

**For Hearing: Challenging the Status Quo at TSA: Perspectives on the Future of  
Transportation Security  
House Committee on Homeland Security's Subcommittee on Transportation Security  
311 Cannon House Office Building  
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**Written Statement  
Richard W. Bloom, PhD, ABPP  
Professor and Associate Vice President for Academics**

**Opportunities for Status Quo Challenge**

Develop qualitative and quantitative analyses of TSA's effectiveness and cost to answer question of whether TSA should continue to exist. Effectiveness would include measures of prevention, deterrence, and the successful resolution of terrorism and other crime. Comparative analyses of various public and private approaches should also be part of addressing effectiveness and cost.

Assess whether TSA should have regulatory authority over the security services it also provides. For example, does the Japanese experience with nuclear energy provision and regulation suggest that TSA's dual responsibilities mitigate against regulatory and service success?

Continue to assess whether TSA is too focused on aviation, too little focused on other transportation modalities. Continue to focus on whether overall U.S. Government security efforts are too focused on transportation to the exclusion of other terrorist and crime targets.

Regardless of the future of TSA, U.S. Government concerns about transportation security can only be resolved by more global, international, and regional cooperation including that between transportation security and customs authorities.

Better differentiate among the three main definitions of *security* in TSA policies, programs, and procedures—(1) how secure we think we are; (2) how secure we actually are; and (3) what we do to achieve either or both of the first two—as a means to create more coherent policy and programs.

Better address that what contributes to security one moment may also contribute to violating it another moment—based on the creativity and ingenuity of those seeking to violate transportation security through terrorism and other crime.

Focus less on how many and what kind of resources are enough for adequate transportation security. Focus more on how do we get the most security with whatever resources are available. This is especially true with the U.S and its allies facing fiscal and economic challenges globally, regionally, and domestically that necessitate budget reductions or trade-offs with other priorities.

Continue to move away from a *vulnerability-impact* approach, away from a better *threat* approach, and towards an optimal *risk estimate*.

Approach the ideal that risk estimates should continuously change because threat, vulnerability, and the world in general continuously change.

Develop and field the various layers of transportation security so that they continuously change as risk estimates continuously change.

More equally develop and field in an integrated fashion both *offensive* and *defensive* approaches. They should continuously match changes in risk estimates.

The *offensive* approach includes *perception management* and *intelligence collection and analysis*. In *perception management*, various communication strategies are used to decrease how many people worldwide want to attack transportation or support those who do. For *intelligence collection and analysis*, information helps identify people intending to attack transportation or support those who do. Then—in a legally and ethically appropriate fashion—these people are detained, incarcerated and/or neutralized.

The *defensive* approach includes technologies and human activities to catch people and things constituting an attack on transportation—often near the location of the attack. This includes physical barriers; motion detectors; closed circuit television; explosive, weapons, radiation, and other threat detection systems; behavioral detection and profiling systems; education, training, and assessment of human operators who engage in technology-, eye-, and hand-mediated searches; hardening of transportation cargo packaging; optimal configuring of transportation cargo; and various supply chain security programs.

Resolve the challenge of time. Time works against transportation security. It's pretty easy to learn about specific security measures, and this provides the opportunity for people and organizations who seek to attack transportation to pre-empt, counter, work around, or just attack elsewhere. As resources continue to be sunk into a specific offensive or defensive approach, many of those who seek to attack transportation already have made allowances for security measures that have not even been fully fielded.

Resolve the challenge of intelligence. While, accurate and relevant information is crucial to our understanding the threats and vulnerabilities from which risk estimates come, this information is almost always incomplete, contradictory, and ambiguous. There also are many difficulties in sharing and transmitting this information to transportation security personnel in a manner that is timely, responsive, and secure. Too often, then, transportation security personnel are flying blind...or at least with impaired vision. There are always multiple threats, rarely actionable intelligence.

Resolve the challenge of technology. Estimates of security technologies' effectiveness almost always keep *decreasing* as we move from the laboratory, to field test, to an every-day travel and operational environment. In fact, given the usually low probability of a terrorist attack or other security violation—save for actionable intelligence—statistically supporting the security effectiveness and utility of technologies is a very difficult thing to do.

Resolve the challenge of profiling, behavioral detection, and interviewing techniques in operational environments. It's just extremely difficult to link specific aspects of people—

sweating, facial expressions, clothing, how they talk, what they talk about, where they are in an airport or onboard an aircraft, let alone what they may be thinking and feeling to terrorist and criminal intent and behavior. And much more attention needs to be focused on the profiling of situations and environments. Profiling efforts should continue for shipments and things, as well as people.

Resolve the challenge of how transportation security personnel are selected, trained, and managed. Let's see, these folks are being entrusted with our lives. Do they have the right stuff and do we know what the right stuff is—how to best think, what motivations are appropriate for wanting the job, what powers of concentration are appropriate, what types of emotional functioning are the right ones, what behavioral capabilities are necessary including fatigue tolerance and tolerance for people behaving at their worst? Does training best conform with knowledge and skills associated with actually identifying and stopping today's and tomorrow's terrorist and criminal attacks, not yesterdays? Are transportation security personnel treated right—salaries, benefits, awards and recognition, day-to-day respect?

Resolve the challenge of the layers of security looking right. What does this mean? If the layers look predictable and *are* predictable, we have a big problem. This is because surveillance, reconnaissance, and probing transportation security systems too often occur by potential terrorist and criminal planners. Even the everyday security violations like people going through the wrong door, entering restricted areas accidentally, or leaving baggage unattended are studied by potential terrorists for clues to the likely responses of transportation security systems when a real attack occurs. A better choice is looking predictable but being unpredictable. A best choice is looking unpredictable and being unpredictable.

