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HOMELAND SECURITY AND REGULATORY ANALYSIS: ARE WE SAFE YET?

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During the five years since its inception, the Department of Homeland Security ("DHS") promulgated thirteen economically significant regulations, costing a total of at least four billion dollars annually. This study evaluates the quality of regulatory analysis that DHS has produced for these regulations. Compared to the ideal articulated in Executive Order 12,866 and accompanying Office of Management and Budget ("OMB") guidance, most of these analyses are seriously incomplete. DHS, OMB, and Congress can all take steps to remedy this deficiency. DHS should hire more economists, involve them early in developing alternatives, manage them in a way that ensures their job is to conduct objective analysis, and learn from both its own and other agencies' best practices in regulatory analysis. OMB should aggressively promote analysis of alternatives when it reviews DHS regulations and amend Executive Order 12,866 to clarify that it expects

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agencies to analyze all reasonable alternatives, even if they would require a change in the law. Congress should give DHS greater discretion to craft regulations and give DHS deadlines that allow adequate time to conduct quality regulatory analysis. Congress should also hold DHS accountable by specifically articulating and measuring the outcomes the regulations are supposed to accomplish. If Congress declines to give DHS more discretion or time, then it should arrange for an objective analysis of alternatives by the Government Accountability Office or other independent entity.

Ms. Letter [White House Tour Guide]:

Now that we've made it through with security **Guard:** Ma'am, one is never through with security...

> ... **Ms. Letter:** Oh! I feel so guarded.¹

INTRODUCTION

The DHS celebrated its fifth anniversary in 2008. During its first five years, the Department promulgated thirteen "economically significant" regulations, costing a total of at least four billion dollars annually.² Pronounced criticism of the Department and its policies has come from across the political spectrum on a variety of issues.³ How can Americans know whether they are getting their money's worth from the lead agency designed to ensure their safety? Perhaps more importantly, how does DHS know this?

For decades, presidents have issued executive orders insisting that regulatory agencies complete a detailed Regulatory Impact Analysis that

^{1.} Karen Zacarías, Chasing George Washington: A White House Adventure 11 (Feb. 28, 2008) (unpublished manuscript of play, on file with authors).

^{2.} See infra tbl.3.

^{3.} A recent example occurred in early 2008, as a particular dispute between Congress and DHS reached a boiling point as members of Congress representing border states rankled at DHS regulations requiring individuals to present passports when crossing the U.S. border from Canada. *See* Spencer Hsu, *ID Rule to Change for Canada Crossings*, Spencer Hsu, WASH. POST, Jan. 22, 2008, at A02 (noting that after Homeland Security Secretary Michael Chertoff suggested it was time for those opposed to the measures to "grow up," Representative Thomas Reynolds stated that Chertoff had "as much credibility on telling people to grow up as Geoffrey the giraffe").

helps answer these questions for "economically significant" regulations.⁴ The Office of Information and Regulatory Affairs ("OIRA"), within the OMB, reviews proposed regulations and accompanying analysis and can return the regulation to the issuing agency or seek revisions if the analysis is incomplete or the regulation is inconsistent with administration policy.⁵ Regulatory impact analyses are unique analyses produced within the government that are intended to identify options to accomplish a regulatory goal and provide decision makers with objective analysis of their effectiveness and cost.⁶ Wherever possible, values are quantified to make comparisons easier for decision makers. If DHS is conducting thorough regulatory analysis, Americans should be able to rest easy knowing that the government they have entrusted to keep them secure is doing its homework to ensure it adopts effective solutions to the country's security problems without needlessly sacrificing liberty, privacy, prosperity, or other important values in the process.

This study evaluates the quality of regulatory analysis DHS has produced for each of the thirteen economically significant regulations the department has issued between its creation and December 31, 2007. Compared to the ideal articulated in Executive Order 12,866 and accompanying OMB guidance,⁷ most of these analyses are seriously incomplete. We suggest and test possible explanations for what appears to be lackluster performance. We have not attempted to analyze whether the regulations DHS has implemented are actually effective or desirable, but rather, whether DHS provided itself, the public, the President, and the Congress with the information necessary to answer that question before issuing the regulations.

To the best of our knowledge, this is the first overall attempt to assess the quality of DHS regulatory analysis of economically significant regulations. Because we rely solely on the publicly-available rule notices and Regulatory Impact Analysis, we cannot claim to offer a comprehensive assessment of the influence of economists or other regulatory analysts on DHS regulations. The regulations actually issued may have been much

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^{4.} Exec. Order No. 12,866, 58 Fed. Reg. 51,735 (Sept. 30, 1993). This executive order—signed by President Clinton and still in force today—requires that agencies complete regulatory impact analyses whenever a rule has a \$100 million annual economic impact, or has other significant adverse impacts on the economy, the environment, or other enumerated factors. *Id.* at 51,738.

^{5.} *Id*.

^{6.} *Id*.

^{7.} OFFICE OF MGMT. & BUDGET, EXECUTIVE OFFICE OF THE PRESIDENT, OMB CIRCULAR NO. A-4, REGULATORY ANALYSIS (2003). [hereinafter OMB CIRCULAR A-4].

improved either by extensive analysis, or simply by questions raised during internal discussions, that never saw the light of day. Nevertheless, our approach yields significant insight into the quality of the analysis DHS has made public.

Other researchers have engaged in similar "scorecard" assessments of regulatory analyses performed by other agencies. Working with various coauthors, Robert Hahn has developed a scorecard that covers most of the same topics as our evaluation in this article.⁸ The Hahn scorecard provides yes/no answers for a series of elements that OMB requires agencies to include in a Regulatory Impact Analysis.9 We evaluate the completeness of the analysis, rather than just the presence of various elements, but because the Hahn scorecard contains numerous elements, it provides substantial insights on the depth of the analysis similar to our assessment of completeness. Most recently, in 2007, Hahn and Dudley assessed the analyses underlying seventy-four environmental regulations enacted under three successive administrations, finding that many of these analyses were seriously incomplete.¹⁰ A 2000 analysis by Hahn, Lutter, and Viscusi reached similar conclusions.¹¹ A 1990 analysis by Hahn and other co-authors covering multiple agencies concluded, "[t]he agencies' economic analyses generally did not provide adequate information about a proposed regulation to justify decisions to proceed with the regulation."¹² The quality of regulatory analysis in the European Union, moreover, generally lags the United States, though some countries are better than others.¹²

^{8.} Robert W. Hahn et al., Assessing Regulatory Impact Analyses: The Failure of Agencies to Comply With Executive Order 12,866, 23 HARV. J. L. & PUB. POL'Y 859, 877 (2000).

^{9.} *Id*.

^{10.} Robert W. Hahn & Patrick Dudley, *How Well Does the U.S. Government Do Benefit-Cost Analysis?*, 1 REV. ENVTL. ECON. & POL'Y 192, 193-94 (2007).

^{11.} ROBERT W. HAHN, RANDALL W. LUTTER & W. KIP VISCUSI, DO FEDERAL REGULATIONS REDUCE MORTALITY? 23-24 (2000).

^{12.} Robert W. Hahn et al., Assessing Regulatory Impact Analyses: The Failure of Agencies to Comply With Executive Order 12,866, 23 HARV. J. L. & PUB. POL'Y 859, 877 (2000).

^{13.} Robert W. Hahn & Robert E. Litan, *Counting Regulatory Benefits and Costs: Lessons for the U.S. and Europe*, 8 J. INT'L. ECON. L. 473, 487 (2005) ("Although the quality of assessment and oversight is higher in some European member states than others, the overall quality throughout Europe is generally poor."); Robert W. Hahn & Paul C. Tetlock, *Has Economic Analysis Improved Regulatory Decisions?*, 22 J. ECON. PERSP. 67, 72-73 (2008) (citing research showing that a much smaller percentage of European regulatory analyses include important elements).

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Section I discusses the elements of an ideal regulatory analysis and the foundation of these elements in economic scholarship, executive orders, and OMB guidance. Section II explains how we developed criteria for evaluating regulatory analysis based on the requirements in Executive Order 12,866 and OMB guidance. Section III lays out the results of our evaluation of the regulatory analyses for each of the thirteen economically significant rules promulgated between the creation of DHS and the end of 2007. Section IV analyzes several possible explanations for DHS's failure to complete thorough regulatory analysis. Finally, in Section V, we offer some potential solutions for improving regulatory analysis that DHS, OMB, and Congress could implement.

I. I. REGULATORY ANALYSIS¹⁴

Respected analysts have called on the government to prioritize security initiatives based on risk assessment and cost-effectiveness.¹⁵ The 9/11 Commission's report repeatedly called on the government to implement security measures that reflect assessment of risks and cost-effectiveness.¹⁶ The 2007-2009 DHS Annual Performance Report lists six objectives related to protecting Americans from terrorists; four of the six objectives are expressed in terms of risk reduction.¹⁷ The National Strategy for Homeland Security notes:

The assessment and management of risk underlies the full spectrum of our homeland security activities, including decisions about when, where, and how to invest in resources that eliminate, control, or mitigate risks. In the face of multiple and diverse catastrophic possibilities, we accept that risk—a function of threats, vulnerabilities, and consequences—is a permanent condition. We must apply a risk-based framework across all homeland

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^{14.} This section draws heavily on Jerry Brito & Jerry Ellig, A Tale of Two Commissions: Net Neutrality and Regulatory Analysis, 16 COMMLAW CONSPECTUS 1 (2007), and JERRY ELLIG, AMOS GUIORA, & KYLE MCKENZIE, MERCATUS CENTER, A FRAMEWORK FOR EVALUATING COUNTERTERRORISM REGULATIONS (2006), available at http://www.mercatus.org/repository/docLib/20060908 PS terrorism Complete.pdf.

^{15.} See, e.g., HENRY H. WILLIS, ANDREW R. MORRAL, TERRENCE K. KELLY & JAMISON JO MEDBY, RAND CTR. FOR TERRORISM RISK MGMT. POL'Y, ESTIMATING TERROR RISK (2005).

^{16.} See, e.g., NATIONAL COMMISSION ON TERRORIST ATTACKS UPON THE UNITED STATES, THE 9/11 COMMISSION REPORT 364-65, 391, 396, available at http://www.gpoaccess.gov/911/index.html [hereinafter The 9/11 Commission Report].

^{17.} DEPARTMENT OF HOMELAND SECURITY, ANNUAL PERFORMANCE REPORT, FISCAL YEARS 2007-2009, 6-7, *available at* http://www.dhs.gov/xlibrary/assets/cfo_apr_fy2007.pdf.

security efforts in order to identify and assess potential hazards (including their downstream effects), determine what levels of relative risk are acceptable, and prioritize and allocate resources \dots .¹⁸

An almost infinite number of possible actions might serve to mitigate an almost infinite number of terrorist attacks. With limited public and private resources, we cannot invest in all of them, but rather, must find a way to prioritize possible actions. Setting priorities for government action requires an understanding of the outcomes, consequences, and forgone benefits associated with different measures to mitigate terrorist risks.

It should be no surprise that regulatory analysis provides the necessary framework for such evaluation. Regulatory analysis is rooted in economics the social science commonly defined as the study of how people satisfy potentially unlimited wants with scarce means that have alternative uses.¹⁹ This definition of economics precisely characterizes the predicament faced by DHS: an unlimited number of things could be imagined that might make the country safer from terrorists, the resources available for the task will never be sufficient to do all the things that could be imagined, and those resources have alternative uses. In addition, the DHS must deal with the pesky issue of finding out which of the imagined solutions are actually likely to produce the hoped-for results.

Table 1 below summarizes the most salient aspects of the regulatory analysis framework commonly advocated by economists and enshrined in several Executive Orders since the 1970s.²⁰ Commentators sometimes refer to this framework as "cost-benefit analysis," as if its sole purpose is to develop a quantitative comparison that automates the decision about whether to regulate. This is, however, an exceedingly narrow and highly inaccurate depiction of the framework. Of course, regulatory analysis requires identification and documentation of benefits and costs. Comparison of benefits and costs, however, is just one element of the framework.

OMB Circular A-4 on Regulatory Analysis states,

^{18.} Homeland Security Council, National Strategy for Homeland Security 41 (2007), *available at* http://www.dhs.gov/xlibrary/assets/nat_strat_homelandsecurity_2007.pdf.

^{19.} This classic definition was first articulated by LIONEL ROBBINS, AN ESSAY ON THE NATURE & SIGNIFICANCE OF ECONOMIC SCIENCE 16 (2d ed. 1945).

^{20.} For a concise history of the Executive Orders governing regulatory analysis, see Brito & Ellig, *supra* note 14, at 7-13.

A good regulatory analysis is designed to inform the public and other parts of the Government (as well as the agency conducting the analysis) of the effects of alternative actions

. . . .

A good regulatory analysis should include the following three basic elements: (1) a statement of the need for the proposed action, (2) an examination of alternative approaches, and (3) an evaluation of the benefits and costs—quantitative and qualitative—of the proposed action and the main alternatives identified by the analysis.²¹

Use of this framework allows decision makers to clarify objectives, assess the need for regulation, identify the nature of the problem they are trying to solve, and understand the consequences of alternative courses of action, even if comparison of quantified costs and benefits does not drive the decision. Thomas McGarity, who characterizes himself as ambivalent about regulatory analysis,²² nevertheless notes that regulatory analysis is "simply the process of applying the policy analysis paradigm to regulatory problems."²³ The "policy analysis paradigm" consists of these steps:

(1) identify the problem; (2) break it down into its constituents; (3) clarify and rank preexisting goals; (4) identify alternative policies for resolving the problem; (5) investigate the consequences of each alternative, using available information and clearly specified assumptions; (6) measure the consequences against the goals; and (7) select the policy that best advances the goals.²⁴

What we call the six key steps in regulatory analysis parallels McGarity's list.

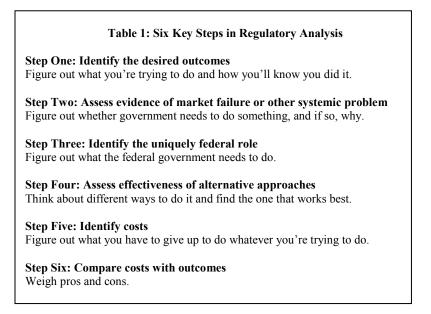
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^{21.} OMB CIRCULAR A-4, supra note 7, at 2.

