual who owns 25 percent or more of the entity
- TSA has determined that an STA is not needed if:
- The individual is outside of the United States; or
- The individual is in the vicinity of air cargo where the operator, FAC or IAC has other approved security measures to control access; or
- The individual has completed a CHRC for SIDA access or a TSA threat assessment for HAZMAT endorsement.

Alternative: Commenters suggested that unknown shipper cargo be allowed aboard passenger flights. The National Industrial Transportation League suggested that TSA “allow for acceptance of cargo from unknown shippers as long as such cargo is subject to physical inspection by the carrier.” DHL suggested that “if unknown shipper cargo is subject to 100 percent screening passenger airlines should be allowed to transport it.” DHL also argues that the final rule should allow the interline carriage of cargo. Under such a plan, the cargo would be inspected, as appropriate, for its initial flight. After the initial inspection and flight, “such shipments should be allowed on either all-cargo or passenger aircraft.”

Resolution: While TSA appreciates these comments, at this time TSA declines allowing unknown shipper cargo to be transported on passenger aircraft. Currently, no single technology or inspection technique exists, with sufficient versatility, to handle the vast array of cargo configurations, and commodities to ensure security while maintaining acceptable throughput, or processing time.

In the future, TSA may consider this request in the context of developing random screening requirements for Known Shipper cargo. However, TSA does not anticipate allowing unknown cargo on passenger carriers until the rulemaking process is complete and security programs are strengthened. After a comprehensive set of measures is in place, it may be permissible to consider amending the known shipper program to allow the physical screening of unknowns by the operator.

Alternative: TSA invited comments on alternatively requiring each person who boards an aircraft for transportation under an all-cargo security program to submit to an STA. TSA also invited comments about requiring persons who board an aircraft under an all-cargo security program to submit to the assessment if they require prohibited items during the flight to perform their duties.

British Airways, Air France, and ALPA, supported STAs for all individuals who board all-cargo aircraft for transportation. ALPA stated that TSA must minimize access to the aircraft and the flight deck by permitting only those persons to board who have been properly vetted by a 10-year, fingerprint-based CHRC. They also stated that TSA should reconsider the practice of allowing employees who have not been vetted to ride aboard all-cargo aircraft as an employment benefit, without requiring them to meet the same security requirements applicable to other employees who work on or around the aircraft. In addition, ALPA noted that many foreign

nationals travel as animal attendants aboard all-cargo aircraft, and often sit unsupervised just outside of the cockpit, in possession of items normally prohibited on aircraft. The Association of European Airlines recommended that all-cargo aircraft either have security enhanced flight deck doors or that all passengers undergo an STA due to their in-flight proximity to the crew.

Two commenters, ATA and IATA, opposed the STA requirement. IATA stated that STAs for personnel boarding all-cargo aircraft are unnecessary when the Government has already vetted such personnel through the submission of master crew lists and flight manifests. Similarly, ATA recommended permitting air carriers to use current comparable procedures in these locations like submission of crew manifests to TSA.

Resolution: TSA appreciates the responses to these issues and is further evaluating the impact and benefit of establishing a STA requirement for individuals onboard an all-cargo aircraft. At this time, TSA declines to extend a STA requirement to these individuals. Screening requirements for individuals transported are addressed in applicable security programs, Security Directives and Emergency Amendments. Individuals transported are currently checked against the TSA “No Fly” list and they and their accessible property are inspected for prohibited items. Further, all-cargo aircraft operators will be required to screen persons traveling aboard the aircraft for weapons, explosives or other prohibited items. All persons other than flight crewmembers or FAA Inspectors transported on the aircraft must be screened in accordance with TSA-approved standards. Screening will be conducted with walk-through metal detector or hand-wand for individuals and x-ray or physical search of all items brought aboard. TSA is developing an appropriate list of prohibited items for these operations. These measures are in addition to strengthened limitations on who is able to fly as a passenger or

courier on all-cargo flights and are intended to reduce the possibility that a person could hijack an all-cargo aircraft and use it as a weapon.

Alternative: The Association of European Airlines suggested that TSA adopt measures being considered by the EU cargo security work group for secure trucking.

Resolution: TSA did not address this in this rule because it is outside the scope of air cargo.

Alternative: The AOPA recommended replacing the LEO requirement with a designated supervisor who would challenge unauthorized persons in the vicinity of the aircraft.

Resolution: TSA clarified the rule language and its analysis, which resulted in the removal of LEO costs from the regulatory evaluation.

COST OF COMPLIANCE

Regulatory action in the area of air cargo security is focused on the persons or entities responsible for the actual transportation of goods. TSA regulates four distinct segments of the air cargo industry: certain airports serving cargo operations; passenger carriers that transport cargo; all-cargo air carriers; and Indirect Air Carriers (IACs). This regulatory regime covers domestic entities falling under one of these four categories as well as foreign air carriers who operate into or out of the United States. This evaluation will present the cost of compliance by impacted groups. Within each of these sections, we describe the requirement, the target population, and the estimated costs.

Cost of Compliance: Airport Operators:

At airports that are required to have a SIDA because of the presence of covered passenger operations, TSA has extended SIDA requirements to all-cargo operating areas at some airports. Currently, at airports with a security program pursuant to 40 CFR 1542 that are required to have a SIDA, all individuals working in the SIDA must have an airport-approved photo identification (ID) media that meets standards established by TSA. To obtain an airport-approved ID, a person must successfully undergo a fingerprint based criminal history records check (CHRC), and successfully complete training in accordance with the airport's security program.

At airports that are not required to have a SIDA and that regularly host all-cargo aircraft operations using aircraft having a maximum certificated take-off weight greater than 45,500 kg (100,309.3 lbs), TSA is applying the requirements of 49 CFR 1544.225 to operations conducted under the full all-cargo security program.

