

#### AGENCY

Department of Homeland Security (DHS)

Rule title

Passenger Screening Using Advanced Imaging Technology

RIN	1652-AA67
Publication Date	3/26/2013
Comment Period Closing Date	6/24/2013
Stage	Proposed rule

### **REGULATORY SCORING**

	SCORE
<b>1. Systemic Problem:</b> How well does the analysis identify and demonstrate the existence of a market failure or other systemic problem the regulation is supposed to solve?	<b>2</b> /5
2. Alternatives: How well does the analysis assess the effectiveness of alternative approaches?	<b>2</b> /5
<b>3. Benefits (or Other Outcomes):</b> How well does the analysis identify the benefits or other desired outcomes and demonstrate that the regulation will achieve them?	<b>3</b> /5
4. Costs: How well does the analysis assess costs?	<b>2</b> /5
<b>5. Use of Analysis:</b> Does the proposed rule or the RIA present evidence that the agency used the Regulatory Impact Analysis in any decisions?	<b>1</b> /5
6. Cognizance of Net Benefits: Did the agency maximize net benefits or explain why it chose another alternative?	<b>1</b> /5
Total Score	<b>11</b> /30

### SUMMARY

The TSA has proposed rules modifying the screening process for airline passengers entering the secure area of airports to make Advanced Imaging Technology (AIT) the primary screening technology. This action is an attempt to "mitigate a vulnerability of existing aviation security" to the threat of concealed nonmetallic weapons and explosives. The proposed rule is in response to a court decision directing the TSA to solicit public comment on its prior decision to adopt AIT.

Rather than impartially attempting to identify and implement the solution that best addresses the identified vulnerability of the existing passenger screening process to nonmetallic items, the Regulatory Impact Analysis (RIA) reads like an attempt to justify the prior decision to adopt AIT. Protection from terrorist activities is an expected function of government—something few citizens would doubt is highly beneficial. These benefits, as the TSA admits, are also difficult to calculate. Instead of providing some estimate of how much AIT reduces the probability of a successful terrorist attack or attempting to quantify the benefits or the risks of nonaction, the TSA resorts to unsubstantiated claims, anecdotal evidence, and broad reference to classified reports.

The chosen alternative may, in fact, provide for the highest net benefits to society, but since the RIA does not estimate the benefits, we can't know that. The RIA doesn't even conduct a break-even analysis. No range of cost estimates is provided and no sensitivity analysis is conducted.

The Regulatory Studies Program at the Mercatus Center at George Mason University issues Regulatory Report Cards scored by a team of economists for economically significant proposed regulations. For more information about the program, scorers, other scores, and scoring conventions, see www.mercatus.org/reportcard.

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1. Systemic Problem: How well does the analysis identify and demonstrate the existence of a market failure or other systemic problem the regulation is supposed to solve?	<b>2</b> /5	
Does the analysis identify a market failure or other sys- temic problem?	4/5	The RIA identifies an externality problem, stating that "the consequences of an attack or other security incident may be significantly larger than what would be realized by an individual airport operator or commercial aircraft operator." However, this argument concerns establishing the TSA in place of private security companies. The true systemic problem is the existing failure of TSA screening to detect current threats, which is related to the terrorists' adaptation to current TSA screening technology, using nonmetallic materials not consistently detectable by approved screening methods.
Does the analysis outline a coherent and testable theory that explains why the problem (associated with the out- come above) is systemic rather than anecdotal?	3/5	Externality theory is presented as the reason that "private firms" fail to make the socially optimal investment in security. It is not clear if this refers to airlines (which are privately owned) or airports (which are usually publicly owned). The theory is plausible but not very well developed. Ultimately, the analysis discusses how walk-through metal detectors and random pat downs are not effective means of detecting nonmetallic threats hidden on a passenger's body, and TSA screening procedures must be adapted to recent terrorist use of nonmetallic means.
Does the analysis present credible empirical support for the theory?	2/5	No evidence was cited in support of the externality theory. The only evidence cited in support of the theory was that terrorists are increasingly using nonme-tallic weapons in several anecdotes.
Does the analysis adequately address the baseline? That is, what the state of the world is likely to be in the absence of federal intervention, not just now but in the future?	2/5	The baseline assumes the existing number of walk-through metal detectors through May 2012, approaching an "optimized" number of 1,333 in 2014. RIA assumes that current deployment of AIT represents the future state of the world in the absence of new action. No projection of how terrorist threats or incidence of terrorism might evolve. RIA separates AIT costs that have already been incurred from costs that will occur in the future as a result of continued deployment.
Does the analysis adequately assess uncertainty about the existence or size of the problem?	1/5	The problem is presented as a certainty. The argument in the RIA lacks specific- ity concerning the extent of the problem, presenting statements such as "this technology has helped TSA officers detect hundreds of prohibited, dangerous, or illegal items concealed on passengers." However, it is unclear how large the threat is in the first place under the baseline, as the agency argues that the lack of specificity is due to that information being classified. The RIA does provide unjustified claims that a successful terrorist act could lead to the death of 300 on-board passengers plus numerous on-ground individuals and much property damage. It also references research that suggests a \$60-\$125 billion reduction in GDP growth and at least 1,200 additional driving deaths due to the fear of flying after the 9/11 attack in 2001.