^{22.} THOMAS O. MCGARITY, REINVENTING RATIONALITY: THE ROLE OF REGULATORY ANALYSIS IN THE FEDERAL BUREAUCRACY XVII (1991).

^{23.} Id. at 112.

^{24.} Id.



A. Step One: Identify the Desired Outcomes

For the purposes of regulatory analysis, an outcome may satisfy the economist's definition of a net social "benefit," or it may simply be some result that policymakers deem worthwhile.²⁵ The key point is that an outcome indicates the ultimate effect of the regulation on human wellbeing.²⁶ To effectively identify how a proposed regulation would affect outcomes, decision makers need to define the outcome they are trying to affect or achieve, outline a theory of causality or "logic model" that shows how the regulatory proposal is likely to achieve the desired outcome(s),²⁷ and

^{25.} OMB Circular A-4, *supra* note 7, at 1-2. "Congress establishes some regulatory programs to redistribute resources to select groups." *Id.* at 5.

^{26. &}quot;In constructing measures of 'effectiveness', final outcomes, such as lives saved or life-years saved, are preferred to measures of intermediate outputs, such as tons of pollution reduced, crashes avoided, or cases of disease avoided." *Id.* at 12.

^{27. &}quot;Each agency shall base its decisions on the best reasonably obtainable scientific, technical, economic, and other information concerning the need for, and consequences of, the intended regulation or guidance document." Exec. Order 12,866, *supra* note 4, at 51,736. "Explain how the actions required by the rule are linked to the expected benefits. For example, indicate how additional safety equipment will reduce safety risks." OMB CIRCULAR A-4, *supra* note 7, at 2.

establish measures that indicate whether and how much of the outcome is achieved as a result of the regulation.²⁸

Defining outcomes for homeland security requires understanding and acknowledging that acts of terrorism will occur. Accordingly, the question is how a liberal democratic society minimizes terrorism. If the public has realistic expectations, the government will likely develop better counterterrorism programs and institutions. Terrorism can be minimized, perhaps marginalized, but not completely eradicated—a characteristic shared with most of the social problems we confront, air pollution, food safety, crime, and political corruption.

The 9/11 Commission recognized this fact when it noted:

We do not believe it is possible to defeat all terrorist attacks against Americans, every time and everywhere. A president should tell the American people:

No president can promise that a catastrophic attack like that of 9/11 will not happen again. History has shown that even the most vigilant and expert agencies cannot always prevent determined, suicidal attackers from reaching a target.

But the American people are entitled to expect their government to do its very best. They should expect that officials will have realistic objectives, clear guidance, and effective organization. They are entitled to see some standards for performance so they can judge, with the help of their elected representatives, whether the objectives are being met.²⁹

DHS's National Strategy for Homeland Security emphasizes preventing terrorist acts, reducing vulnerabilities, and minimizing consequences of terrorist acts.³⁰ When risk can be measured or estimated, one desirable outcome of counterterrorism regulation is a reduction in the measurable risk of attack. Another desirable outcome is a reduction in the likely damage the attack could do to lives and property. For terrorist attacks for which probabilities are unknown, it should still be possible to measure the effects of

^{28. &}quot;Even when a benefit or cost cannot be expressed in monetary units, you should still try to measure it in terms of its physical units. If it is not possible to measure the physical units, you should still describe the benefit or cost qualitatively." OMB CIRCULAR A-4, *supra* note 7, at 10.

^{29.} THE 9/11 COMMISSION REPORT, *supra* note 16, at 365.

^{30.} HOMELAND SECURITY COUNCIL, *supra* note 18, at 25-30.

mitigation measures intended to reduce damage. If one cannot measure the likelihood of an attack, then the best one can hope for is a transparent policymaking process that lets citizens see, understand, and evaluate decision makers' "judgment calls."

B. Step Two: Assess Evidence of Market Failure or Other Systemic Problem³¹

Regulatory economists generally accept that government action can enhance consumer welfare in the case of a clear "market failure" that cannot be addressed adequately by other means.³² This is because voluntary action by individuals and organizations is very effective at allocating scarce resources to the uses that citizens value most highly. As Nobel laureate economist Friedrich Hayek showed, decentralized processes are superior to centralized regulatory solutions because decentralized markets focus dispersed information—information that no one individual (not even a regulator) can obtain—and convey it effectively to market participants.³³ Decentralized markets also permit trial-and-error experimentation in order to discover things that would not otherwise be discovered.³⁴ Evidence abounds that individuals with diverse, localized knowledge can make choices, generate ideas, and solve problems far better than small groups of experts, no matter how well intentioned, knowledgeable, or intelligent.³⁵

^{31.} Executive Order 12,866 required agencies to identify the relevant problem in terms of "the failures of private markets or public institutions that warrant new agency action . . ." Exec. Order No.12,866, *supra* note 4, at 51,735. Executive Order 13,422 underscores this step by amending the previous order and requiring agencies to "identify in writing the specific market failure (such as externalities, market power, lack of information) or other specific problem that it intends to address (including, where applicable, the failures of public institutions) that warrant new agency action . . ." Exec. Order No. 13,422, 72 Fed. Reg. 2763, 2763 (Jan. 23, 2007). OMB Circular A-4 provides substantial guidance to agencies on how to identify and describe a market failure. OMB CIRCULAR A-4, *supra* note 7, at 4-5.

^{32.} See W. KIP VISCUSI ET AL., ECONOMICS OF REGULATION AND ANTITRUST 79-80 (4th ed. 2005) (explaining the theory of perfect competition in which consumer welfare is maximized under conditions of Pareto optimality).

^{33.} See generally Friedrich A. Hayek, *The Use of Knowledge in Society*, 35 AM. ECON. REV. 519 (1945).

^{34.} Friedrich Hayek, *Competition as a Discovery Procedure*, in Hayek, NEW STUDIES IN PHILOSOPHY, POLITICS, AND ECONOMICS 179 (1978).

^{35.} JAMES SUROWIECKI, THE WISDOM OF CROWDS: WHY THE MANY ARE SMARTER THAN THE FEW AND HOW COLLECTIVE WISDOM SHAPES BUSINESS, ECONOMIES, SOCIETIES AND NATIONS (2004).

Some forms of "market failure" may arise as a result of incentives or constraints for private parties created by previously-existing government policies.³⁶ While such policy-driven problems are not technically "market" failures, the problems are likely to persist in the absence of some additional government action. The fundamental solution is to correct the original policy.

Concentrating government effort on market failure does not mean that the government should sit back and wait for a terrorist attack to reveal where the private sector has provided inadequate security. Rather, government and independent analysts need to identify situations in which private individuals, businesses, or other organizations may lack incentives to provide the desired level of security. There are two reasons why regulatory analysis should explicitly identify a market failure or some other systemic problem underlying the need for action. If in fact there is no market failure or other systemic problem, then government action will likely do more harm than good. If there is a market failure or other systemic problem, then government action can more effectively correct the problem if it has been accurately identified and understood.³⁷ Even in the case of security against terrorism, there are areas in which market participants are adequately motivated to protect their own assets such that there is not a role for government intervention.³⁸ In one sense, this is no different than protection against crime: governments supply police, but people also buy locks for their doors.

C. Step Three: Identify the Uniquely Federal Role

The fact that a market failure or other systemic problem prevents the achievement of desired policy outcomes does not automatically mean that the federal government will provide the most effective remedy. Federal regulation may help promote a uniform national solution, but leaving regulation at the state or local level may foster experimentation and choice.³⁹ As OMB Circular A-4 explains:

^{36.} SUSAN E. DUDLEY, MERCATUS CENTER, PRIMER ON REGULATION 39 (2005), *available at* http://www.mercatus.org/repository/docLib/20060510_Primer_on_Regulation_ Dudley_Dec_2005_Final_as_Posted.pdf.

^{37.} Id.

^{38.} See, e.g., ELLIG, GUIORA, & MCKENZIE, *supra* note 14, at 19-21 (noting that coffee houses, malls, and bus lines in Israel hire private security guards to check patrons at the door, not because any government policy compels them to do so, but because security is necessary to attract customers).

^{39.} DUDLEY, *supra* note 36, at 39-40.

In assessing whether Federal regulation is the best solution, you should also consider the possibility of regulation at the State or local level. In some cases, the nature of the market failure may itself suggest the most appropriate governmental level of regulation. For example, problems that spill across State lines (such as acid rain whose precursors are transported widely in the atmosphere) are probably best addressed by Federal regulation. More localized problems, including those that are common to many areas, may be more efficiently addressed locally.⁴⁰

Broadly speaking, there are strong reasons for a federal role in homeland security. Federal regulation may be appropriate if state or local regulations would burden interstate commerce or compromise the rights of national citizenship. Travel among the fifty states is commonplace, so the costs individual states would incur to protect against terrorist entry would have benefits to citizens of other states. Individual states and localities would arguably invest too little in counterterrorism measures if they bear the full costs, but the benefits would accrue to the whole nation (or continent).

That is not to say that the federal government must provide, direct, or regulate all homeland security measures. Where both the costs and benefits are largely confined to a single state or locality, it is appropriate for that state or locality to take action and make the decisions. Federal authority should be involved when there are significant spillovers across state lines. In addition, federal authorities may have a comparative advantage on gathering and providing information to states and localities about potential threats.

D. Step Four: Assess Effectiveness of Alternative Approaches

A finding that market failure justifies some federal role does not mean that any conceivable federal role will do. Government has a wide variety of options to influence security-related outcomes. These include various publicprivate partnerships, performance-based regulation, command-and-control regulation, nonbinding guidance, information disclosure regulations, antitrust enforcement, removal of entry barriers, commercial law, tort law, and

^{40.} OMB CIRCULAR A-4, *supra* note 7, at 6. *See also* Exec. Order 12,866, *supra* note 4, at 51,736 (directing agencies to "assess the effects of Federal regulations on State, local, and tribal governments, including specifically the availability of resources to carry out those mandates, and seek to minimize those burdens that uniquely or significantly affect such governmental entities, consistent with achieving regulatory objectives").

contract law.⁴¹ For any postulated outcome and market failure, regulators should assess which alternative is likely to achieve the goal most effectively.⁴² OMB explicitly notes that agencies should analyze feasible alternatives, even if they are currently outside the scope of the law: "[i]f legal constraints prevent the selection of a regulatory action that best satisfies the philosophy and principles of Executive Order 12866, you should identify these constraints and estimate their opportunity cost. Such information may be useful to Congress under the Regulatory Right-to-Know Act."⁴³

In some cases, the effectiveness of different approaches is relatively easy to compare. For example, the Government Accountability Office ("GAO") monitored the effectiveness of airport screeners who implement airline security regulations both before and after September 11, 2001. This permitted a comparison of the effectiveness of three different arrangements: private contractors paid for by the airlines prior to that date, screeners employed by the federal government through the Transportation Security Administration ("TSA") which were required after that date, and private contractors employed by several airports under a pilot program permitted after June 2002. One investigation involved undercover audits by DHS. According to the then DHS inspector general, federal airport security screeners installed after September 11, 2001 performed no better in their ability to stop prohibited items from entering the "sterile" areas of airports than did private screeners employed before that date.⁴⁴ GAO examined two studies to assess the pilot program that allowed five airports in the United

^{41. &}quot;Each agency shall identify and assess available alternatives to direct regulation, including providing economic incentives to encourage the desired behavior, such as user fees or marketable permits, or providing information upon which choices can be made by the public." Exec. Order 12,866, *supra* note 4, at 51,736. "Even where a market failure clearly exists, you should consider other means of dealing with the failure before turning to Federal regulation. Alternatives to Federal regulation include antitrust enforcement, consumer-initiated litigation in the product liability system, or administrative compensation systems." OMB CIRCULAR A-4, *supra* note 7, at 6. *See also* Exec. Order 12,866, *supra* note 4, at 51,741 (requiring agencies to assess "alternatives to the planned regulation, identified by the agencies or the public (including improving the current regulation and reasonably viable nonregulatory actions), and an explanation why the planned regulatory action is preferable to the identified potential alternatives"). OMB CIRCULAR A-4, *supra* note 7, at 7-9.

^{42.} Exec. Order 12,866, *supra* note 4, at 51,736. See also note 41, *supra*.

^{43.} OMB CIRCULAR A-4, supra note 7, at 17.

^{44.} Department of Homeland Security: The Road Ahead: Hearing Before the S. Committee on Homeland Security and Governmental Affairs, 109th Cong. 51-67 (2005) (statement of Richard L. Skinner, Acting Inspector General, United States Department of Homeland Security).

States to use non-federal screeners. GAO itself performed one investigation, and BearingPoint, under contract to the TSA, performed the other. Both studies found no evidence to conclude that privately hired screeners performed worse than federal screeners.⁴⁵ In fact, the BearingPoint study cited one airport—Kansas City—in which the private screeners performed better than the federal screeners.⁴⁶ The GAO and TSA investigations both suggest that private screeners under federal regulatory guidance provide screening at least as effectively as TSA employees.

The airline screening example demonstrates that, even for a seemingly esoteric public good like security, it is possible to design and evaluate alternative approaches.

E. Step Five: Identify Costs

The accurate measure of the cost of any government action is its opportunity cost: what did we, as a society, give up in order to devote resources to taking the action?⁴⁷ Government and private expenditures only partially measure the forgone benefits associated with a particular course of action.⁴⁸ Sound regulatory analysis also identifies hidden and indirect costs that are less obvious than direct expenditures. Although difficult to estimate, one major study estimates that the annual cost of compliance with federal regulations totals \$1.1 trillion.⁴⁹

^{45.} U.S. GEN. ACCOUNTING OFFICE, TESTIMONY BEFORE THE H. SUBCOMM. ON AVIATION OF THE COMM. ON TRANSPORTATION AND INFRASTRUCTURE, AVIATION SECURITY: PRIVATE SCREENING CONTRACTORS HAVE LITTLE FLEXIBILITY TO IMPLEMENT INNOVATIVE APPROACHES (2004)

^{46.} Sara Kehaulani Goo, *Airport Screeners Do Poorly, Panel Told*, WASH. POST, April 23, 2004, at A08.

^{47.} DUDLEY, supra note 36, at 42.

^{48.} See Exec. Order 12,866, supra note 4, at 51,741 (requiring agencies to assess "costs anticipated from the regulatory action (such as, but not limited to, the direct cost both to the government in administering the regulation and to businesses and others in complying with the regulation, and any adverse effects on the efficient functioning of the economy, private markets . . . health, safety, and the natural environment") See also OMB CIRCULAR A-4, supra note 7, at 14-42 (explaining how to identify and calculate costs and explaining the concept of "opportunity cost").