Essentially this means providing for airport identification media, a defined boundary¹ around the SIDA, verification of personnel within the SIDA, and need to ensure they have coordinated law enforcement notification and response capability. Discussions with knowledgeable TSA personnel suggest that most operating locations already have the essential elements and only need to expand the area covered. For the airport operators this translates to additional personnel being trained on existing airport security program requirements and issuing additional badges. Two commenters felt TSA underestimated the costs by a factor of 4. After reviewing the comments and determining the importance of extending SIDA requirements into sorting facilities on the airport, TSA surveyed its field inspectors to obtain more information on impacts. Based upon the feedback from the inspectors, TSA determined that the estimated population numbers for the SIDA badging would increase from 5,000 to 50,000. The number of estimated locations has been increased from 100 to 260. TSA also accepted the advice of the commenters and included an allowance for the capital costs of expanding the SIDA. These adjustments result in a ten-year cost of \$10.9 million which is roughly double the value recommended by the two commenters who provided numbers.

TABLE 4
Cost to Expand the SIDA

	Locations (A)	Estimated New Badges (B)	Unit Cost (C)	Total Cost =(A or B)*C
Badge Cost		50,000	15	\$ 750,000
Updating Security Plan	260		516	\$ 134,160
Capital Costs	260		500	\$ 130,000
Total	260	50,000	\$531	\$ 1,014,160

TABLE 5
10 YEAR COST OF SIDA EXPANSIONS

¹ Regulations allow airports to determine the most appropriate means to identify the boundary. Examples include the outer perimeter fence, painted lines, signs, etc.

Year	Additional Employee Badges (A)	Updating Security Plan (B)	Capital Costs	Total Cost =A+B
2005	\$ 1,350,000	\$ 134,160	\$ 1,000,000	\$ 2,484,160
2006	\$ 750,000	\$ 134,160	\$ 50,000	\$ 934,160
2007	\$ 750,000	\$ 134,160	\$ 50,000	\$ 934,160
2008	\$ 750,000	\$ 134,160	\$ 50,000	\$ 934,160
2009	\$ 750,000	\$ 134,160	\$ 50,000	\$ 934,160
2010	\$ 750,000	\$ 134,160	\$ 50,000	\$ 934,160
2011	\$ 750,000	\$ 134,160	\$ 50,000	\$ 934,160
2012	\$ 750,000	\$ 134,160	\$ 50,000	\$ 934,160
2013	\$ 750,000	\$ 134,160	\$ 50,000	\$ 934,160
2014	\$ 750,000	\$ 134,160	\$ 50,000	\$ 934,160
Total	\$ 8,100,000	\$ 1,341,600	\$ 1,450,000	\$ 10,891,600

Cost of Compliance: Aircraft Operators:

Criminal History Record Checks

A fingerprint based background check is commonly referred to as a criminal history records check (CHRC). The cost of a CHRC can vary depending on the intermediary used in the process. The cost of a CHRC for this analysis is based on the American Association of Airport Executives (AAAE) fee for fingerprinting. AAAE serves as a “clearing house” for facilitating the processing of fingerprint cards.

TABLE 6
AAAE COST RECOVERY FOR FINGERPRINT CARD PROCESSING

Organization	Electronic Fingerprint Cards
American Association of Airport Executives	\$7.00
Federal Bureau of Investigation	\$22.00
Total	\$29.00

Source: Interviews with personnel from the American Association of Airport Executives, the Office of Personnel Management, and the Federal Bureau of Investigation.

Assuming a CHRC-type background check, each set of fingerprints will cost each checked person \$29. Allowing 30 minutes for the person being finger printed at \$25.37/hr² fully loaded and 10 minutes of law enforcement time taking the print at \$30.59/hr fully loaded³, the unit cost for the CHRC is \$47. TSA estimates that in the first year of the rule, 50,000 employees will be subject to the background requirement. TSA assumes that thereafter, 15 percent of the previous year employees will require background checks each year as a result of replacement due to attrition. The base population of 50,000 was adjusted from the original estimate of 5,000 based upon adding on airport cargo facilities to the badging requirements, a survey of TSA inspectors, and comments received. Based on the above, the revised total cost for fingerprinting is estimated at \$5,685,430. These background check costs are detailed in the table below.

² Using BLS online database hourly wages , the 33-xxxx SOC's were used to estimate a weighted average hourly wage which was then adjusted for benefits by dividing by 0.682 which represents 31.8% of total compensation as benefits from the employer costs data on the DOL website. ("May 2003 National Occupational Employment and Wage Estimates, Employment and wage estimates by occupation at the national level are divided into twenty-two tables, one for each SOC major group. National OES estimates by SOC major groups.")

³ Using BLS online database hourly wages , the 53-xxxx SOC's were used to estimate a weighted average hourly wage which was then adjusted for benefits by dividing by 0.682 which represents 31.8% of total compensation as benefits from the employer costs data on the DOL website. The occupational labor costs are obtained by using the menu system and selecting the 53-xxxx occupational series. ("May 2003 National Occupational Employment and Wage Estimates, Employment and wage estimates by occupation at the national level are divided into twenty-two tables, one for each SOC major group. National OES estimates by SOC major groups.")

TABLE 7
AIR CARGO PERSONNEL
FINGERPRINT-BASED BACKGROUND CHECK COSTS

Year	Employee Base	Number of Checks (C)	Cost/Check (D)	Background Check Cost =C*D
2005	50,000	50,000	\$47	\$2,350,000
2006	50,500	7,575	\$47	\$356,025
2007	51,005	7,651	\$47	\$359,585
2008	51,515	7,727	\$47	\$363,181
2009	52,030	7,805	\$47	\$366,813
2010	52,551	7,883	\$47	\$370,481
2011	53,076	7,961	\$47	\$374,186
2012	53,607	8,041	\$47	\$377,928
2013	54,143	8,121	\$47	\$381,707
2014	54,684	8,203	\$47	\$385,524
Total				\$5,685,430

Notes: Replacement due to Attrition 15%
Checks in years beyond the base year are computed as 15% of the previous year employee base for attrition plus replacement over previous base year.