2. Alternatives: How well does the analysis assess alterna- tive approaches?	<b>2</b> /5	
Does the analysis enumerate other alternatives to address the problem?	5/5	The analysis discusses the baseline of pat downs and Explosives Trace Detection (ETD). Every passenger must walk through metal detectors and a "high volume of randomly selected passengers" receive a thorough pat down and another randomly selected population is chosen for ETD screening. These are in addition to the alternative, Advanced Imaging Technology.
Is the range of alternatives considered narrow (e.g., some exemptions to a regulation) or broad (e.g., performance- based regulation vs. command and control, market mechanisms, nonbinding guidance, information disclo- sure, addressing any government failures that caused the original problem)?	2/5	All alternatives entertained in the RIA are directives that all TSA screening locations would follow. While the technology/screening process varies across the four alternatives, they offer very little difference in the type of regulation considered and are variations on the same basic approach. For instance, a performance-based regulation could have been considered in which each airport could choose its appropriate screening program and be required to pass random, unannounced testing by the TSA. However, no alternatives other than command- and-control options were considered.
Does the analysis evaluate how alternative approaches would affect the amount of benefits or other outcome achieved?	1/5	A brief qualitative discussion considers the effectiveness of each alternative in detecting nonmetallic weapons, concluding that the use of AIT is more effective. No evidence is presented, and the claimed difference in effectiveness is not quantified.
Does the analysis identify and quantify incremental costs of all alternatives considered?	2/5	The incremental costs of each alternative were discussed to a large degree. The baseline costs are described fairly well, as are the costs of the chosen (AIT) alternative. The costs of alternatives 2 and 3 are briefly discussed more generally in terms of increased personnel required and increased passenger wait time without fully justifying the cost claims or estimating a total cost figure for these two options.
Does the analysis identify the alternative that maximizes net benefits?	0/5	No. Without estimating the benefits, it is not possible to maximize net benefits. The RIA does not even conduct a breakeven analysis. The decision of which alternative to select appears to be made based on the broad, unjustified benefits claims (or more likely determined ahead of time to continue with the already adopted AIT option).
Does the analysis identify the cost-effectiveness of each alternative considered?	0/5	Benefits are not calculated, and cost-effectiveness is not compared. There is not even a breakeven analysis, as DHS has done in some other proposed regulations. Further, for alternatives 2 and 3, the costs are not fully estimated.
3. Benefits (or Other Outcomes): How well does the anal- ysis identify the benefits or other desired outcomes and demonstrate that the regulation will achieve them?	<b>3</b> /5	
Does the analysis clearly identify ultimate outcomes that affect citizens' quality of life?	5/5	The analysis presents an argument that the usage of an AIT screening process will reduce the likelihood of a successful terrorist plot on an airplane, saving lives (of both passengers and crew), reducing property damage, and potentially increasing GDP growth.