^{49.} W. MARK CRAIN, U.S. SMALL BUSINESS ADMINISTRATION, THE IMPACT OF REGULATORY COSTS ON SMALL FIRMS (2005), available at http://www.sba.gov/advo/research/rs264tot.pdf. However, Crain's estimates, as noted in a recent discussion paper, may be at the high end of the likely range. Winston Harrington, Grading Estimates of the Benefits and Costs of Federal Regulation: A Review of Reviews, at 13 (2006), *available at* http://www.rff.org/documents/RFF-DP-06-39.pdf.

When federal agencies and private firms spend money to enforce and comply with regulations, the money has to come from somewhere. Government, of course, gets money from taxes. Businesses and other entities ultimately have to get the money by charging customers or reducing payments to the owners of resources the firm uses. In both cases, the costs of regulation are likely to affect the prices that consumers pay for the things they buy.⁵⁰

Costs of regulations result from the choices that both firms and consumers are expected to make if those regulations were to become effective. For firms, it may mean complying exactly with the regulation requiring greater expenditures in the form of new capital or labor. On the other hand, firms may seek to avoid those costs by getting out of the business, moving the business, or by continuing to lobby for change. Behavioral change for consumers also implies costs. For example, for those who continue to travel by plane, more time spent standing in lines and longer time at the airport decreases the quality of the trip. Numerous studies estimate the effect of security measures on the time passengers have to spend in airports, the monetary value of that time, and the reductions in air travel that occur because of the hassle.⁵¹

Finally, regulation also involves tradeoffs between different types of risks. One cost of reducing terrorism risk could well be an increase in some other type of risk that threatens life and safety. Airline security provides a notable case in point. Federal passenger and baggage screening have increased both the monetary cost of air travel, due to higher ticket prices, and the nonmonetary costs, due to longer delays and waiting times at airports. Travelers have responded by substituting automobile travel for air travel—particularly on shorter routes. Statistically, auto travel is much more dangerous than air travel; per mile, the risk of fatality is 8.9 times greater.⁵²

52. Adriana Rossiter & Martin Dresner, *The Impact of the September 11th Security Fee and Passenger Wait Time on Traffic Diversion and Highway Fatalities*, 10 J. AIR TRANSP. MGMT. 227 (2004) (using average yearly data from 1992-2001 from the National

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⁵⁰ Analyzing the effects of cost-increasing regulation is similar to analyzing the "incidence" of a tax. One of the most well-known tenets of the economics of taxation is that the party that formally "pays" a tax does not necessarily bear the burden of the tax. The incidence of the tax—who really pays—depends on the elasticities of supply and demand, as well as the competitiveness of the market. *See, e.g.*, EDGAR BROWNING & JACQUELINE BROWNING, PUBLIC FINANCE AND THE PRICE SYSTEM (1979).

^{51.} See generally Harumi Ito & Darin Lee, Assessing the Impact of the September 11 Terrorist Attacks on U.S. Airline Demand, 57 J. ECON. & BUS. 75 (2005); Robert W. Hahn, The Economics of Airline Safety and Security: An Analysis of the White House Commission's Recommendations, 20 HARV. J. L. & PUB. POL'Y 791 (1997).

A study by University of Maryland economists Adriana Rossiter and Martin Dresner estimates that the ten-minute increase in wait time assumed by the TSA and a security fee of \$2.50 per flight segment will lead to an additional 66.2 additional highway deaths per year.⁵³ Robert Hahn, in his 1997 paper, also estimates the number of highway deaths attributable to more costly security measures. He estimates that a thirty-minute delay increase at airports would generate between 30 and 140 more fatalities per year.⁵⁴

Terrorists kill, but so can safety precautions. Zero risk is unattainable. Even in a wealthy country like the United States, not every policy that reduces the risk of terrorism makes society safer overall. Sound security decisions require careful analysis of all risks, not just the risk the regulation is intended to reduce.

F. Step Six: Compare Costs with Outcomes

Cost information cannot be considered in isolation. A costly regulation may create significant positive outcomes that are valuable to policymakers and citizens.⁵⁵ Information on outcomes and costs can be combined in a variety of ways to aid decision-making, such as analysis of cost-effectiveness or comparison of costs and benefits.⁵⁶ When costs can be estimated but benefits cannot, one can still perform a "breakeven analysis" to identify how large the benefits would have to be in order to balance the costs.

Comparing costs and benefits does not automate decisions, because different decision makers may ascribe different values to the costs or

Transportation Statistics (US Bureau of Transportation Statistics, 1992-2001) and the Aviation Accident Statistics). Some research finds that air passengers who diverted to automobile travel are probably safer than average drivers; the diverted air passenger is only seventy-six percent as likely to be involved in a fatal accident as the average driver. *See* Leonard Evans, Michael C. Frick & Richard C. Schwing, *Is it Safer to Fly or Drive*?, 10 RISK ANALYSIS 239 (1990).

^{53.} Rossiter & Dresner, *supra* note 52, at 227-32. If the assumptions and parameters of their equation are varied, the number of additional deaths due to automobile travel can range from 1.0 to 99.3. *See also* Garrick Blalock, Vrinda Kadiyali & Daniel H. Simon, The Impact of Post-9/11 Airport Security Measures on the Demand for Air Travel 27 (Feb. 23, 2005), (unpublished manuscript, *available at* http://ssrn.com/abstract=677563).

^{54.} Hahn, *supra* note 51, at 806.

^{55.} Exec. Order 12,866, *supra* note 4, at 51,736 (requiring agencies to "assess both the costs and the benefits of the intended regulation and, recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs.").

^{56.} OMB Circular A-4 explains to agencies the differences between Cost-Benefit Analysis and Cost-Effectiveness Analysis. OMB CIRCULAR A-4, *supra* note 7, at 9-12.

benefits.⁵⁷ Even when benefits can be expressed in monetary terms, the dollar amounts usually reflect the value of the benefits to the "average" or "typical" person.⁵⁸ Cost-benefit analysis may mask significant diversity in the value that different people attach to the benefits.⁵⁹ For this reason, a complete cost-benefit analysis should also identify who bears the costs and who reaps the benefits.⁶⁰

Two different decision makers, armed with the same information about cost effectiveness or the same cost-benefit comparisons, can still reasonably disagree about what to do, based on their values. This may be an especially relevant consideration for security-oriented regulations, where benefits may be difficult to monetize or highly uncertain, costs may include lost civil liberties or effects on constitutional values that are not captured quantitatively, and the citizens receiving the benefits may not always be the citizens paying the costs. These factors increase the number of ways in which reasonable individuals faced with the same information might disagree as to the most desirable course of action. But the fact that people with different values may disagree when faced with the same information does not mean they should throw away the information. The alternative to making decisions based on regulatory analysis is making decisions based on supposition and hope. This converts regulation from an evidence-based initiative to a faithbased initiative.

II. EVALUATING DHS REGULATORY ANALYSIS

A. Regulatory Analyses Examined

To assess the completeness and quality of DHS regulatory analysis, we examined all 13 "economically significant" DHS regulations that became final by December 31, 2007. An "economically significant" regulation is one that results in an expenditure exceeding \$100 million in one year or meets one of several other criteria outlined in Executive Order 12,866.⁶¹ The Executive Order requires agencies to perform a Regulatory Impact

^{57.} MCGARITY, supra note 22, at 142-55.

^{58.} DUDLEY, supra note 36, at 43.

^{59.} Id.

^{60. &}quot;Your regulatory analysis should provide a separate description of distributional effects (i.e., how both benefits and costs are distributed among sub-populations of particular concern) so that decision makers can properly consider them along with the effects on economic efficiency." OMB CIRCULAR A-4, *supra* note 7, at 14.

^{61.} Exec. Order 12,866, supra note 4, at 51,738.

Assessment for all economically significant regulations.⁶² We limited the analysis to final regulations so that we could assess the final regulatory impact analysis ("RIA") produced for each regulation. Since the final regulatory analysis may reflect additional information furnished to the agency during the public comment period, it is likely to be the most complete analysis that reflects the agency's best effort.

Table 2 lists the 13 regulations and provides a brief description of each. The regulations were issued by seven different components of DHS. Several component agencies—notably the Coast Guard and Customs and Border Protection—issued multiple major regulations. Table 3 lists cost figures for each regulation from the agency's regulatory analysis. Each figure is the annualized net present value of costs over a ten-year period, discounted at an interest rate of seven percent. This figure is one of the standard calculations agencies are supposed to perform when they estimate costs in a regulatory analysis.⁶³

Full Name & Citation	Description
Area Maritime Security	This final rule adopted a
	previous interim final rule that
33 C.F.R. Part 103,	established U.S. Coast Guard
USCG-2—3-14733,	Captains of the Ports as Federal
RIN 1625-AA42.	Maritime Security Coordinators, and
	requirements for Area Maritime
	Security Plans and Area Maritime
	Security Committees.
Vessel Security	This final rule requires the
	owners or operators of vessels to
33 CFR Parts 104, 160, 165,	designate security officers for
46 CFR Parts 2, 31, 71, 91, 115,	vessels, develop security plans based
126, and 176	on security assessments and surveys,
USCG-2003-14749,	implement security measures specific
RIN 1625-AA46.	to the vessel's operation, and comply
	with Maritime Security Levels.

 Table 2: Economically Significant Homeland Security Regulations

 Finalized Through December 31, 2007

^{62.} Id. at 51,741.

^{63.} OMB CIRCULAR A-4, *supra* note 7, at 33.

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Facility Security	This rule requires owners or
Facility Security	operators of facilities to designate
33 CFR Part 105	security officers for facilities,
USGC-2003-14732	develop security plans based on
RIN 1625-AA43	security Rules and Regulations
KIN 1025-AA+5	assessments and surveys, implement
	security measures specific to the
	facility's operations, and comply
	with Maritime Security Levels.
United States Visitor and	This rule established the United
Immigrant Status Indicator	States Visitor and Immigrant Status
Technology Program (US-VISIT);	Technology Program ("US–VISIT"),
Authority to Collect Biometric	an integrated, automated entry-exit
Data from Additional Travelers	system that records the arrival and
and Expansion to the 50 Most	departure of aliens; verifies aliens'
Highly Trafficked Land Border	identities; and authenticates aliens'
Ports of Entry	travel documents through
0 CED D (215 225 1252	comparison of biometric identifiers.
8 CFR Parts 215, 235 and 252	
DHS-2007-0002	
RIN 1650-AA00	This rule describes the
Special Community Disaster	
Loans Program	procedures and requirements for a
44 CED D + 200	program designed to provide loans
44 CFR Part 206	for essential services to local
DHS-2005-0051	governments that have experienced a
RIN 1660-AA44	loss in revenue due to major disaster.
Allocation of Additional H-1B	This rule implemented
Visas Created by the H1-B Visa	congressional changes to the
Reform Act of 2004	numerical limits of the H–1B
9 CED D+ 214	nonimmigrant visa category and the
8 CFR Part 214	fees for filing of H–1B petitions.
DHS-2005-0014	
RIN 1615-AB32	

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Electronic Transmission of Passenger and Crew Manifests for Vessels and Aircraft 8 CFR Parts 217, 231 and 251 19 CFR Parts 4, 122 and 178 CBP Decision 05-12 RIN 1651-AA37	transmission of manifest information for passengers and crew members on board commercial vessels and aircraft, in advance of arrival in and departure from the United States, and onboard commercial aircraft that continue within and fly over the United States.			
Air Cargo Security Requirements 49 CFR Parts 1520, 1540, 1542, 1544, 1546, and 1548 1544, 1546, and 1548 TSA-2004-19515 RIN 1652-AA23 1652-AA23	This rule requires airport operators, aircraft operators, foreign air carriers, and indirect air carriers to implement security measures in the air cargo supply chain.			
Documents Required for Travelers Departing From or Arriving in the United States at Air Ports-of-Entry from Within the Western Hemisphere 8 CFR Parts 212 and 235 22 CFR Parts 41 and 53 USCBP 2006-0097 RIN 1400-AC10	This rule requires that, beginning January 23, 2007, all United States citizens and nonimmigrant aliens from Canada, Bermuda, and Mexico departing from or entering the United States from within the Western Hemisphere at air ports-of- entry will be required to present a valid passport.			
TransportationWorkerIdentificationCredential (TWIC)Implementation in the MaritimeSector;HazardousMaterialsEndorsement for a CommercialDriver's License33 CFR Parts 101-106, 12546 CFR Parts 1515, 1540, 1570,1572TSA 2006-24191USCG 2006-24196RIN 1652-AA41	This rule implements a plan to increase the security of ports by requiring use of the TWIC as an access control measure.			

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AdjustmentoftheImmigrationandNaturalizationBenefitApplicationandPetitionFeeSchedule8CFR Part 103USCIS-2006-0044USCIS-2006-0044RIN 1615-AB53	This rule adjusts the fee schedule for U.S. Citizenship and Immigration Services ("USCIS") immigration and naturalization benefit applications and petitions, including nonimmigrant applications and visa petitions.
ChemicalFacilityAnti-Terrorism Standards6 CFR Part 27DHS 2006-0073RIN 1601-AA41	This rule requires covered chemical facilities to prepare Security Vulnerability Assessments and implement Site Security Plans that include measures that satisfy risk-based performance standards outlined in the rule.
AdvancedElectronicTransmissionofPassengerandCrewMemberManifestsforCommercial Aircraft and Vessels19CFR Parts 4 and 122USCBP-2005-0003RIN 1651-AA62	This rule requires that electronic manifest information for passengers onboard commercial aircraft and vessels arriving in and departing from the United States be vetted by DHS against a government- established and maintained terrorist watch list prior to departure.

Table 3: Annualized Costs of Homeland Security Regulations

Regulation	Year Final	Annualized Cost (7% discount rate)
Area Maritime Security ⁶⁴	2003	\$47.7 million
Vessel Security ⁶⁵	2003	\$137 million

^{64.} Cost Assessment and Final Regulatory Flexibility Analysis Area Maritime Security, at 2, 70 Fed. Reg. 39284, 39287 (July 1, 2003) (to be codified at 33 C.F.R. pt. 103), available at www.regulations.gov/fdmspublic/component/main?main=DocketDetail&d=USCG-2003-14733.