TSA has amended section 1544.205 to strengthen the Known Shipper program by requiring aircraft operators to inspect a portion of air cargo submitted by Known Shippers. In general, section 1544 requires each aircraft operator to use the procedures in its security program to prevent or deter the carriage of unauthorized explosives or incendiaries in cargo onboard a passenger aircraft. TSA has amended section 1544 to broaden the scope of screening actions required in the aircraft operator security program, including the addition of a requirement to randomly screen the cargo of Known Shippers.

This analysis focuses on cargo screening on passenger aircraft. Under FAA and now TSA security program policy dating back to the late 2001, cargo is only allowed on passenger aircraft if the shipment is submitted by Known Shippers. The Known Shipper program allows operators and freight forwarders to offer cargo to passenger aircraft operations. Accordingly,

these operators are required to maintain a Known Shipper program under their security programs.

This action requires aircraft operators to amend their security programs to ensure the random screening of a portion of air cargo submitted by Known Shippers. To meet this requirement, aircraft operators will be required to follow TSA-approved guidelines and utilize technology approved by TSA. TSA does not provide screeners or equipment to meet this requirement, assuming that the total cost of screening will be borne by these aircraft operators.

TSA offers multiple ways for aircraft operators and foreign air carriers to conduct cargo screening in compliance with security program requirements. Accordingly, these operators may choose among these measures to screen the cargo in most efficient and cost effective manner to meet their business model while abiding the security standards set by TSA. TSA also invites these operators to work with us to determine whether alternative screening measures may meet the security requirements.

TSA requires that passenger aircraft operators randomly inspect a percentage of known shipper cargo before loading it on passenger flights. TSA is not disclosing the specific percentage in this document for security reasons. Based on this prescribed percent of random screening, TSA estimates the total cost for the random screening of Known Shipper cargo at \$168.7 million in the first year and \$1.491 billion over a ten-year period. The table below shows the costs for the ten-year period of this analysis. A discussion of how the costs were estimated follows the table.

TABLE 8
PASSENGER FLIGHT SCREENING OF KNOWN SHIPPER CARGO
Total Ten (10) Year Cost (000's of Constant 2005 dollars)

Year	Purchase of Equipment (B)	Maintenance Costs (D)	Training Costs (E)	Labor Costs (F)	Total Cost =b+c+d+e+f
2005			323	168,372	168,695
2006			38	168,372	168,410
2007	22,000	7,900		133,600	163,500
2008		7,900		133,600	141,500
2009		7,900		133,600	141,500
2010		7,900		133,600	141,500
2011		7,900		133,600	141,500
2012		7,900		133,600	141,500
2013		7,900		133,600	141,500
2014		7,900		133,600	141,500
Total	22,000	63,200	361	1,405,544	1,491,105

TSA revised these costs from the NPRM estimates based upon several factors.

Legislation mandated a tripling of screening and this adjustment was applied. Additionally, the public comments provided a number of very useful values. For the first two years, TSA assumes that manual screening will remain the primary screening method. For years three through ten, TSA assumes that technology will allow a transition to more technologically based methods. TSA relied upon public comments to adjust the previous estimates.

All-Cargo Standard Security Program

The ASAC working groups recommended, and TSA agrees, that all-cargo aircraft operations conducted in aircraft with a maximum certificated take-off weight of more than 45,500 kg (100,309.3 pounds) should be subject to certain security requirements beyond those applicable to such operations under the current Twelve-five security program. Under the changes, the Twelve-five program would continue to apply to covered operations conducted in

aircraft with a maximum certificated takeoff weight of more than 12,500 pounds up to 45,500 kg (100,309.3 pounds). The all-cargo security program builds on the provisions of the Twelve-five program that are not specific to passenger operations. This program requires additional steps for securing all-cargo aircraft weighing more than 45,500 kg (100,309.3 pounds) from tampering or unauthorized access. Existing security programs with similar requirements already cover many carriers and this rule standardizes the requirements. For costing purposes, TSA originally estimated 8 hours of plan maintenance at a U.S. average management loaded cost of \$43 (BLS⁴ value). The two comments received commented on total costs without identifying the source of the cost differences. In recognition of the higher values recommended in total, TSA made two changes to this analysis. The 8 hours for updating was increased by a factor of 3 to 24 in keeping with the 2-4 range as a multiplier in the comments. The final rule requires procedures to ensure coordinated law enforcement notification and response capability but not an expansion of law enforcement staffing. As a result, costs previously attributed to the LEO function have been removed. Table 9 reflects the new summary of these costs.

⁴ U.S. Department of Labor's Bureau of Labor Statistics.

TABLE 9
10 YEAR COST TO IMPLEMENT U.S.
ALL-CARGO AIRCRAFT OPERATOR STANDARD SECURITY PROGRAMS

Year	All Cargo Carriers (B)	Plan Maintenance Hours (C)	Total Hours (D) =B*C	Hourly Cost (E)	Total =D*E+H (000)
2005	65	24	1,560	\$43	\$67,564
2006	65	24	1,560	\$43	\$67,564
2007	65	24	1,560	\$43	\$67,564
2008	65	24	1,560	\$43	\$67,564
2009	65	24	1,560	\$43	\$67,564
2010	65	24	1,560	\$43	\$67,564
2011	65	24	1,560	\$43	\$67,564
2012	65	24	1,560	\$43	\$67,564
2013	65	24	1,560	\$43	\$67,564
2014	65	24	1,560	\$43	\$67,564
Total			15,600		\$675,636

Screen All Persons Aboard All-Cargo Flights

TSA further enhances cargo security by requiring all-cargo aircraft operators to screen persons traveling aboard the aircraft for weapons, explosives or other prohibited items. All persons other than flight crewmembers or FAA Inspectors transported on the aircraft must be screened in accordance with TSA-approved standards, such as walk-through metal detector or hand-wanding for individuals. There were no comments on this cost aspect. These costs are detailed in the Table 10.