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Does the analysis identify how these outcomes are to be measured?	2/5	No benefits are measured. RIA cites a few suggestive figures that document the lives lost and other costs of a successful terrorist attack but does not estimate how much of this AIT would prevent.
Does the analysis provide a coherent and testable theory showing how the regulation will produce the desired outcomes?	4/5	RIA lists several terrorist attempts to smuggle weapons or other dangerous objects on planes. By increasing the probability of detecting these items, the RIA assumes not only will more terrorists be caught in advance but also fewer terror- ists will attempt to board a plane with such items. As such, fewer terrorist plots will be successful, leading to the intended outcomes.
Does the analysis present credible empirical support for the theory?	2/5	RIA refers to a classified assessment that indicates AIT reduces risk. The primary evidence of AIT's effectiveness presented is a list of blog entries cataloging things detected by AIT. Given that DHS has already deployed some AIT, it ought to be possible to marshal statistics that demonstrate AIT's greater effectiveness.
Does the analysis adequately assess uncertainty about the outcomes?	1/5	AIT is presumed to improve security with certainty. The RIA's failure to calculate benefits could be taken as an admission that there is some uncertainty about the size of the benefits.
Does the analysis identify all parties who would receive benefits and assess the incidence of benefits?	2/5	Passengers and nonpassengers alike stand to benefit by a lower probability of death and property damage due to fewer successful terrorist actions. However, the incidence of these benefits are not addressed. The RIA also suggests that reduced airline terrorist threats can reduce highway traffic fatalities, citing a study finding that at least 1,200 traffic fatalities can be attributable to the 9/11 terrorist attacks, as travelers opted to drive rather than fly.
4. Costs: How well does the analysis assess costs of the regulation?	<b>2</b> /5	
Does the analysis identify all expenditures likely to arise as a result of the regulation?	5/5	Under the adoption of the AIT screening, the RIA identifies the cost of equip- ment, personnel, training, removal of old machines, and utilities.
Does the analysis identify how the regulation would likely affect the prices of goods and services?	1/5	Security screening is a good in and of itself, but the RIA suggests the cost of providing this service will rise with the use of AIT. While the analysis suggests an increase cost of TSA screening, it does not address the source of the funds to pay for such cost increases, such as taxes or fees for tickets. As such, it does not address the likely impact of the price of other goods and services.
Does the analysis examine costs that stem from changes in human behavior as consumers and producers respond to the regulation?	3/5	While the analysis does address opportunity cost of passengers' time as a result of going through the AIT screening device and of those opting for the manual pat-down, it does not address the possibility of more time spent in line or passengers arriving earlier (and spending more time unproductively at the airport) as a result of the uncertainty associated with getting through the queue. Admittedly, the expected time should not change much in the long run, but wait times certainly did when the technology was first adopted prior to this proposed rule. Analysis of privacy costs describes a newer technology that arguably raises fewer privacy concerns because it identifies anomalies on a generic outline of a person rather than using an actual image. RIA also cites evidence that the radiation levels do not create health impacts.

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If costs are uncertain, does the analysis present a range of estimates and/or perform a sensitivity analysis?	0/5	No range of cost estimates is provided, and no sensitivity analysis is conducted.
Does the analysis identify all parties who would bear costs and assess the incidence of costs?	3/5	RFA analysis concludes that the regulation does not create a substantial burden on small entities because the TSA pays most of the costs. No other analysis of cost incidence.
5. Use of Analysis: Does the proposed rule or the RIA present evidence that the agency used the analysis in any decisions?	1/5	DHS prepared only an NPRM and RIA to seek comment on the new screening methods because it lost a court case after it implemented the screening without taking public comment. The RIA simply calculates the costs of the decision DHS made before it even sought comment. So, it appears the RIA had no effect on the decision.
6. Cognizance of Net Benefits: Did the agency maximize net benefits or explain why it chose another alternative?	1/5	Benefits were not estimated, so no comparison of net benefits was possible. The analysis suggests, through unjustified claims, that the AIT screening process is more successful in detecting metallic and nonmetalic items on a person's body than are the other alternatives and that this fact should outweigh the cost disadvantages.