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^{65.} Cost Assessment and Final Regulatory Flexibility Analysis, Vessel Security, 68 Fed. Reg. 39292, 39298 (July 1, 2003) (to be codified at 33 C.F.R. pts. 104, 160, 165, 46 C.F.R. pts. 2, 31, 71, 91, 115, 126, 176), *available at* www.regulations.gov/fdmspublic/component/main?main=DocketDetail&d=USCG-2003-14749.

Maritime Facility Security ⁶⁶	2003	\$540 million
US-VISIT Biometric Data ⁶⁷	2004	Unclear
Community Disaster Loans ⁶⁸	2005	Unclear
H1-B Visa Allocation ⁶⁹	2005	\$125 million
Automated Passenger Info. System ⁷⁰	2005	\$100 million
Air Cargo Security ⁷¹	2006	\$206 million
Western Hemisphere Travel Documents ⁷²	2006	\$206 million
Transportation Worker ID Credential ⁷³	2007	\$250 million

66. Cost Assessment and Final Regulatory Flexibility Analysis, Facility Security, 68 Fed. Reg. 39315, 39319 (July 1, 2003) (to be codified at 33 C.F.R. pt. 105), *available at* www.regulations.gov/fdmspublic/component/main?main=DocketDetail&d=USCG-00314732.

67. United States Visitor and Immigrant Status Indicator Technology Program (US-VISIT), Authority to Collect Biometric Data From Additional Travelers and Expansion to the 50 Most Highly Trafficked Land Border Ports of Entry, Interim Rule with Request for Comments, 69 Fed. Reg. 53318, 53331 (Aug. 31, 2004) (to be codified at 8 C.F.R. pts. 215, 235, 252), available at www.regulations.gov/fdmspublic/component/main?main= DocketDetail&d=DHS-2004-0002.

68. Special Community Disaster Loans Program, Interim Rule with Request for Comments, 70 Fed. Reg. 60443, 60449 (Oct. 18, 2005) (to be codified at 44 C.F.R. § 206.377), available at www.regulations.gov/fdmspublic/component/main?main=DocketDetail &d=FEMA-2005-0051.

69. Allocation of Additional H-1B Visas Created by the H1-B Visa Reform Act of 2004, Interim Rule, 70 Fed. Reg. 23775, 23782 (May 5, 2005) (to be codified at 8 C.F.R. pt. 214) available at www.regulations.gov/fdmspublic/component/main?main=DocketDetail&d= USCIS-2005-0004.

70. Electronic Transmission of Passenger and Crew Manifests for Vessels and Aircraft (APIS), Final Rule, 70 Fed. Reg. 17820, 17843 (April 7, 2005) (to be codified at C.F.R. pts. 217. 231, 251, 19 C.F.R. pts. 4, 122, 178).

71. Final Regulatory Evaluation, Regulatory Flexibility Determination, Trade Impact Assessment, and Unfunded Mandates Assessment, Air Cargo Security Requirements, 2 (Table 1), (May 26, 2006) (to be codified at 49 C.F.R. pts. 1520, 1540, 1542, 1546, 1548), *available at* http://www.regulations.gov/fdmspublic/component/main?main=DocketDetail&d=TSA-2004-19515.

72. Regulatory Assessment, The Western Hemisphere Travel Initiative Implemented in the Air Environment, 71 Fed. Reg. 46155, 46170 (Aug. 11, 2006) (to be codified at 8 C.F.R. 212, 235) *available at* http://www.regulations.gov/fdmspublic/component/main?main= DocketDetail&d=USCBP-2006-0097 (doc. I.D. # ending 0001).

73. Transportation Worker Identification Credential Standards in the Maritime Sector, Regulatory Impact Assessment, Final Rule, Table 1 (May 5, 2005) (to be codified at 33 C.F.R. pts. 101, 103-06, 46 C.F.R. pts. 10, 12, 15, 49 C.F.R. pts. 1515, 1570, 1572), available at

Immigration Benefit Application ⁷⁴	2007	\$1.1 billion
Chemical Facilities ⁷⁵	2007	\$1.36 billion
Passenger Manifests ⁷⁶	2007	\$100 million

B. Criteria and Scoring

We developed a system for evaluating the regulatory analyses in order to answer two questions: (1) On an absolute scale, how well does each analysis address major elements of regulatory analysis; and (2) on a relative scale, which analyses are better? The six principal elements of regulatory analysis provide appropriate categories for evaluating the completeness and quality of each analysis. For each of the six elements, we developed a list of questions to assess how completely and how well the analysis addressed that element. Appendix I lists the questions and, for each question, provides cites to the relevant section of Executive Order 12,866 or OMB Circular A-4. For each element, we assigned the analysis a score ranging from zero to five.⁷⁷

We did not assign point values or weights to each question listed under each element. Rather, the score for each element reflects our judgment of how well the analysis addressed the entire group of questions listed under

77. The score ranges have the following meanings:

2 - Some relevant discussion with some documentation of analysis

http://www.regulations.gov/fdmspublic/component/main?main=DocumentDetail&o=0900006 4802c4d6b .

^{74.} Adjustment of the Immigration Benefit Application/Petition and Biometric Fee Schedule, Final Rule, 72 Fed. Reg. 29851, 29871 (May 30, 2007) (to be codified at 8 C.F.R. pt. 103) *available at* http://www.regulations.gov/fdmspublic/component/main?main= DocumentDetail&o=090000648024855d.

^{75.} Regulatory Assessment for the Chemical Facility Anti-Terrorism Standards, Interim Final Rule 85 (April 1, 2007), DHS Docket No. DHS-2006-0073, *available at* http://www.regulations.gov/fdmspublic/component/main?main=DocumentDetail&o=0900006 480222d8c.

^{76.} Passenger Manifests for Commercial Aircraft Arriving in and Departing from the United States: Passenger and Crew Manifests for Commercial Vessels Departing from the United States, Regulatory Assessment, 71 Fed. Reg. 40035, 40045 (July 14, 2006) (to be codified at 19 C.F.R. pts. 4, 122) *available at* www.regulations.gov/fdmspublic/ component/main?main=DocketDetail&d=USCBP-2005-0003-0003.

⁰⁻no relevant content

^{1 -} Perfunctory statement with little explanation or documentation

^{3 –} Reasonably thorough analysis of some aspects

 $^{4-{\}rm Reasonably}$ thorough analysis of most aspects and/or shows at least one example of a "best practice" that other agencies could learn from

^{5 -} Complete analysis of all or almost all aspects, with one or more best practices

each element. Stellar analysis of one question could help offset poor analysis of others.

This scoring system is admittedly a qualitative assessment, but we took several steps to ensure consistency. Scores reflected a consensus between the two authors. We evaluated each regulation separately, then compared scores. Our initial scores on any criterion never differed by more than one point. The list of questions in Appendix I also helped ensure that scoring is consistent across regulations. Others using the same criteria might score the regulations more or less strictly, but we suspect most evaluators would end up with a similar ranking.

Scores on the six elements were summed to calculate a total score, which could range between zero and thirty. These total scores allowed us to rank the analyses. Each of the six elements received an equal weight in calculation of the total score, because each of these elements is important and clearly required by OMB.⁷⁸

Our evaluation assesses both the completeness and the quality of the regulatory analysis. In performing this evaluation, we examined only the regulatory analyses produced by the agencies—whether as a separate document or a separate section of the final rule. We did not examine comments in the public record or other assessments of the regulations that may have been conducted by other government agencies (such as the Government Accountability Office) or published in scholarly journals. As a result, we may have overlooked some flaws in the analysis (particularly cost or benefit estimates) that could be identified only by specialists who possess extensive practical experience or have spent a great deal of time studying a particular regulation. In some cases, this might create an upward bias in our scores.

In addition to evaluating completeness and quality, we also assigned each regulatory analysis a "transparency" score ranging from zero to five. This score shows how easy or difficult it was to locate the rule and all the relevant elements of the agency's regulatory analysis. In an ideal world, DHS would maintain its own docket of economically significant final regulatory actions online, with access to all of the related analyses. In fact, DHS is already required to make this information public. As it stands, to find the information we needed for our study, we searched OIRA records to identify each economically significant final rule that DHS sent to OIRA for review

78. See App. I.

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during our specified time frame.⁷⁹ From there, we found the Regulatory Identification Number (RIN) for each rule and then used www.regulations.gov to search for each docket using that number. In a few cases, we were unable to locate an e-docket by using the RIN. In those cases, we had to do extensive digging to find out whether the rule was actually published as a final rule in the Federal Register, but not available through www.regulations.gov. This required that we use the Code of Federal Regulations citations provided by OIRA. Once we located the rule either in the e-docket or the Federal Register, we had to search to find the regulatory analysis. For example, some agencies included the regulatory analysis in the text of the final rule, with all major elements discussed under a heading that referenced Executive Order 12,866.⁸⁰ Others put the full regulatory analysis into a separate document. Some of these documents were easier to find than others, depending on whether they were included in the electronic docket and whether the citations or links provided in the rule actually worked. The more detective work we had to do to find the regulatory analysis, the lower the transparency score.

III. FINDINGS AND TRENDS

Table 4 shows the scores that the regulations achieved. Out of thirty possible points, scores on the substantive evaluation ranged from a low of two to a high of fifteen. On transparency, most analyses received either a four (relatively easy to locate after overcoming the initial hurdle of identifying the rule) or a two (findable, but only after some difficulty).

Regulation									
	Year Final	Transparency	Total Score	Define Outcomes	Systemic Problem	Fed Role	Analyze Alternatives	Costs	Cost vs. Outcome
W. Hem. Travel Documents	2006	4	15	2	2	1	3	5	2
Passenger Manifests	2007	4	12	3	1	0	3	3	2

Table 4: Scores and Ranking

79. *See* EO 12866 Regulatory Review, http://www.reginfo.gov, (follow "Current and Past Regulatory Reviews" to search for OIRA records).

80. Among these type of regulations were: Biometric Data Collection, Community Disaster Loans, and Automated Passenger Information System (APIS).

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Chemical Facilities	2007	4	10	2	2	0	2	3	1
Automated Pasgr. Info. Syst.	2005	4	9	2	1	1	1	2	2
US-VISIT Biometric Data	2004	2	8	1	0	1	2	2	2
Immigration Benefit Application	2007	2	8	2	3	0		1	1
Vessel Security	2003	2	6	1	0	1	0	2	2
Maritime Facility	2003	2	6	1	0	1	0	2	2
Transp. Worker ID Credential	2007	4	6	1	0	0	2	2	1
Area Maritime Security	2003	2	5	1	0	1	0	2	1
Air Cargo	2006	3	5	1	0	0	1	2	1
H1-B Visa Allocation	2005	4	4	1	1	0	0	1	1
Community Disaster Loans	2005	4	3	1	0	1	0	1	0
Average		3.15	7.46	1.46	0.77	0.54	1.15	2.15	1.38

Source: Evaluations done by authors.⁸¹

A. Overall Scores

The total scores suggest that the analyses range from poor to middling, compared to the ideal of a complete regulatory analysis articulated in the executive order and OMB guidance documents. The average score was 7.46 out of a possible 30 points, or about twenty-five percent.

We do not know how DHS regulatory analyses would compare to those of other agencies using our criteria, because we have not performed this kind of evaluation for other agencies. Nevertheless, our results appear consistent with previous research. In a book of case studies of regulatory analysis in the 1980s, Thomas McGarity notes, "[w]e shall see wide variations among agencies, and even within agencies, in the level of analysis achieved in a

^{81.} See App. II for evaluations of regulations.

typical rulemaking. None of the agencies, however, comes close to meeting the comprehensive analytical rationality ideal."⁸²

In several papers with several coauthors, Robert Hahn has employed a scorecard approach to assess the quality of regulatory analysis produced by other federal agencies.⁸³ Most recently, Hahn and Dudley found that regulatory analyses of environmental regulations covered an average of approximately thirty out of seventy-six items on their scorecard—an average of forty percent.⁸⁴ To the extent our scorecards are comparable, this result suggests that the average DHS regulatory analysis has not been as good as the average environmental regulatory analysis. Given that the environmental regulatory agencies have been around a lot longer than DHS, this is not surprising.

A quick glance at Figure 1 suggests a tendency for the quality of DHS regulatory analyses to improve over time. However, closer inspection reveals a more subtle pattern. The analyses for regulations finalized in 2003 and 2004 received very low scores, but so did some of the analyses for 2005 through 2007. The principal difference is that some of the regulatory analyses were noticeably better in the latter years. As Table 4 shows, the three best analyses—Travel Documents, Passenger Manifests, and Chemical Facilities—were for regulations finalized in 2006 and 2005. With one exception—Immigration Benefit Applications—the transparency scores are also uniformly better between 2005 and 2007 than the preceding years.

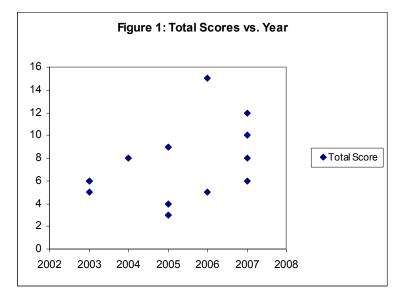
^{82.} MCGARITY, supra note 22, at 165.

^{83.} See sources cited supra notes 8-13.

^{84.} Hahn & Tetlock, supra note 13, at 74.

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Source: Evaluations done by authors.

B. Scores on Individual Elements

Some interesting patterns emerge when considering scores on individual elements of regulatory analysis. On average, the analyses received the highest scores for articulating the intended outcomes of the regulation (1.46), calculating costs (2.15), and comparing costs and benefits (1.38). In most cases, though, these scores are just ones or twos. A score of one on the costbenefit elements indicates that the analysis names some costs and benefits; a score of two indicates that there is some analysis of costs and benefits but the analysis is incomplete. Neither score could be considered "satisfactory." Average scores were higher on the outcome, cost, and cost-benefit elements because no regulatory analysis received a zero, many received twos, and some received threes or higher. Although most analyses discuss costs and benefits, there is still substantial room for improvement.

The differences between these scores and the lower scores on the other elements are striking. The average score for discussion of alternatives was 1.15, with five analyses receiving a zero because they did not discuss alternatives at all. Seven of the analyses did not articulate the systemic problem the regulation was supposed to solve, so they received a zero on that element. The zeroes are primarily responsible for the fact that the average scores on these two elements are below the average scores on other elements. Without the zeroes, the average score for discussion of alternatives is 1.88, and the average score for articulation of the systemic problem is 1.67. These scores are far from stellar, but they are in the same ballpark as the average scores on most of the other elements. This suggests that when DHS analyzes the systemic problem and alternatives, it does these things about as well as it does other elements of regulatory analysis.