TABLE 10
COST TO SCREEN ALL PERSONS ABOARD ALL-CARGO FLIGHTS

Year	Departures* (C)	Authorized persons* (D)	Crew (3 per flight) (E)	Screening hours (F)	Hand Wands	Total (G) =F*\$25 (Screening labor rate)
2005	603,717	905,576	1,811,151	113,197	\$ 312,000	\$3,141,923
2006	630,281	945,421	1,890,842	118,178	\$ 31,200	\$2,985,640
2007	658,013	987,019	1,974,039	123,377	\$ 31,200	\$3,115,635
2008	686,965	1,030,448	2,060,896	128,806	\$ 31,200	\$3,251,351
2009	717,192	1,075,788	2,151,576	134,473	\$ 31,200	\$3,393,037
2010	748,748	1,123,123	2,246,245	140,390	\$ 31,200	\$3,540,958
2011	781,693	1,172,540	2,345,080	146,567	\$ 31,200	\$3,695,387
2012	816,088	1,224,132	2,448,264	153,016	\$ 31,200	\$3,856,612
2013	851,996	1,277,994	2,555,987	159,749	\$ 31,200	\$4,024,930
2014	889,484	1,334,225	2,668,451	166,778	\$ 31,200	\$4,200,654
Total		11,076,265	22,152,530	1,384,533	\$ 592,800	\$35,206,128

*Notes: Departure data from DOT/BTS TRANSSTAT, T100, 2003, market, US flights with freight, all cargo carriers
Totals may not sum due to rounding
cargo growth rate (FAA forecast) 4.4%
pax per flight 1.5
Future years ratios held constant
From the private charter rule, pax screening rate/hour 24
Screening labor rate
(estimated from weighted average of supervisors and labors in relevant 53-xxxx
occupational codes, fully loaded, BTS, 2003. There is no exact occupational code, but if
53-7121 loaders was used, the value would be \$24.75) \$25.00
Carrier Locations 1950
Wand Cost (web search shows range of\$129 -184) \$ 160.00
Wand Replacement allowed at 10% a/year although
no operational replacement data available. This rate allows almost
1 complete replacement over the life of these estimates
Total Cost = screening hours * labor rate plus wand cost

Preflight Screening Requirements

TSA requires that, before placing an all-cargo aircraft back into service after a period spent unattended on the ground, all accessible areas must be searched for any sign of tampering or items that do not belong. Together, these provisions reduce the likelihood of successful tampering, stowaway boarding or the introduction of an improvised explosive device. To ensure that no unauthorized items have been brought on board the plane, prior to take-off aircraft operator employees are required to perform a visual inspection of the aircraft. No changes were suggested in the public comments on this cost aspect. These numbers were updated for a new base year and are detailed in the Table 11 below.

**TABLE 11
NEW PREFLIGHT SCREENING REQUIREMENTS**

Year	Departures* (A)	Preflight time (B)	Hourly Rate (C)	Total =A*B*C
2005	603,717	0.1	50	\$2,515,488
2006	630,281	0.1	50	\$2,741,720
2007	658,013	0.1	50	\$2,988,300
2008	686,965	0.1	50	\$3,257,056
2009	717,192	0.1	50	\$3,549,982
2010	748,748	0.1	50	\$3,869,253
2011	781,693	0.1	50	\$4,217,238
2012	816,088	0.1	50	\$4,596,520
2013	851,996	0.1	50	\$5,009,913
2014	889,484	0.1	50	\$5,460,484
Total				\$38,205,954

All-Cargo Flight Screening of Known Shipper Cargo

Aircraft operators having cargo screening responsibilities under section 1544.205 and their approved security programs “must ensure that, as required in its security program, cargo is inspected for explosives and incendiaries before loading it on its aircraft in accordance with § 1544.207.” TSA has amended this requirement to provide that the aircraft operator, “must

ensure that cargo is screened and inspected for unauthorized persons, explosives, incendiaries, and other destructive substances or items as provided in the aircraft operator's security program and § 1544.207. . . ” This provision broadens the cargo screening duty of regulated aircraft operators to include cargo to be carried on all-cargo aircraft, and authorizes TSA to incorporate into an aircraft operator's individual security program screening of cargo for unauthorized persons, or destructive substances or items the intentional misuse of which could pose a threat to transportation security.

For the purpose of costing, visual inspection of cargo is the assumed method of implementation. Legislation mandated a tripling of screening and this adjustment was applied. Additionally, the public comments provided a number of very useful values. For the first two years, TSA assumes that visual screening will remain the primary screening method. For years three through ten, TSA assumes that technology will allow a transition to more technologically based methods. TSA relied upon public comments to adjust the previous estimates.