Resolve the challenge of culture. Cultural blinders impede how we understand other people. Let's face it, even well-intentioned people can be victims of their own racial, ethnic, ideological, and other prejudices. These make it very difficult to implement some of the offensive and defensive approaches to transportation security. As we try to win hearts and minds of people throughout the world, we may be creating enemies or just not affecting people at all—or affecting different kinds of people in unknown ways. As just one example, when we neutralize terrorists with violence, we may be increasing their total number and losing opportunities to interrogate for valuable information. This doesn't excuse or condone the threat. It does show the difficulties in maintaining acceptable levels of security

Resolve the challenges of transportation security cost and value. Governments and businesses continue to grapple towards accurate calculations on the trade-offs of security overhead, impact on security, profit and loss implications. What are needed are qualitative and quantitative analyses and measures of deterring, preventing, and successfully managing transportation terrorism and other crime—including measures of false positives and false negatives in operational environments. This is especially the case given that terrorists have publicly stated that hurting their targets economically is a priority. *Are transportation security programs and their costs—including the existence and functioning of TSA—actually wins for terrorists?*

Minimize the noxious consequences of partisan politics and turf battles. Yes, there are highly competent political leaders with backbone and character who do the right thing. But there are

others who engage in public posturing, outright lying, making true-believer statements based on sheer ignorance, supporting positions based on trading favors, doing whatever it takes to get elected, and all the rest. This has been the case throughout history for all known cultures. Even our truly great political leaders often have to make compromises with such people...and transportation security can suffer. This occurs in the context of a constant tension among the budgetary interests of government, industry, academia and the general public versus legitimate transportation security needs.

Resolve the challenge of transportation cargo *value*. For example, much less attention and fewer resources have been addressed to the threat facing air cargo than to that facing passengers. Many citizens and legal authorities seem to have less concern about aircraft carrying only cargo and a crew than about commercial passenger flights with cargo. That air cargo containing explosive materiel or other noxious agents, whether on commercial passenger aircraft or on flights without commercial passengers, can endanger large numbers of people seems to be ignored, discounted, or repressed. Depending on the type of attack, the consequences could include large numbers of human casualties; a small number of casualties with high symbolic value; and symbolic, significant, and even catastrophic damage and destruction to communications, energy, and other infrastructure of national and international significance—all with potentially huge economic damage.

Resolve the challenge of transportation cargo *variety*. Cargo *varies* in content, how the content is packaged and situated, and the configuration and other characteristics of the transport vehicle. The associated screening challenges include physical damage related to the method of screening; levels of screening specificity and sensitivity related to the cargo content; and terrorist knowledge of screening methods,

Resolve the challenge of supply chain *links and nodes*. The biggest problem here is the number of entities involved in the cargo supply chain. A partial, generic list of supply chain entities: manufacturers, manufacturing facilities, freight forwarding facilities, shipping facilities, third-party logistics providers, warehouses, other distribution centers, independent cargo screening facilities, and more. The associated screening challenges include physical damage related to the method of screening; levels of screening specificity and sensitivity related to the cargo content; and terrorist knowledge of screening methods

Resolve the challenge of the *cargo security puzzle*. What is this puzzle? Implementing *total, comprehensive, and intrusive screening* can significantly hurt our economy through huge costs of implementation. [And there still will be significant error rates]. But *partial and less comprehensive and less intrusive screening* also can significantly hurt our economy through its very incompleteness leading to a greater probability of successful terrorist attacks. The same applies to *doing nothing*. Any way you cut it, terrorism seems to have a good shot at being successful. Other transportation-related crime much more so. Again, the costs of transportation cargo security may be an example of terrorist ongoing success. The key to counterterrorism and other counter-crime successes is optimal intelligence collection, analysis, and dissemination in a secure, responsive, and timely fashion.

Resolve the insider threat to transportation security. Psychological research on how good people can go bad and bad people can go good need to be studied, implemented, and assessed.

## Conclusions

Terrorism ultimately is psychological. While its intermediate consequences are death, destruction, casualties, and damage, its ultimate consequences are to create and maintain desired perceptions and behaviors of specific targets surviving terrorist acts. TSA seems to be focused on terrorism's intermediary consequences without being integrated with U. S. Government and allied efforts on terrorism's ultimate consequences.

Specific kinds of public discourse and classified analyses of terrorism—including resulting estimates of threat, vulnerability, and risk—are themselves targets of terrorism. So are specific security programs. TSA seems to be inadequately focused on the potential for its actions to support desired terrorist consequences.

Too many people in the United States expect total safety and security—an unreasonable mass psychology that has not been addressed adequately by political and security leaders. At the moment, from the terrorist perspective, both objective success and objective failure qualify as subjective success...again because terrorism is, ultimately, psychological. TSA needs to better address this as it applies to transportation security.

Transportation security initiatives continue to be too focused on technology and technological fixes, not on the thought processes involved in attacks and countering attacks.

It's less important to find some minimum resource threshold below which transportation security is unacceptably endangered. More important is to do what's best with the resources we have. In our favor, resources not directly allocated to support security can be still contribute to counterterrorism success and failure.

Transportation is only one of an infinite number of targets for terrorism and other crimes like illicit trafficking and theft. Unless TSA can be shown to provide more value than cost in an era of competing budgetary and security needs, its disestablishment should be seriously considered.

Prudence and good judgment are essential as we move forward. Yet, in the history of the world, both are usually in short supply.