The one exception is discussion of the unique federal role. About half offered no explanation or justification for a uniquely federal role. The other half offered only a perfunctory statement that the proposed regulation does not conflict with any other federal regulations, which was worth only one point. Little effort appears to go into this aspect of regulatory analysis at all.

The low scores and frequent omission of discussing alternatives, the systemic problem, and the uniquely federal role suggest that decision-makers at DHS have often treated regulatory analysis as cost-benefit analysis of an alternative already chosen for other reasons. For about half the regulations, little attention focused on the other elements of regulatory analysis outlined in the executive order and OMB guidance. This is a significant weakness. If an analysis does not rigorously address alternatives, the systemic problem, and the uniquely federal role, it is of limited use in guiding regulatory decisions. At best, the cost-benefit calculation merely justifies regulatory decisions that have already been made before the analysis started.

For a few of the individual elements, scores appear to improve over time. On definition of outcomes, for example, all but one analysis produced prior to 2006 received a score of one. Three of the four analyses produced after 2003 received a score of two or three on the outcome element. A similar but weaker pattern exists for articulation of the systemic problem (mostly zeroes before 2006, some positive scores thereafter) and discussion of alternatives (mostly zeroes before 2006, some twos and threes thereafter). This is, of course, consistent with the pattern of improvement in the total scores over time.

C. One Best Practice

The only analysis that earned a score of five on any individual element was the cost analysis of the 2006 Western Hemisphere Travel Documents rule issued jointly by the Bureau of Customs and Border Protection and the State Department.⁸⁵ This analysis earned the top score because it appears to have identified most major costs of all options considered, calculated how the regulation would affect the prices of goods and services purchased by

^{85.} *Supra* note 72.

consumers, and calculated some of the deadweight losses⁸⁶ that would result from these price changes. It examined the increased monetary costs of passports, plus the opportunities forgone because the costs would induce some travelers to decline traveling to or from the United States. The calculations included a sensitivity analysis⁸⁷ and Monte Carlo analysis⁸⁸ to examine how the cost results changed in response to changes in assumptions and uncertainty.

Two other analyses—for Passenger Manifests⁸⁹ and Chemical Facilities⁹⁰—earned a score of three for their handling of costs. The Passenger Manifest analysis identified most recurring costs and costs that varied with the number of passengers. Many costs estimates were based on a pilot study of a system that had not yet been implemented, plus an estimate of the agency's costs based on an arbitrary but perhaps supportable assumption that only ten percent of airlines implement an automated query system. The analysis did not examine whether increased costs would be passed on to passengers in the form of higher ticket prices, and thus it identified no passenger response to a possible price increase. It identified a diverse set of costs, including the costs imposed on passengers by delay, rerouting, and additional time spent in airports. Some sensitivity analysis is included.⁹¹

The Chemical Facilities analysis appears to identify most relevant expenditures, and it considers the costs of some of the alternatives to the

^{86.} When prices increase due to regulation, consumers pay more. In addition to these direct costs are the indirect costs that arise when consumers respond to the price increases by purchasing less of the products or services whose prices have increased. The value this output would have created for consumers and producers is called the deadweight loss or excess burden associated with the regulation. See DUDLEY, *supra* note 36, at 42.

^{87.} A sensitivity analysis deals with uncertainty of key variables by altering one or more of them to produce a range of possible results. The Travel Documents regulatory analysis notes, "These scenarios embody assumptions and calculations that produce what we would consider the 'extreme endpoints' of costs we expect to see in the first year as a result of the rule. Neither of these scenarios is at all likely, but they are useful in bounding the potential range of costs." *See supra* note 72, at i.

^{88.} A Monte Carlo analysis treats each key input variable as a distribution of possible values and replicates the analysis numerous times to assess how the range of possible estimates responds to variation in all of the key variables. "Monte Carlo analysis is used to generate values for uncertain variables by mathematically manipulating distributions, rather than point estimates, of those variables. Because we have so many assumptions and variables in this analysis, we conduct a Monte Carlo analysis to more formally characterize the inherent uncertainty in our resulting estimates. *See id.* at 50.

^{89.} See supra note 76.

^{90.} See supra note 75.

^{91.} See supra note 76.

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final rule. The expenditure estimates are fairly detailed. They do not consider how the costs of the rule might affect the prices of goods and services or the behavioral responses of firms and customers. A strong point is that the analysis acknowledges the inherent uncertainty of the cost estimates and conducts a Monte Carlo analysis to assess the effects of this uncertainty.⁹²

The Passenger Manifests and Chemical Facilities analyses presented a good deal of useful cost information. But they were not as complete as the cost analysis of the Travel Documents rule,⁹³ which is why they earned a lower score.

IV. EXPLAINING THE RESULTS

Overall, the quality of regulatory analysis coming out of DHS has been poor to mediocre. Certain component agencies have performed better than others, and the quality of economic analysis appears to have improved over time. Additionally, DHS has usually failed to provide adequate discussion of three important elements of regulatory analysis: (1) the discussion of regulatory alternatives, (2) identifying the market failure or systemic problem that might warrant regulatory intervention, and (3) identifying why federal regulation is the appropriate response. The following discussion identifies some organizational, political, and legal considerations that may explain our observations.

A. Why has DHS Often Done Incomplete Regulatory Analysis?

Despite modest improvement over time, the quality of DHS regulatory analysis remains generally inadequate. One possible explanation for the marginal improvement over time is that, as the OIRA has become more familiar with DHS, collaboration between OIRA and DHS in developing quality economic analysis has increased. Another explanation is that DHS has become more informed of and dedicated to the preparation of sound regulatory analysis since its inception. Finally, the OIRA's detailed guidance document outlining best practices in regulatory analysis, Circular A-4, was not issued until September 2003, which was too late to affect the analysis of the three Coast Guard regulations issued that year. While all of these possibilities provide some explanation, we did not observe uniform

^{92.} See supra note 75.

^{93.} See supra note 72.

improvement over time at each of the component agencies in our sample. Some agencies performed consistently better than others.

Another possible explanation might be that DHS focuses its analytical resources on the most costly regulations, under the assumption that those deserve more careful analysis. We reject this explanation after comparing the cost figures in Table 3 with the scores in Table 4. The regulatory analyses of the two regulations costing more than \$1 billion annually received scores of eight and ten. The third most costly regulation, Maritime Facilities—costing \$540 million annually—received a score of only six on its regulatory analysis. The highest-scoring analysis was for the Travel Documents rule, which achieved a score of fifteen and cost \$206 million annually. The second-highest score—twelve—went to the analysis of the Passenger Manifests rule, which was estimated to cost \$61-190 million. Scores for analyses of the regulations costing \$100-250 million annually ranged from a low of four to a high of fifteen. There is simply no relationship between the quality of regulatory analysis and the cost of the regulation.

Two factors could explain why, even after some time to get on its feet, DHS is still producing inadequate regulatory analysis. First, a shortage of qualified regulatory economists at DHS may detract from the agency's ability to complete thorough analysis. This could be an organization-wide problem rather than just a problem afflicting some component agencies. An informal survey conducted by the authors revealed that as of January 2008, approximately ten economists employed at DHS work on regulatory analysis. In 2007, DHS employed about 159,000 full-time equivalent individuals.⁹⁵ The number of economists and the ratio of economists to non-economists are both much lower at DHS than at other agencies we surveyed, as Table 5 shows.⁹⁶ Perhaps it's no surprise that economics-oriented agencies, such as the Federal Trade Commission and the Federal Communications Commission, have a relatively high proportion of

^{94.} One might argue that the costs of the regulations with better analysis would have been much higher in the absence of the analysis, and so there may be a relationship between the *potential* costs of the regulation and the quality of the analysis. Not being privy to internal discussions of these regulations at DHS, we cannot determine if this is true.

^{95.} U.S. OFFICE OF PERSONNEL MANAGEMENT, EMPLOYMENT AND TRENDS OF FEDERAL CIVILIAN WORKFORCE STATISTICS, tbl. 2 (2007), http://www.opm.gov/feddata/ html/2007/september/table2.asp

^{96.} All of these figures exclude contractors. The sheer magnitude of the difference between total DHS staff and economists suggests that DHS would have to have an enormous number of economists as contractors to get its ratio in line with those of other agencies, so we doubt the omission of contractors seriously alters the conclusions that can be drawn from Table 5.

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economists.⁹⁷ However, the number and proportion of economists at DHS is quite low even when compared to other health and safety regulatory agencies.⁹⁸ One way of reducing delays imposed by a queue is to provide more resources—in this case, economists.

	Employees Sept. 2007	Economists Feb. 2008	Employees per Economist
Environmental Protection Agency	18,119	200	91
Food and Drug Administration	10,000	20	500
Dept. of Agriculture	103,923	220	472
Consumer Product Safety Commission	395	9	44
Federal Communications Commission	1,804	60	30
Federal Trade Commission	1,131	70	16
DHS	159,447	10	15,945

Table 5: Employee Resources of Select Agencies⁹⁹

Second, congressionally imposed deadlines for regulatory action may have stifled DHS efforts to develop thorough regulatory analysis. Following the creation of DHS, there was a tremendous amount of pressure for the government to increase our nation's security in light of the September 11, 2001 terrorist attacks.¹⁰⁰ This pressure may have translated into hurried legislative and regulatory decision-making, and that could account for the nearly universal failure of DHS to examine regulatory alternatives. In regard to one controversial program, a former DHS undersecretary for preparedness told the *Washington Post*:

97. U.S. OFFICE OF PERSONNEL MANAGEMENT, *supra* note 95, at tbl. 2; *see also infra* tbl. 5.

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^{98.} See supra tbl. 5.

^{99.} Economist figures come from an informal survey performed by the authors in January and February 2008. Both FDA figures are from a private communication with Richard Williams, former director for social sciences, Center for Food Safety and Applied Nutrition, Food and Drug Administration.

^{100.} Three years after the September 11, 2001 terrorist attacks on the World Trade Center and the Pentagon, Congress commissioned the 9-11 Commission Report. The report reflects that "countering terrorism has become, beyond any doubt, the top national security priority for the United States. This shift has occurred with the full support of the Congress, both major political parties, the media, and the American people." THE 9/11 COMMISSION REPORT, *supra* note 16, at 361.

You have management issues, political pressure, the complexity of what is arguably a very tough thing to do, all within an unreasonable deadline and it's kind of the old adage—we can hurry up and do it fast, or we can take a little bit longer and do it right . . . External pressures on DHS made this a hurry-up-and-do-it-fast.¹⁰¹

Of course, the conclusion that external pressure is causing the agency to rush through its decision-making is debatable, particularly if further study shows that the regulatory analyses coming out of DHS are not significantly worse than those coming out of other agencies. Nevertheless, the fact that a large proportion of economically significant rules that DHS promulgated from 2001-2007 were interim final rules, with statutorily defined deadlines for prompt regulatory action, is evidence that the atmosphere surrounding the creation of DHS regulations has been rushed, for whatever reason. Interim final rules often become effective without public notice and comment. Of the thirteen economically significant rules we examined, seven began as interim final rules.¹⁰²

A recent article suggests that statutory deadlines inhibit regulatory agencies' ability to develop quality analysis because they limit the time in which an agency can complete studies or elicit comments.¹⁰³ Short statutory deadlines can also interfere with OIRA oversight by reducing the time OIRA has to complete review of agency analysis.¹⁰⁴ The authors found that agencies are much more likely to issue interim final rules, instead of final rules following notice and comment, in the face of short statutory deadlines, and also much more likely to use notice and comment rulemaking in the absence of deadlines.¹⁰⁵

^{101.} Spencer S. Hsu, *DHS Strains as Goals, Mandates Go Unmet*, WASH. POST, March 6, 2008, at A01.

^{102.} *See supra* tbl. 2. Specifically, the regulations that started as interim final rules were: Area Maritime Security, Vessel Security, Maritime Facility Security, US-VISIT Biometric Data, Community Disaster Loans, H1-B Visa Allocation, and Chemical Facilities.

^{103.} Jacob E. Gersen & Anne Joseph O'Connell, *Deadlines in Administrative Law*, 156 U. PA. L. REV. 923, 968 (2008)

^{104.} *Id.* ("[S]tatutory deadlines could undermine the prospects for effective OIRA review. The Executive Orders established a detailed timetable for the presentation and review of proposed agency actions; meeting statutory deadlines may mean failing to meet the President's requirements.").

^{105.} See id. at 943-44. The authors note that the "correlation between deadlines and interim final rules is positive and statistically significant, and the simple correlation between deadlines and direct final rules is negative and statistically significant " *Id.*

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Our observations are consistent with those conclusions. Most of the legislative mandates authorizing the interim final rules we examined imposed deadlines of some sort. In five cases, legislation urged that DHS implement interim final rules as soon as practicable, without adherence to APA notice and comment procedures.¹⁰⁶ Of the seven rules we examined which had their beginnings as interim final rules, only two of them were not subject to statutorily imposed deadlines—the 2005 Community Disaster Loans rule and the 2005 H1-B Visa Allocation rule. However, the preambles for both rules state that urgency required the use of an interim final rule instead of traditional notice and comment procedures.¹⁰⁷

Regulation	Year Final	Transparency	Systemic Problem	Alternatives	Total Score
Interim Final Rules					
Area Maritime Security	2003	2	0	0	5
Vessel Security	2003	2	0	0	6
Maritime Facility	2003	2	0	0	6
US-VISIT Biometric Data	2004	2	0	2	8
Community Disaster Loans	2005	4	0	0	3
H1-B Visa Allocation	2005	4	1	0	4
Chemical Facilities	2007	4	2	2	10

 Table 6: Evaluating the Quality of Regulatory Analysis for Interim

 Final Rules

106. Specifically, the three Coast Guard Regulations from 2004 (Area Maritime Security, Vessel Security, and Facility Security), the 2004 Biometric Data Collection Rule, and the 2007 Chemical Facilities Rule were urged to be adopted without the full procedure by legislation.