TABLE 12
ALL CARGO FLIGHT SCREENING OF CARGO
Total Ten (10) Year Cost (\$000s of Constant 2005 dollars)

Year	Purchase of Equipment (B)	Maintenance Costs (D)	Training Costs (E)	Labor Costs (F)	Total Costs (G) =b+c+d+e+f
2005			\$135	\$56,193	\$56,328
2006			\$16	\$56,193	\$56,209
2007	\$4,000	\$1,436		\$29,970	\$35,406
2008		\$1,436		\$24,291	\$25,727
2009		\$1,436		\$24,291	\$25,727
2010		\$1,436		\$24,291	\$25,727
2011		\$1,436		\$24,291	\$25,727
2012		\$1,436		\$24,291	\$25,727
2013		\$1,436		\$24,291	\$25,727
2014		\$1,436		\$24,291	\$25,727
Total	\$4,000	\$11,491	\$151	\$312,393	\$328,035

Cost of Compliance: Indirect Air Carriers (IACs):

The indirect air carrier (IAC), sometimes called a freight forwarder, is a crucial part of the air cargo system, acting as an intermediary between the shipper and the air carrier for approximately 80% of all air cargo shipped in the United States. All provisions and analysis of the IAC aspects of the rule received considerable public attention. Based on public comments and internal TSA discussions, both the number of firms and number of covered employees were revised for the final analysis. Originally TSA estimated that there were 3,800 entities in the United States operating as IACs ranging from large corporations to sole proprietors working out of their homes. This was based upon the IACs that had registered with TSA. TSA now concludes that firms identified by the U.S. Census, as being directly involved in freight forwarding, NAICS 4885101, Freight Forwarders should be considered. Based on the 2002 Economic Census that has been released since the original analysis, there are 6,506 firms and 83,427 employees. This results in an average employee/firm count of 12.8. The public comments were mixed—some suggesting 3,800 was an appropriate number while other comments suggested the number was much higher. TSA subject matter experts (SMEs) who have worked extensively with the IACs believe that a considerable part of that business population represented in the 6,500 number is engaged in modes other than aviation and that some consolidation has occurred. TSA is acknowledging that some freight forwarders not previously registered with TSA as an IAC will now be regulated by this rule. TSA concludes that a reasonable compromise between the estimates at each end of the range is to use something near the mean value between the high and low values. $((3800+6500)/2= 5150)$. TSA chose 5,000 as a number clearly rounded due to uncertainty and to not unduly weight estimates for the strong conviction of some internal SMEs that the number should be less than 3,800. Additionally, the

new regulatory language clarifies that only individual with unsupervised access to the cargo will require the STA. Once again the commenters and TSA SMEs provide a substantial range of possible percentages of affected workers. TSA concludes that using a round value of 10 employees per firm reflects both the increase shown in census data and public comments. Combining the 5,000 firm count with the 10 employees/firm requiring the STA results in a new IAC STA population of 50,000.

TABLE 13
IAC SEEKING ANNUAL CERTIFICATION
IAC REPORTING

Year	IAC Seeking Vetting (B)	Report Cost (C) =B*\$75	TSA Admin Costs (D)	Total =C+D
2005	5,000	\$375,000	\$600,000	\$975,000
2006	250	\$18,750	\$400,000	\$418,750
2007	250	\$18,750	\$200,000	\$218,750
2008	250	\$18,750	\$200,000	\$218,750
2009	250	\$18,750	\$200,000	\$218,750
2010	250	\$18,750	\$200,000	\$218,750
2011	250	\$18,750	\$200,000	\$218,750
2012	250	\$18,750	\$200,000	\$218,750
2013	250	\$18,750	\$200,000	\$218,750
2014	250	\$18,750	\$200,000	\$218,750
Total		\$543,750	\$2,600,000	\$3,143,750

Under paragraph 1548.7(e), unless otherwise authorized by TSA, each indirect air carrier required to have a security program under this part is required to resubmit its approved security program annually. The prior IAC security program needs to be redeveloped to meet the new requirements of 1548.7(a). However, development costs are minimal because the IAC can adopt a standard security program authorized, directed, and developed by TSA. TSA estimates that each IAC needs to rewrite and rework various aspects of their security plan each year. Based on the rewrite of 14 CFR 108, an estimated eight (8) hours annually is needed to maintain and

update a security program. The estimated hourly wage for administrative security personnel is \$29 and a fully loaded cost of \$43 when the \$29 is adjusted for benefits. Therefore, based on the above and a fully loaded wage rate of \$43, the total ten year cost will be \$43.3 million. These costs are broken down in Table 14 below

TABLE 14
ANNUAL IAC SECURITY PLAN UPDATES, IMPLEMENTATION, AND DUTIES

Year	IACs (B)	Plan Maintenance Hours (C)	Security Duties and Plan Implementation (D)	Total Hours (E=B* (C+D))	Hourly Cost (F)	Total =F*E
2005	5,000	8	12	100,000	\$43	\$4,331,000
2006	5,000	8	12	100,000	\$43	\$4,331,000
2007	5,000	8	12	100,000	\$43	\$4,331,000
2008	5,000	8	12	100,000	\$43	\$4,331,000
2009	5,000	8	12	100,000	\$43	\$4,331,000
2010	5,000	8	12	100,000	\$43	\$4,331,000
2011	5,000	8	12	100,000	\$43	\$4,331,000
2012	5,000	8	12	100,000	\$43	\$4,331,000
2013	5,000	8	12	100,000	\$43	\$4,331,000
2014	5,000	8	12	100,000	\$43	\$4,331,000
Total						\$43,310,000

Note: All costs were fully annotated in the initial regulatory evaluation. New values are the result of updating population values.

TSA will use the information submitted by IAC applicants to verify their legitimacy through a check of publicly available records and to cross-check that information against data on known and suspected terrorists. These new IAC vetting tools would enable TSA to effectively implement a program to approve a proposed security program, or to decline to approve or withdraw approval of a security program from those IACs found to be security risks.

For purposes of Table 15 below, TSA has assumed that 1% of all IACs would be declined or decertified each year. TSA assumed that entities would require five hours to prepare paperwork to appeal a decertification or an unapproved application; in response, TSA personnel would require five hours to review this paperwork and make a ruling on the decertification. These time and personnel costs are estimated at fully loaded wage rates of \$50 and \$60 per case respectively. The ten-year projection below shows that the total cost for the first year of operation would be \$5,500 and the total ten year cost associated with this change would be \$55,000.