The statutory authority for the Coast Guard Maritime Security Initiatives is the Maritime Security Act, Pub. L. No. 107-295, 116 Stat. 339. The applicable deadlines for regulatory action under the Act can be found at: 33 U.S.C. § 1504(a) (2000) (Regulations); 46 U.S.C. § 70101(c) (2000); 46 U.S.C. § 70104 (a)(1) (2000) (Deadline for plans). The statutory deadlines for the 2004 Biometric Data Collection Rule comes from Data Management Improvement Act of 2000 ("DMIA"), Pub. L. 106-214 (2000), 114 Stat. 339 (codified as amended at 8 U.S.C. § 1365(d) (2000)), and the Enhanced Border Security Act, 8 U.S.C. § 1732 (2000).

The statutory deadline for the 2007 Chemical Facilities Rule comes from the Department of Homeland Security Appropriations Act of 2007, Pub. L. 109-295, § 550, 120 Stat. 1388 (codified as amended at 6 U.S.C. § 121 (2000)).

107. *See* Special Community Disaster Loans Program, 70 Fed. Reg. 60443 (Oct. 18, 2005) (codified at 44 C.F.R. pt. 206); *see also* Allocation of Additional H–1B Visas Created by the H–1B Visa Reform Act of 2004, 70 Fed. Reg. 23,775 (May 5, 2005) (codified at 8 C.F.R. pt. 214).

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Average		2.86	0.43	0.57	6.00
Final Rules					
Automated Pasgr. Info. Syst.	2005	4	1	1	9
Air Cargo	2006	3	0	1	
W. Hem. Travel Documents	2006	4	2	3	1
Transp. Worker ID Credential	2007	4	0	2	
Immigration Benefit Applic.	2007	2	3	1	ŧ
Passenger Manifests	2007	4	1	3	1
Average		3.50	1.17	1.83	9

Source: Evaluations done by the authors.

The results of our evaluation support a conclusion that statutory deadlines have had a significant impact on DHS regulatory analysis quality. Table 6 shows that the average total score for the seven interim final rules in our sample was only 6, while the overall average for the six regulations that were not interim final rules was 9.17— more than fifty percent better. Thus, there appears to be a loose correlation between the quality of analysis produced by DHS and the decision to implement interim final rules.

The 2007 Chemical Facilities rule was the only interim final rule for which DHS chose to provide the public with advance opportunity to comment.¹⁰⁸ Its regulatory analysis received the highest score out of the group of interim final rules and the third highest score overall—ten points. Tellingly, the 2006 Travel Documents rule that received the highest overall score in our evaluation was also the only rule for which DHS published an Advanced Notice of Proposed Rulemaking,¹⁰⁹ in addition to a Notice of Proposed Rulemaking,¹¹⁰ which provided ample opportunity for the agency to study comments and develop its regulatory analysis.

B. Particularly Weak Areas in DHS Regulatory Analysis

DHS has performed particularly poorly in three areas of regulatory analysis: (1) discussing regulatory alternatives, (2) identifying a market

^{108.} Chemical Facilities Anti-Terrorism Standards; Advanced Notice of Rulemaking, 71 Fed. Reg. 78276 (Dec. 28, 2006).

^{109.} Documents Required for Travel within the Western Hemisphere; Advanced Notice of Proposed Rulemaking, 70 Fed. Reg. 52037 (Sept. 1, 2005).

^{110.} Documents Required for Travel within the Western Hemisphere; Notice of Proposed Rulemaking, 71 Fed. Reg. 46155 (Aug. 11, 2006).

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failure or other systemic problems that the regulation seeks to fix, and (3) determining the uniquely federal role in fixing that problem.

1. Regulatory Alternatives

Executive Order No. 12,866 encourages agency decision makers to consult with regulatory analysts and economists early in the rulemaking process to develop and examine regulatory alternatives *before* an agency identifies its preferred course of action. The low scores that most of the component agencies received on their analysis of regulatory alternatives suggest that planning-stage collaboration with economists has not occurred. This could be the result of the shortage of qualified economists at DHS, or perhaps an institutional unwillingness to listen to them. But it could also be the result of other legal and political considerations, such as (a) statutorily imposed deadlines for action, and (b) narrow legislative delegations from Congress to DHS.

a. Statutory Deadlines

As demonstrated earlier, Congress has caused DHS to implement a large number of interim final rules—most of which became effective without prior notice and comment.¹¹¹ This has been the result of Congress either imposing short statutory deadlines on DHS, or explicitly directing DHS to implement interim final rules in lieu of traditional notice and comment rulemaking. Table 6 shows that, of the seven rules we examined which had their beginnings as interim final rules, five earned zero points for discussion of alternatives, and the other two each earned two points, for an average of 0.57 out of five possible points. The average score for the six rules that were not interim final rules was 1.83. This is consistent with the conclusion that DHS performs more poorly on its analysis of regulatory alternatives when it issues interim final rules without prior notice and comment, and that statutory deadlines may be the culprit.

Furthermore, the results suggest that when DHS takes more time and receives more public input on its regulatory analyses, it tends to do a better job at discussing alternatives. The 2004 Biometric Data and 2007 Chemical Facilities interim final rules received two points each for discussion of alternatives in their regulatory analyses. These two rules also scored the highest overall points among the group of rules that started as interim final

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^{111.} See supra note 106 and accompanying text.

rules. The 2007 Chemical Facilities rule was the only interim final rule for which DHS sought public comment, and it earned ten overall points—well above average for the entire group. The 2004 Biometric Data rule was actually third in a line of previous interim final rules, and DHS had already solicited comments on the previous versions of the rule, which might explain its above-average score. Again, this suggests that when DHS engages with the public it produces better, if not perfect, analysis of regulatory alternatives.

b. Narrow Delegation

Congress may also be affecting the quality of alternatives analysis coming out of DHS in another way. Congress has the ability to limit regulatory agencies' discretion to create new rules through narrow delegations of authority.¹¹² Our observations suggest that where DHS has had very little discretion under the law, the agency has produced truly inadequate analysis of regulatory alternatives. An examination of the various legislative delegations to DHS that authorized each of the thirteen rules in our study revealed that the scope of the agency's discretion is generally narrow.¹¹³ Interestingly, the two rules that received the lowest scores for regulatory analysis were the product of legislative mandates which provided almost no discretion at all.¹¹⁴ Both of those rules also earned zero points on their discussion of alternatives.

^{112.} See Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837 (1984).

^{113.} Other rules not discussed here for which DHS was given very little discretion to adopt alternatives were Biometric Data Collection, H1-B Visa Allocation, TWIC, and Passenger Manifests. *See supra*, tbl 2. The legislative delegations for these rules are referenced in the Federal Register notices announcing each of these final rules.

^{114.} The two rules were the 2005 Community Disaster Loans Rule and H1-B Visa Allocation Rule. In the case of the Community Disaster Loan Rule, Congress gave DHS and the Federal Emergency Management Agency ("FEMA") the ability to distribute community disaster loans to local governments for disaster recovery projects following the devastating 2005 hurricane season. *See* Community Disaster Loan Act of 2005, Pub. L. 109–88, § 2(a) (2005). The extent of FEMA's regulations in this case amounted to a definition of what kind of entities would be eligible for the money. *See* Special Community Disaster Loans Program, *supra* note 107.

With regard to the H1-B Visa Allocation rule, Congress raised the cap for the number of individuals to whom DHS could allocate H1-B Visas in 2005, since the previous cap had been met earlier than expected. *See* H–1B Visa Reform Act of 2004, 8 U.S.C. § 1184 (2000). The extent of DHS's regulations for that rule included raising fees for the visa and setting out the effective dates for the rule. *See* Allocation of Additional H-1B Visas, *supra* note 107. In both

In cases where Congress delegated some discretionary authority to DHS. it usually could only be exercised in very limited circumstances. For example, in the 2006 Travel Documents rule, Congress instructed DHS to develop regulations that would require travelers entering the United States to present identification proving citizenship and identity.¹¹⁵ Congress allowed DHS to determine what the appropriate documents would be, based on the department's expertise.¹¹⁶ The 2007 Passenger Manifest rule was another instance where Congress instructed the agency to implement a specific security plan, but gave the agency some latitude with respect to details.¹¹⁷ Both of these rules achieved scores of three out of five for their discussion of alternatives—the two highest scores on this element. Notably, both of these rules also achieved the two highest total scores in our evaluation. To achieve even higher scores on alternatives analysis, DHS would have needed to discuss broader alternatives, including alternatives that fall beyond the scope of the legislative delegations that authorized both of the above rules. For instance, if in its regulatory analysis for the 2007 Passenger Manifest Rule, the agency had prepared a detailed analysis of a "no-action" alternative, the agency could have received a higher score on alternatives analysis.

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cases, there was no room for DHS to adopt alternative schemes for achieving congressionally stated goals.

^{115.} Documents Required for Travelers Departing From or Arriving in the United States at Air Ports-of-Entry From Within the Western Hemisphere; Final Rule, 71 Fed. Reg. 68412 (Nov. 24, 2006).

^{116.} The preamble to the rule states that the Intelligence Reform and Terrorist Prevention Act of 2004 required DHS and the Secretary of State to "develop and implement a plan to require travelers entering the United States to present a passport, other document, or combination of documents, that are 'deemed by the Secretary of Homeland Security to be sufficient to denote identity and citizenship." *See* Bureau of Customs and Border Protection, 71 Fed. Reg. 68412, at 68413 (Nov. 24, 2006) (to be codified at 22 C.F.R. pt. 41 & pt. 53). *See also,* Intelligence Reform and Terrorist Prevention Act, Pub. L. 108–458, 118 Stat. 3638 (Dec. 17, 2004).

^{117.} Congress instructed the agency to develop regulations requiring pre-departure transmission of passenger manifests for commercial airliners entering and leaving the United States, but allowed the agency to determine the minimum time before departure acceptable for transmission of passenger information. *See* Aviation and Transportation Security Act (ATSA) §115, 49 U.S.C. § 44909 (2001); Enhanced Border Security and Visa Entry Reform Act (EBSVERA) of 2002, § 402, 8 U.S.C. § 1221 (2002). The preamble to the rule states that the Intelligence Reform and Terrorists Prevention Act of 2004 mandated that DHS "collect manifest information in sufficient time to ensure that the Federal government can perform security analysis and take appropriate action prior to the departure of aircraft and vessels". *See* Advance Elec. Transmission of Passenger and Crew Member Manifests for Commercial Aircraft and Vessels; Final Rule, 72 Fed. Reg. 48320, 48322 (Aug. 23, 2007) (to be codified at 19 C.F.R. pt. 4 & pt. 122).

In circumstances where DHS has been instructed that it *must* act, DHS may be reluctant to spend resources developing economic analyses that discuss regulatory alternatives that it is prohibited from ultimately implementing—DHS likely has a natural aversion to second-guessing congressional intent. Therefore, when Congress severely limits regulatory options, DHS usually acts as if it assumes that Congress has already evaluated regulatory alternatives and further discussion would be superfluous. From that starting point, DHS has little incentive to examine the baseline and develop meaningful analysis of regulatory alternatives. However, OMB Circular A-4 does require regulatory agencies to examine alternatives that might fall outside of their statutory authority.¹¹⁸ In a few instances, DHS regulatory analyses did so, and they earned higher scores for discussion of alternatives as a result.

Specifically, the regulatory analysis for the 2007 TWIC Rule included a fairly developed analysis of an alternative which involved issuing regulations that would require private facilities to conduct security threat assessments on all of their employees, instead of adopting regulations that would establish the credential system required by the Maritime Transportation Security Act ("MTSA").¹¹⁹ The department explained that it could not adopt this alternative because it would not meet the requirements of the MTSA. The analysis received a score of two out of five possible points for analysis of alternatives, which was above average.¹²⁰ However, the information in the analysis of that alternative could be fairly useful to policy makers.

For instance, the analysis showed that the forbidden alternative was significantly less costly than the chosen alternative, but it did not meet the particular requirements of the MTSA.¹²¹ In this instance, the total cost for the chosen alternative was \$1.257 billion, while the total cost for the alternative

^{118.} OMB CIRCULAR A-4, *supra* note 7, at 17 ("If legal constraints prevent the selection of a regulatory action that best satisfies the philosophy and principles of Executive Order 12866, you should identify these constraints and estimate their opportunity cost. Such information may be useful to Congress under the Regulatory Right-to-Know Act.").

^{119.} Regulatory Impact Assessment, Final Rule, Transp. Identification Credential: Implementation in the Maritime Sector, at 39 (Dec. 21, 2006), http://www.regulations.gov (search TSA-2006-24191-0745) (last visited Nov. 1, 2008).

^{120.} Only two other analyses scored higher, at three out of five possible points on discussion of alternatives: The 2006 Travel Documents Rule and the 2007 Passenger Manifests Rule. While neither of those analyses discussed alternatives that fell outside of the scope of their legislative delegation, their analysis of alternatives was superior in many other respects.

^{121.} See supra note 119, at 34-39.

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was only \$326.2 million.¹²² The analysis also pointed out that the chosen alternative offered two features that the extra alternative did not. Of course, the next step would be to ask whether the two features required by legislation justify the extra \$725 million in annual costs. The agency did not discuss the marginal benefits of the more expensive option; however, that kind of analysis would be particularly useful for policymakers in situations when there is uncertainty regarding the effectiveness of a chosen policy, as there almost always is with security regulation. Nothing forbids the department from developing this kind of alternatives analysis, yet in one instance, the regulatory analysis for the 2005 Automated Passenger Information System ("APIS") rule, the department explicitly refused to analyze alternatives that it would not actually be allowed to implement under its statutory authority.¹²³ Clearly, DHS has the authority to examine any alternatives it would like to, even if for purely illustrative reasons.

2. Analysis of the Systemic Problem and Federal Role

In addition to the analysis of alternatives, DHS regulatory analysis was particularly weak in identifying the market failure or other systemic problem that warrants government intervention and identifying the unique role the federal government can play. Short deadlines may have some effect on DHS's propensity to analyze the systemic problem. Of the seven rules whose analysis of the systemic problem received a score of zero, five were interim final rules. The average score for analysis of the systemic problem was 1.17 for final rules but only 0.43 for interim final rules. Discussion of the federal

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^{122.} Id. at 39.

^{123.} The extent of the department's analysis of alternatives for the 2005 APIS rules is as follows:

The requirements of this final rule are mandated by the ATSA and the EBSA. Exploration of regulatory alternatives, therefore, was limited during the rulemaking process, as these legislative acts were explicit in the types of systems to be installed and the type of information to be submitted. CBP has, however, developed alternative submission methods for small air carriers, while the Coast Guard has developed alternative methods for vessels. These alternative methods should help small businesses comply with the final rule in the most cost-effective manner The "no action" alternative is not a feasible alternative because it does not meet legislative mandates.

Electronic Transmission of Passenger and Crew Manifests for Vessels and Aircraft, 70 Fed. Reg. 17820, 17843 (April 7, 2005) (to be codified at 8 C.F.R. pts. 217, 231, 251, 19 C.F.R. pts. 4, 122, 178). If not for the fact that the department adopted alternatives for small carriers and vessels, the analysis would have received zero instead of one point out of five.

role was never better than perfunctory, so all regulatory analyses received either a zero or a one on this aspect. More of the final rules received zeroes, but we read little into this result since analysis of the federal role was never very good.

Given the general lack of discretion Congress gives DHS to develop security policies, DHS regulators may feel these two prongs of regulatory analysis are of trivial importance. In cases where DHS *must* act, it appears that Congress has already determined that there is a problem that the agency has to fix, so it may seem futile for the agency to elaborate on these points.

This inference is invalid for two reasons. First, if regulators are unable to identify the precise problem that a proposed regulation intends to fix, it becomes very difficult to complete thorough analysis with respect to any of the other elements of an Executive Order 12,866 regulatory analysis. Another way to say this is if you don't know what problem you are trying to solve, looking at different solutions does not make a lot of sense. Or, as George Harrison noted, "If you don't know where you're going, any road will take you there."¹²⁴ If Congress did a thorough job of identifying the systemic problem that Congress intends the agency to solve. If Congress did not identify the systemic problem, then DHS could better exercise whatever discretion it has if it first identifies the systemic problem that Congress failed to define. The same holds true for analyzing why federal regulation is the appropriate response.

The failure of regulatory agencies to identify a market failure or other systemic problems also hinders outcome-based scrutiny of regulatory policy after the policy is adopted. Congress requires OMB to produce an annual report evaluating the costs and benefits of federal regulations.¹²⁵ Executive Order 12,866 explicitly instructs agencies to conduct retrospective reviews of regulations to identify whether they have been effective.¹²⁶ But because agencies do little retrospective analysis, the annual OMB report usually relies on estimates the agencies produced in their regulatory analyses when the

^{124.} GEORGE HARRISON, Any Road, on BRAINWASHED (Dark Horse Records 2002).

^{125.} See OFFICE OF MGMT. & BUDGET, EXECUTIVE OFFICE OF THE PRESIDENT, DRAFT 2007 REPORT TO CONGRESS ON THE COSTS AND BENEFITS OF FEDERAL REGULATIONS, (2007), available at http://www.whitehouse.gov/omb/inforeg/2007_cb/2007_draft_cb_report.pdf. OMB currently produces the report to comply with section 624 of the Treasury and General Government Appropriations Act of 2001. Pub. L. No. 106-554, 114 Stat. 2763A-161 to -162 (2000).

^{126.} Exec. Order 12,866, *supra* note 4, at 51,740.

regulations were adopted.¹²⁷ If DHS does not identify the problem that its regulations are intended to solve, it is difficult to see how DHS and those who oversee its policies can measure the effectiveness of those policies.

V. OPPORTUNITIES FOR IMPROVEMENT

Our evaluation of DHS regulatory analysis in Part III suggests that there is substantial room for improvement. Moreover, our exploration of explanations in Part IV reveals specific, concrete steps that decision makers in DHS, OMB, and Congress could take to improve the quality of regulatory analysis that informs security regulation.

A. Ways to Strengthen Economic Analysis at DHS

We make four general recommendations that, if adopted, could provide for significant improvement in the quality of regulatory analysis produced by DHS. Namely, we recommend that DHS allocate more resources to increasing the number of regulatory economists preparing and reviewing regulatory impact analyses, seek the input of those economists early in the policy-making process to ensure that regulatory analysis informs policy decisions before the fact, more actively solicit public participation in the rulemaking process, and share best practices in regulatory analysis with subagencies at DHS as well as agencies at other Departments.

1. Hire More Economists

"Insufficient resources" can be an endemic excuse that conceals a multitude of other sins. In the case of DHS, however, there is persuasive evidence that some of the analytical shortcomings in regulatory analysis may simply reflect a shortage of economists with the training and ability to conduct regulatory analysis. With one economist per 159,000 employees, the proportion of economists to total employees is truly miniscule. We have not evaluated the quality of regulatory analysis at other agencies, but we would not be surprised if many do better than DHS simply because they are more adequately staffed to do the job. Although having a sufficient number of

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^{127.} Office of Mgmt. & Budget, *supra* note 125, at 7. The OMB's report states that, "[t]he estimates of the costs and benefits of Federal regulations over the period October 1, 1996 to September 30, 2006 are based on agency analyses subject to public notice and comments and OMB review under Executive Order 12866." *Id.*

economists is a necessary first step to doing good analysis, there are many other necessary conditions.

2. Manage Economists Effectively

Sheer numbers of economists are not sufficient to guarantee that regulatory analysis is of high quality or that it effectively informs regulatory decisions. Research on other health and safety agencies suggests three factors that allow economists to make a productive contribution to the regulatory process.¹²⁸ First, economists should be involved early in the regulatory process, so they can help develop alternatives before the agency has decided what kind of regulation to write.¹²⁹ Second, economists, like other scientists, should have the freedom to be "truth-seekers," charged with generating the best knowledge available about reality to inform decisions. The economist's role in regulatory analysis should not be that of an advocate preparing a quantitative brief justifying decisions that have already been made for reasons related to politics, public relations, or wishful thinking.¹³⁰ Third, economists should report to and be evaluated by other economists, rather than attorneys or political actors.¹³¹ This helps ensure that economists' career advancement depends on the quality of their analyses, reduces noneconomists' opportunities to tamper with those analyses, and improves the agency's odds of hiring and retaining competent economists.¹³²

For this study, we examined only the publicly-available end product of DHS economic analysis; we did not conduct detailed interviews to glean "insider" information. Therefore, we can offer no judgments about the current influence or management of economists in DHS. The general lessons learned in other agencies that conduct economic analysis of risks, however, may nevertheless prove helpful.

^{128.} See generally Richard A. Williams, *The Influence of Regulatory Economists in Federal Health and Safety Agencies*, (Mercatus Ctr. at George Mason Univ., Working Paper No. 08-15, 2008).

^{129.} *Id.* at 14-15. A survey of economists in federal health and safety agencies revealed that most felt they could best contribute to their agency's mission by aiding in the comparative evaluation of costs and benefits of alternatives. *See id.* at 8-10.

^{130.} However, this is sometimes the expected role of economists in regulatory agencies. *See id.* at 10-11.

^{131.} *Id.* at 13-14.

^{132.} Id.

HOMELAND SECURITY

3. Get Ahead of the Curve

Executive Order 12,866 requires regulators to consider alternative solutions to regulatory problems.¹³³ Regulators may not feel obligated to do so when Congress specifically dictates the content of the regulations they are supposed to issue. In this context, one way DHS could improve the effect of regulatory analysis on decisions would be through an active research and public outreach program designed to generate useful knowledge on regulatory options before Congress acts. The results of DHS research, conferences, and workshops on regulation would then be an input into congressional decision-making.

There is ample precedent for this kind of approach in the federal government. The Economic Research Service in the U.S. Department of Agriculture has a staff of more than 350 personnel, the vast majority of whom are economists.¹³⁴ The Federal Trade Commission ("FTC") has an extremely active program of basic research and public workshops relevant to its mission of preserving competition and protecting consumers.¹³⁵ All three of the commission's large bureaus—the Bureau of Economics, Bureau of Consumer Protection, and Bureau of Competition—sponsor research, surveys, and events that create knowledge before Congress acts, so that they can inform legislative decisions.¹³⁶ The Bureau of Economics, which employs seventy economists, has its own public conferences and research publications.¹³⁷

4. Share Best Practices

DHS was created by a merger of many different entities, each of which had their own missions, histories, cultures, strengths, and weaknesses. Our evaluation reveals substantial variation in the completeness and quality of regulatory analyses. The quality of cost analysis would increase substantially

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^{133.} Exec. Order 12,866, *supra* note 4, at 51,741.

^{134.} U.S. Dept. of Agriculture, Economic Research Service, About ERS, http://www.ers.usda.gov/AboutERS/Overview.htm.

^{135.} Fed. Trade Comm'n, Office of Pub. Affairs, Public Events, http://www.ftc.gov/opa/events.shtm (last visited Mar. 30, 2009).

^{136.} *Id.* Perusal of these links reveals events organized by each of these bureaus, as well as other FTC entities such as the General Counsel's Office and the Office of Policy Planning.

^{137.} See Fed. Trade Comm'n, Bureau of Econ., Research, http://www.ftc.gov/be/research.shtm (last visited Mar. 30, 2009); Fed. Trade Comm'n, Bureau of Econ., Events, http://www.ftc.gov/be/events.shtm (last visited Mar. 30, 2009).

if all regulations had a cost analysis as good as the one in the Regulatory Impact Analysis for the Western Hemisphere Travel Documents rule, which scored a five for its cost analysis. On several other aspects of regulatory analysis, one or two of the regulations earned a three while most others received a zero, one, or two. This suggests DHS could achieve substantial improvement just by consistently adopting the practices used in the best analyses. Far more improvement is possible if DHS can adopt best practices developed at other federal agencies.

B. OMB Should Emphasize Alternatives

DHS regulatory analysis exhibited the most significant deficiencies in areas relevant to generation and discussion of alternatives. The most obvious element is, of course, explicit consideration of alternatives. In addition, the two other elements where the analyses scored poorly—identification of the systemic problem and the unique federal role—are both precursors to the generation and analysis of alternative solutions. OMB's regulatory review function could help improve the consideration of alternatives in several ways.

First, OMB could strongly promote generation and consideration of alternatives in the review process for individual regulations. It is true that, by the time a draft regulation goes to OMB for review, DHS has made at least a tentative decision about the option it prefers. However, if OIRA returned, or at least critiqued, regulatory analyses that had inadequate consideration of alternatives, it would give DHS greater incentive to remedy this deficiency. As of December 31, 2007, the end of the period covered by this study, OIRA had issued no "return letters" on DHS regulations.¹³⁸ It had, however, issued one "post-review" letter on a DHS regulation.¹³⁹ A post-review letter expresses OIRA's misgivings about a regulation OIRA permitted to move forward. The post-review letter addressed the Secure Flight Program, a proposed regulation requiring airlines to provide DHS with passenger manifest data for all international flights seventy-two hours prior to departure.¹⁴⁰ It explicitly asked that DHS analyze a regulatory alternative consistent with the existing APIS rule, which allows airlines to transmit

^{138.} Gen. Servs. Admin., OIRA Return Letters, http://www.reginfo.gov/public/ do/eoReturnLetters (last visited Mar. 30, 2009).

^{139.} Letter from Susan Dudley, Admin'r, Office of Info. & Regulatory Affairs, to Gus Coldebella Gen. Counsel & Regulatory Policy Officer, Dep't of Homeland Sec., (Dec. 7, 2007), *available at* http://www.reginfo.gov/public/postreview/Coldebella.pdf.

^{140.} Id.

passenger manifest data thirty minutes prior to departure on international flights.¹⁴¹

In August 2008, after we completed the analysis in this study, OIRA Director Susan Dudley issued a return letter for a draft rule on "Coastwise Transportation of Passengers."¹⁴² The rule would have made it more difficult for foreign-flag vessels to carry passengers between U.S. ports by requiring a minimum stay at a foreign port along the way. The letter noted, "This proposal presents no market failure or compelling public need, omits a statement of the costs and benefits of the rulemaking, and does not include a discussion and analysis of regulatory alternatives, significant distributive impacts, or uncertainties."¹⁴³

Second, OMB might consider strengthening the language of Executive Order 12,866 as it relates to analysis of alternatives. In several places, the Executive Order urges consideration of a wide scope of alternatives, including modification or repeal of existing regulations,¹⁴⁴ economic incentives,¹⁴⁵ information disclosure,¹⁴⁶ performance standards,¹⁴⁷ and "nonregulatory actions."¹⁴⁸ In its statement of regulatory philosophy, the Executive Order states that agencies should consider all "available" alternatives to direct regulation.¹⁴⁹ The actual list of items that agencies must include in a regulatory analysis, however, states that they should assess the costs and benefits of "potentially effective and reasonably feasible alternatives to the planned regulation."¹⁵⁰ Only OMB Circular A-4 explicitly directs agencies to analyze alternatives beyond the scope of the legislation authorizing the regulation because such information might be useful if Congress decides to review the regulation under the Congressional Review Act.¹⁵¹

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^{141.} *Id*.

^{142.} Letter from Susan Dudley, Admin'r, Office of Info. & Regulatory Affairs, to Gus Coldebella Gen. Counsel & Regulatory Policy Officer, Dep't of Homeland Sec., (Aug. 13, 2008), *available at* http://www.reginfo.gov/public/return/DHS-CBP_Coastwise_Cruises_ Return Letter.pdf.

^{143.} *Id.*

^{144.} Exec. Order 12,866, *supra* note 4, at 51,735-36.

^{145.} Id. at 51,736.

^{146.} Id.

^{147.} Id.

^{148.} *Id.* at 51,741.

^{149.} Id. at 51,735

^{150.} Id. at 51,741.

^{151.} OMB Circular A-4, *supra* note 7, at 17.

Words like "available" and "reasonably feasible" could be interpreted as a mandate that agencies should consider a wide range of regulatory alternatives, as long as they are not plainly fanciful or contrary to the physical laws of the universe or human nature. Thus, an airline safety regulation that simply required all terrorists to raise their hands before boarding a flight would be beyond consideration, since the terrorists could not reasonably be expected to comply. However, an alternative requiring a change in existing law, but otherwise feasible, could be analyzed.

Alternatively, it requires no stretch to imagine that agencies could interpret words like "available" and "reasonably feasible" much more narrowly. Regulators concerned about administrative or political expedience might construe those words to mean that they need only consider and analyze alternatives that are within the scope of current law.

An administration could remedy this ambiguity by amending section 6(a)(3)(C)(iii) of Executive Order 12,866 to clarify that a regulatory analysis of a major regulation must include consideration of reasonably feasible alternatives to the proposed regulation, even if such alternatives would require a change in existing law. The agency should identify why the proposed regulation is preferable to any alternatives permitted under existing law. The agency should also identify whether and why an alternative that would require a change in the law is preferable to the proposed regulation.