TABLE 15
COST FOR IAC DECERTIFICATION

Year	IAC Seeking Vetting (B)	Decertification Rate (C) =B*.01	5 Hour Prep and Appeal (D) =B*\$50	5 Hour Appeal Review (E) =B*\$60*	Total Costs =D+E
(Rates)		1%	\$50	\$60	
2005	5,000	50	\$2,500	\$3,000	\$5,500
2006	5,000	50	\$2,500	\$3,000	\$5,500
2007	5,000	50	\$2,500	\$3,000	\$5,500
2008	5,000	50	\$2,500	\$3,000	\$5,500
2009	5,000	50	\$2,500	\$3,000	\$5,500
2010	5,000	50	\$2,500	\$3,000	\$5,500
2011	5,000	50	\$2,500	\$3,000	\$5,500
2012	5,000	50	\$2,500	\$3,000	\$5,500
2013	5,000	50	\$2,500	\$3,000	\$5,500
2014	5,000	50	\$2,500	\$3,000	\$5,500
Total			\$25,000	\$30,000	\$55,000

In total, the new web-based IAC Security Program will provide a faster, more efficient and comprehensive vetting process while facilitating the application, renewal and review process for the industry. In total, the entire IACSSP including annual IAC certification or recertification, decertification, and updating of security programs is estimated to cost \$5.3 million the first year and a total of \$46.5 million over a ten-year period. These costs are broken out in Table 16 below.

TABLE 16
Total IAC Security Program Requirements

Year	IAC Certification (B)	IAC Decertification (C)	IAC Security Plan (D)	Total =B+C+D
2005	\$ 975,000	\$ 5,500	\$ 4,331,000	\$ 5,311,500
2006	\$ 418,750	\$ 5,500	\$ 4,331,000	\$ 4,755,250
2007	\$ 218,750	\$ 5,500	\$ 4,331,000	\$ 4,555,250
2008	\$ 218,750	\$ 5,500	\$ 4,331,000	\$ 4,555,250
2009	\$ 218,750	\$ 5,500	\$ 4,331,000	\$ 4,555,250
2010	\$ 218,750	\$ 5,500	\$ 4,331,000	\$ 4,555,250
2011	\$ 218,750	\$ 5,500	\$ 4,331,000	\$ 4,555,250
2012	\$ 218,750	\$ 5,500	\$ 4,331,000	\$ 4,555,250
2013	\$ 218,750	\$ 5,500	\$ 4,331,000	\$ 4,555,250
2014	\$ 218,750	\$ 5,500	\$ 4,331,000	\$ 4,555,250
Total	\$ 3,143,750	\$ 55,000	\$ 43,310,000	\$ 46,508,750

Cost of Compliance: Name-Based Background Checks:

Expand Security Threat Assessments for Certain Individuals

TSA has added new sections 1544.228, 1546.213, and 1548.15 to require security threat assessments for individuals who require unescorted access to cargo that is shipped by air.

Sections 1544.228 and 1546.213 apply to aircraft operator employees and other individuals who are authorized to have unescorted access to air cargo, but are not required to complete a criminal history records check (CHRC) under 1544.229 or 1544.230. Section 1548.15 extends the security threat assessment requirement to employees and agents who have unescorted access to cargo on behalf of an indirect air carrier (IAC). TSA will also conduct a security threat assessment on each general partner, officer, director, and individual who owns 25 percent or more of the entity of an IAC or entity applying to become an IAC.

Two offsetting changes are present for the security threat assessment costs. TSA eliminated a portion of the costs while the population almost doubled. The larger population spread the fixed costs over a larger population base resulting in a lower overall fee and slightly

lowers overall costs the STA. TSA now estimates the cost of compliance for this requirement at \$0.5 million in the first year of implementation and \$4.6 million over a ten-year period.

TABLE 17
COST OF NAME-BASED BACKGROUND CHECKS

Year	Number of IACs (B)	Employee /IAC Needing STA (C)	Number of All Cargo Carriers (D)	Avg Number of Employees for STA requirement* (E)	Total # of Employees (F) =b*c+d*e	Turn over - 10% (G)	Number of Checks	Cost of Name-Based Checks
2005	5,000	10	65	25	51,625	--	51,625	\$470,750
2006	5,000	10	65	25	51,625	7,744	7,744	\$462,988
2007	5,000	10	65	25	51,625	7,744	7,744	\$462,988
2008	5,000	10	65	25	51,625	7,744	7,744	\$462,988
2009	5,000	10	65	25	51,625	7,744	7,744	\$462,988
2010	5,000	10	65	25	51,625	7,744	7,744	\$462,988
2011	5,000	10	65	25	51,625	7,744	7,744	\$462,988
2012	5,000	10	65	25	51,625	7,744	7,744	\$462,988
2013	5,000	10	65	25	51,625	7,744	7,744	\$462,988
2014	5,000	10	65	25	51,625	7,744	7,744	\$462,988
Total							121,321	\$4,637,642

Notes	Column	Source/Comments
	A/B	Firm and employment population numbers were updated from the 2002 Economic Census. Values were rounded up to allow for uncertainty. (12.8 x 75% need STA =9.6 rounded to 10)
	C	TSA and DOT databases identify approximately 65 impacted carriers as all cargo.
	F	15% Annual turnover. The 15% includes 10% employee turnover and the 5% IAC business turnover covered in Table 13.
	G	Total population is checked in first year, turn over in following years

IAC and Agent Training

TSA has added section 1548.11 that adds regulatory text to implement training and testing programs for IACs and agents. TSA adjusted the training costs with the new population estimates. This new estimate is higher than all of the comments except one. As noted in the response to comments, TSA concludes FedEx extended requirements beyond TSA's interpretation and thus the analysis here does not attempt to reconcile the FedEx number with the other commenters' values which TSA now exceeds. The new estimate is \$35.6 million versus the previous \$15.1 million.

TABLE 18
IAC SECURITY TRAINING AND TESTING COSTS

Year	# of IACs (B)	Ave # of employees per IAC (C)	Total # of IAC Employees (D) =B*C	Hours (E)	Hourly Cost (F)	IAC Costs (G) =D*E*F	TSA Costs (H)	TOTAL Security Training Costs =G+H
2005	5,000	12.8	64,000	4	25	\$6,400,000	\$449,000	\$6,849,000
2006	5,000	12.8	64,000	2	25	\$3,200,000		\$3,200,000
2007	5,000	12.8	64,000	2	25	\$3,200,000		\$3,200,000
2008	5,000	12.8	64,000	2	25	\$3,200,000		\$3,200,000
2009	5,000	12.8	64,000	2	25	\$3,200,000		\$3,200,000
2010	5,000	12.8	64,000	2	25	\$3,200,000		\$3,200,000
2011	5,000	12.8	64,000	2	25	\$3,200,000		\$3,200,000
2012	5,000	12.8	64,000	2	25	\$3,200,000		\$3,200,000
2013	5,000	12.8	64,000	2	25	\$3,200,000		\$3,200,000
2014	5,000	12.8	64,000	2	25	\$3,200,000		\$3,200,000
Total						\$35,200,000		\$35,649,000

Notes: Hourly cost comes from rounding the BLS summary tables for all civilian workers, fully loaded hourly rate

TABLE 19
TSA COSTS FOR IAC TRAINING COURSE DEVELOPMENT

TSA has not updated the individual training development costs. Training is still under development and TSA concludes the original estimates remain appropriate.

Cost of Compliance: TSA (Known Shipper Database)

TSA already has the known shipper database functioning. Although one comment suggested that the federal government always underestimates IT costs and should consider a number up 10-60% higher, TSA feels that the operational nature of the database suggest the original estimate remains appropriate.

TABLE 20
WEB-BASED KNOWN SHIPPER DATABASE COSTS

Year	Modification Programming	O&M	Data Costs	Total
2005	500,000	\$400,000	\$2,000,000	\$2,900,000
2006		\$400,000	\$2,000,000	\$2,400,000
2007		\$400,000	\$2,000,000	\$2,400,000
2008		\$400,000	\$2,000,000	\$2,400,000
2009		\$400,000	\$2,000,000	\$2,400,000
2010		\$400,000	\$2,000,000	\$2,400,000
2011		\$400,000	\$2,000,000	\$2,400,000
2012		\$400,000	\$2,000,000	\$2,400,000
2013		\$400,000	\$2,000,000	\$2,400,000
2014		\$400,000	\$2,000,000	\$2,400,000
Total				\$24,500,000

FINAL REGULATORY FLEXIBILITY ANALYSIS(FRFA)

The Regulatory Flexibility Act of 1980 (RFA) establishes ``as a principle of regulatory issuance that agencies shall endeavor, consistent with the objective of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the business, organizations, and governmental jurisdictions subject to regulation." To achieve that principle, the RFA requires agencies to solicit and consider flexible regulatory proposals and to explain the rationale for their actions. The Act covers a wide range of small entities, including small businesses, not-for-profit organizations, and small governmental jurisdictions.

Agencies must perform a review to determine whether a proposed or final rule will have a significant economic impact on a substantial number of small entities. If the determination is that it will, the agency must prepare a regulatory flexibility analysis as described in the Act.

However, if an agency determines that a proposed or final rule is not expected to have a significant economic impact on a substantial number of small entities, section 605(b) of the 1980 RFA provides that the head of the agency may so certify and a regulatory flexibility analysis is not required. The certification must include a statement providing the factual basis for this determination, and the reasoning should be clear.

TSA conducted the required initial review of this final rule and indicated that TSA believed it would not have a significant economic impact on a substantial number of small entities. There are two primary sources of change related to the RFA analysis. Although IAC costs in total went up, the population of both workers and business both went up. The cost impact per business on the smallest businesses was computed at .04% in the IRFA and still rounds to .04% in this FRFA. The unit costs actually came down in the STA costs. A simple calculation shows that the average population/business went up by 80%; the small firms in the

example remained approximately constant in size and unit cost dropped by as much as 50%. These changes from the IRFA are essentially offsetting and still result in a finding that there is not a significant impact on a substantial number of IACs. The original IRFA data is still applicable therefore and provided with updated cost values.

IACS

Many of the estimated 7000 Indirect Air Carriers are likely to be small entities. Several very large businesses would have most of the training costs contained in these numbers. Each small business will have the initial cost of developing a security plan; clearing and training employees; and obtaining initial TSA plan approval. In implementing the security plan, TSA expects security to be integrated into actions the same way safety has become an integral part of how IACs conduct their business. For this reason, in years beyond the initial year, costs are limited to an annual report, insuring their own plan is followed, and vetting any new employees.

IACs are a subset of freight forwarders. The larger category of freight forwarders includes all modes of transportation. For this analysis, information from Dunn & Bradstreet (D&B) was used in conjunction with TSA firm specific information. An attempt was made to match D&B firm specific information to TSA known firm specific information, but the quality of the data did not allow for reliable matching. Therefore, the D&B specific data was examined utilizing the Standard Industrial Classification (SIC) and revenue as filters on the data. The SIC was used because SIC data is more complete in D&B, and the Census Bureau NAICS - SIC match for this industry shows near 100% reliability in the correspondence tables.⁵ Without better information, the characteristics of the total industry are assumed to apply to the IACs. This threshold for small business for this industry is \$6 million and the distributions are as follows:

⁵ Correspondence tables between the NAICS and the SIC are published by the Census Bureau.

Freight Forwarding					
Number of Firms in Duns for SIC 4731 02 by Employees (not all records have employee data)					
Employees	Primary SIC	+Secondary SIC	# w FTE and Sales Data	Category %	Cmltv %
1-4	4154	4404	4311	55.2%	55.23%
5-9	1493	1602	1584	20.3%	75.52%
10-19	826	907	898	11.5%	87.02%
20-49	519	597	591	7.6%	94.59%
50+	336	427	422	5.4%	100.00%
Total	7328	7937	7806	100.0%	

Number of Firms in Duns for SIC 4731 02 by Sales				
Sales	Primary	+Secondary	Category %	Cmltv %
<\$20k	5	5	0.0%	0.0%
\$20-\$50k	41	62	0.6%	0.6%
\$50,001-\$100k	109	167	1.6%	2.2%
\$100,001-\$249,999	749	880	8.3%	10.5%
\$250k-\$499,999	1763	1877	17.7%	28.3%
\$500k-\$999,999	3230	3360	31.8%	60.0%
\$1m-\$6m	3264	3503	33.1%	93.1%
>\$6 million	627	725	6.9%	100.0%
Total	9788	10579	100.0%	

Using the data above and the 7000 population values in the analysis, all but 6.9% or 6517 would be small entities for this FRFA. To evaluate the impact, the data was segmented and the smallest of the small were examined for significant impact. If the smallest group can be shown not to have significant impact, and because the relationship remains somewhat proportional as firm size increases, it is a reasonable conclusion that the overall impact is also insignificant. Once again, specific D&B firm data for the smallest 10.5% with revenues less than \$250,000 was examined. This group provided 1110 records.

To estimate the impact, the individual cost items from the report above per employee are multiplied times the number of employees and then the cost per firm is added. The results are

summed over the entire population, which results in an impact of \$68,040 on \$170,278,465 of revenue or at a rate of .04% in the first or most expensive year. This rate of impact is not significant. See the following table for a summary of the calculation.

ITEM	RATE	FIRM COSTS	PER EMPLOYEE COSTS
Annual Reporting	75/report/firm	75	
Training	4 hrs/employee @ \$25		100
Security duties	20 HRS/FIRM @ 43	860	
Decertification	1 5 OF FIRMS @250=2.50/FIRM	2.5	
STA	38/EMPLOYEE		38
Total		937.5	138

All Cargo Operations

The NAICS code for cargo operations is 481112 – scheduled freight air transportation. The SBA standard for small business in this category is less than 1,500 employees (which is the same as the standard for scheduled passenger air transportation – NAICS code 481111). The 2002 Economic Census shows that small business accounts for a significant percentage of carriers for both NAICS codes based on the SBA standard (Appendix A).

For the analysis for All Cargo Operations, DOT form 41 data from BTS TRASTATS was analyzed. The following distribution was found.

FREIGHT

Aircraft Size			
Firm Size	>=100	<100	Total
Large	77.7%	0.8%	78.5%
Small	21.1%	0.3%	21.5%
All Firms	98.8%	1.2%	100.0%

DEPARTURES

Aircraft Size			
Firm Size	>=100	<100	Total
Large	47.2%	15.9%	63.1%
Small	22.9%	14.0%	36.9%
All Firms	70.0%	30.0%	100.0%

PASSENGER FLIGHT REPORTING FREIGHT

Aircraft Size			
Firm Size	LARGE	SMALL	Grand Total
LARGE	88.3%	8.5%	96.7%
SMALL	1.5%	1.8%	3.3%
	89.8%	10.2%	100.0%

Although revenue data for the large carriers (>\$6million) and many midsize carriers are available, too many small carriers are missing revenue data to make a cost comparison. All of the significant costs for the carriers are directly proportional to the size of the business. The most costly item remains the actual screening. Since this requirement has been in place for some time, the market impacts have likely already transpired. The size threshold for the aircraft is large enough that the BTS data suggests few if any carriers defined as small under the SBA guideline rather than the FAA guidelines are likely to even be in the regulated group.

Key Assumptions Analysis

TSA has made several conservative assumptions in this analysis. For example, even though TSA believes most airports and all-cargo carriers have many elements of this rule already in place as good business practice or out of their own concerns for security, costing was done as

if the entire group would be implementing these as new requirements. Based on information gathered through other efforts with the airports, TSA believes the airports have reached out to the aviation community and already successfully completed fingerprint based criminal history records checks, provided access badges, and the associated access training.

INTERNATIONAL TRADE IMPACT ASSESSMENT

The Trade Agreement Act of 1979 prohibits Federal agencies from establishing any standards or engaging in related activities that create unnecessary obstacles to the foreign commerce of the United States. Legitimate domestic objectives, such as safety, are not considered unnecessary obstacles. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards. TSA has assessed the potential effect of this final rule and has determined that carrier operations at overseas locations must provide an equivalent level of security. At most the impact of this rule creates an even competitive cost structure.

UNFUNDED MANDATES REFORM ACT ANALYSIS

The Unfunded Mandates Reform Act of 1995 (the Act) is intended, among other things, to curb the practice of imposing unfunded Federal mandates on State, local, and tribal governments. Title II of the Act requires each Federal agency to prepare a written statement assessing the effects of any Federal mandate in a proposed or final agency rule that may result in an expenditure of \$100 million or more (adjusted annually for inflation) in any one year by State, local, and tribal governments, in the aggregate, or by the private sector, such a mandate is deemed to be a "significant regulatory action." This final rule does not contain such a mandate on State, local, and tribal governments. The overall impact on the economy does exceed the threshold. This regulatory evaluation documents costs, public comments, alternatives, and TSA accommodation of the public comments.