C. Congressional Role

Should DHS seriously consider hiring more regulatory economists, Congress would, of course, have to provide the funds for those hirings. Another possibility would be for Congress to establish a unit in headquarters similar to the Office of Risk Assessment and Cost Benefit Analysis ("ORACBA") which currently exists within the U.S. Department of Agriculture. This office provides oversight for all agency risk assessments and cost-benefit analyses in the department's component agencies.¹⁵² Congress could also make substantial contributions toward improving regulatory analysis at DHS in several other ways outlined below.

152. Dep't of Agric., Office of the Chief Economist, Risk Assessment, http://www.usda.gov/oce/risk_assessment/ (last visited Mar. 30, 2009).

1. Legislate Ends, Not Means

Congress could give DHS wider latitude to consider alternatives by actually giving DHS wider latitude to consider alternatives. Our analysis of enabling legislation revealed that DHS had very little discretion in crafting many of the thirteen major regulations. One way to prompt—though not guarantee—consideration of alternatives would be to give DHS greater discretion.

Greater discretion, of course, begs the question of how Congress can hold a relatively new department that is often plowing new regulatory ground on sensitive topics accountable to the public. In addition to giving DHS more discretion in crafting regulations, Congress should be more explicit about the specific outcomes it expects security regulations to produce for the public. Each piece of legislation requiring DHS to regulate should include a statement of the specific outcomes the regulation is supposed to achieve. Is the regulation supposed to reduce of the risk of a terrorist attack? Is it supposed to reduce the damage and loss of life from a terrorist attack? For what kinds of terrorist activity is the regulation supposed to have these effects? Ideally, explicit statements of outcomes would be accompanied by measures that indicate how much of, or how well, the regulation has achieved the outcome. If Congress feels it lacks the detailed knowledge to craft such measures, then it should explicitly require DHS to develop and seek public comment on verifiable and valid outcome measures for the regulation.

2. Do Your Homework

If Congress continues to give DHS very little discretion in crafting regulations, then Congress has taken de facto responsibility for assessing the effectiveness and costs of a wider range of alternatives. Similarly, if Congress requires DHS to issue interim final rules, or sets deadlines that have the effect of requiring DHS to do this, then DHS cannot perform adequate regulatory analysis. It is debatable whether the current legislative process adequately assesses alternative approaches and selects the one that offers the greatest, or most cost-effective, improvements in security. If Congress wants to ensure that security-related legislation is based on an adequate analysis of alternatives, then the committees that review such legislation should arrange for extensive analysis of alternatives by the Government Accountability Office or other independent entity. This practice would help ensure that the committees have access to analysis of alternatives, and it would also provide information the rest of the members

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could consider prior to casting their votes on legislation. A ready template for this kind of committee report already exists—namely, the regulatory analysis requirements in Executive Order 12,866.

3. Set Realistic Timetables and Deadlines

Our evaluation revealed that DHS tends to produce less complete regulatory analysis when it must issue interim final rules because of short congressionally-mandated deadlines. Congress can promote thorough regulatory analysis by adopting deadlines that realistically allow for a thorough vetting and analysis of the proposed regulations.

The most obvious objection to this proposal is that security is important, lives are at stake, and so the nation simply cannot afford "paralysis by analysis." This objection overlooks the fact that regulations rushed into place are less likely to be effective in achieving their goals—the protection of lives and property. When lives are at stake prudence recommends that DHS "take a little bit longer and do it right."¹⁵³

VI. CONCLUSIONS

The Department of Homeland Security issued thirteen major regulations between its inception and the end of 2007. A longstanding executive order establishes criteria for thorough regulatory analysis, and DHS is a Cabinet department subject to executive orders. Yet the regulatory analyses conducted by DHS have been seriously incomplete. No doubt some of the deficiencies have resulted from the inevitable disorganization created by the largest merger of governmental organizations in U.S. history. If that were the only explanation, we could count on the passage of time and learning by doing to alleviate the problem. Our research suggests otherwise. Substantial systemic changes are necessary if the analysis informing security regulation is to improve substantially. DHS, OMB, and Congress can each make a contribution.

The department should hire more economists, involve them early in developing alternatives, manage them in a way that ensures their job is to do impartial, objective analysis, and learn from both its own and other agencies' best practices in regulatory analysis. OMB should aggressively promote analysis of alternatives when it reviews DHS regulations and amend Executive Order 12,866 to clarify that it expects agencies to analyze all

^{153.} See Hsu, supra note 101.

reasonable alternatives, even if they would require a change in the law. Congress should give DHS greater discretion to craft regulations, but hold DHS accountable by specifically articulating and measuring the outcomes the regulations are supposed to accomplish. If Congress declines to give DHS more discretion, then it should not act until it has access to independent analysis of alternatives conducted by the Government Accountability Office or other nonpolitical source of expertise. Finally, Congress should abandon the "Ready, Aim, Fire" approach to security regulation by giving DHS deadlines that allow adequate time to conduct quality regulatory analysis.

Effective decision-making requires two things: knowledge of the consequences of alternative courses of action, and value judgments that allow the decision-maker to determine which consequences are most desirable. Regulatory analysis provides the first component, but not the second. Regulatory analysis is a tool for understanding causation—what *is*, and what *would likely* happen as a result of various policy initiatives. It is also a tool for ex-post scrutiny of security regulations because it allows policy makers to compare expectations to ultimate outcomes.

Regulatory analysis cannot, however, substitute for judgment when it comes time to make decisions. The analysis is not an algorithm that automatically produces a list of "correct" answers that can be read off of a graph or table. Some stakeholders and decision-makers may believe their fellow citizens should sacrifice a great deal to achieve improvements in security and avoid the economic dislocations of a 9/11-scale attack. Others may place more emphasis on sustained economic growth, free speech, privacy, personal liberty, or other important values. Since regulatory analysis is about what *is*, it cannot tell decision makers which values *ought to be* more important.

But just as analysis is not a substitute for judgment, values are not a substitute for understanding reality. Without the firm grounding in reality provided by regulatory analysis, decision-makers are flying blind. We are less prosperous, less free, *and less safe* as a result.

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APPENDIX I: REGULATORY ANALYSIS EVALUATION QUESTIONS

A. Identify the Desired Outcomes

Does the analysis clearly identify ultimate outcomes that affect citizens' quality of life?¹⁵⁴

Does the analysis identify how these outcomes are to be measured?¹⁵⁵

Does the analysis provide a coherent and testable theory showing how the regulation will produce the desired outcomes?¹⁵⁶

Does the analysis present credible empirical support for the theory?¹⁵⁷

When the outcome involves uncertain events, does the analysis identify how the regulation would affect the size of the outcome and the size of the risk?¹⁵⁸

B. Assess Evidence of Market Failure or Other Systemic Problem

Does the analysis identify a market failure or other systemic problem?¹⁵⁹

156 "Each agency shall base its decisions on the best reasonably obtainable scientific, technical, economic, and other information concerning the need for, and consequences of, the intended regulation or guidance document." Exec. Order 12,866, *supra* note 4, at 51,736. "Explain how the actions required by the rule are linked to the expected benefits. For example, indicate how additional safety equipment will reduce safety risks." OMB CIRCULAR A-4, *supra* note 7, at 2.

157 Exec. Order 12,866, *supra* note 4, at 51,736.

158 "[Y]our analysis should include two fundamental components: a quantitative analysis characterizing the probabilities of the relevant outcomes and an assignment of economic value to the projected outcomes." OMB CIRCULAR A-4, *supra* note 7, at 40. 159

(1) Each agency shall identify in writing the specific market failure (such as externalities, market power, lack of information) or other specific problem that it intends to address (including, where applicable, the failures of public institutions) that warrant new agency action, as well as assess the significance of that problem, to enable assessment of whether any new regulation is warranted.

(2) Each agency shall examine whether existing regulations (or other law) have created, or contributed to, the problem that a new regulation is intended to correct and

^{154 &}quot;In constructing measures of 'effectiveness', final outcomes, such as lives saved or life-years saved, are preferred to measures of intermediate outputs, such as tons of pollution reduced, crashes avoided, or cases of disease avoided." OMB CIRCULAR A-4, *supra* note 7, at 12.

^{155 &}quot;Even when a benefit or cost cannot be expressed in monetary units, you should still try to measure it in terms of its physical units. If it is not possible to measure the physical units, you should still describe the benefit or cost qualitatively." OMB CIRCULAR A-4, *supra* note 7, at 10.

Does the analysis outline a coherent and testable theory that explains why the problem (associated with the outcome above) is systemic rather than anecdotal?¹⁶⁰

Does the analysis present credible empirical support for the theory?¹⁶¹

If the existence or severity of the problem is uncertain, does the analysis evaluate the likelihood that the problem will occur or the likely extent of the problem?¹⁶²

C. Identify the Uniquely Federal Role

Does the analysis consider whether other levels of government have better knowledge or incentives to address the problem?¹⁶³

Exec. Order 12,866, supra note 4, at 51,735-36.

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If the regulation is designed to correct a significant market failure, you should describe the failure both qualitatively and (where feasible) quantitatively . . . For other interventions, you should also provide a demonstration of compelling social purpose and the likelihood of effective action. Although intangible rationales do not need to be quantified, the analysis should present and evaluate the strengths and limitations of the relevant arguments for these intangible values.

OMB CIRCULAR A-4, supra note 7, at 4.

161 *Id*.

162 "The precise consequences (benefits and costs) of regulatory options are not always known for certain, but the probability of their occurrence can often be developed. The important uncertainties connected with your regulatory decisions need to be analyzed and presented as part of the overall regulatory analysis." OMB CIRCULAR A-4, *supra* note 7, at 38. 163

Each agency shall assess the effects of Federal regulations on State, local, and tribal governments, including specifically the availability of resources to carry out those mandates, and seek to minimize those burdens that uniquely or significantly affect such governmental entities, consistent with achieving regulatory objectives as appropriate, agencies shall seek to harmonize Federal regulatory actions with related State, local, and tribal regulatory and other governmental functions.

Exec. Order 12,866, supra note 4, at 51,736.

In assessing whether Federal regulation is the best solution, you should also consider the possibility of regulation at the State or local level. In some cases, the nature of the market failure may itself suggest the most appropriate governmental level of regulation. For example, problems that spill across State lines (such as acid rain whose precursors are transported widely in the atmosphere) are probably best addressed by Federal regulation. More localized problems, including those that are common to many areas, may be more efficiently addressed locally.

OMB CIRCULAR A-4, supra note 7, at 6.

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whether those regulations (or other law) should be modified to achieve the intended goal of regulation more effectively.

Does the analysis identify "spillovers" across state borders that would justify a federal role?¹⁶⁴

Does the analysis identify how the proposed regulation interacts with other federal regulations?¹⁶⁵

D. Assess Effectiveness of Alternative Approaches

Does the analysis enumerate other options to address the problem?¹⁶⁶

Is the range of options 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 disclosure, addressing any government failures that caused the original problem)?¹⁶⁷

Does the analysis evaluate how alternative approaches would affect the amount of the outcome achieved?¹⁶⁸

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?¹⁶⁹

168 Agency regulatory analysis is to include:

An assessment, including the underlying analysis, of benefits anticipated from the regulatory action (such as, but not limited to, the promotion of the efficient functioning of the economy and private markets, the enhancement of health and safety, the protection of the natural environment, and the elimination or reduction of discrimination or bias) together with, to the extent feasible, a quantification of those benefits

Exec. Order 12,866, *supra* note 4, at 51,741. "A regulation may be appropriate when you have a clearly identified measure that can make government operate more efficiently. In addition, Congress establishes some regulatory programs to redistribute resources to select groups. Such regulations should be examined to ensure that they are both effective and cost-effective." OMB CIRCULAR A-4, *supra* note 5, at 5.

169 "This baseline should be the best assessment of the way the world would look absent the proposed action." OMB CIRCULAR A-4, *supra* note 5, at 15.

¹⁶⁴ OMB CIRCULAR A-4, *supra* note 7, at 6.

^{165 &}quot;Each agency shall avoid regulations and guidance documents that are inconsistent, incompatible, or duplicative with its other regulations and guidance documents or those of other Federal agencies." Exec. Order 12,866, *supra* note 4, at 51,736.

^{166 &}quot;Each agency shall identify and assess available alternatives to direct regulation, including providing economic incentives to encourage the desired behavior, such as user fees or marketable permits, or providing information upon which choices can be made by the public." *Id.* "Even where a market failure clearly exists, you should consider other means of dealing with the failure before turning to Federal regulation. Alternatives to Federal regulation include antitrust enforcement, consumer-initiated litigation in the product liability system, or administrative compensation systems." OMB CIRCULAR A-4, *supra* note 7, at 6.

¹⁶⁷ OMB Circular A-4, *supra* note 7, at 6.

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E. Identify Costs

Does the analysis identify and quantify marginal costs of all options considered?¹⁷⁰

Does the analysis identify all expenditures likely to arise as a result of the regulation?¹⁷¹

Does the analysis identify how the regulation would likely affect the prices of goods and services?¹⁷²

Does the analysis examine costs that stem from changes in human behavior as consumers and producers respond to the regulation?¹⁷³

Does the analysis translate costs into alternative metrics of interest to decision-makers (e.g., dollars, lives lost, life-years lost, etc.)?¹⁷⁴

If costs are uncertain, does the analysis present a range of estimates and/or perform a sensitivity analysis?¹⁷⁵

171 Agency regulatory analysis is to include:

An assessment, including the underlying analysis, of costs anticipated from the regulatory action (such as, but not limited to, the direct cost both to the government in administering the regulation and to businesses and others in complying with the regulation, and any adverse effects on the efficient functioning of the economy, private markets (including productivity, employment, and competitiveness), health, safety, and the natural environment), together with, to the extent feasible, a quantification of those costs

Exec. Order 12,866, supra note 4, at 51,741.

172 *Id.* OMB Circular A-4 adds:

You should include these effects in your analysis and provide estimates of their monetary values when they are significant:

• Private-sector compliance costs and savings;

• Gains or losses in consumers' or producers' surpluses;

• Discomfort or inconvenience costs and benefits; and

• Gains or losses of time in work, leisure and/or commuting/travel settings.

OMB CIRCULAR A-4, supra note 7, at 37.

173 OMB CIRCULAR A-4, *supra* note 7, at 37.

174 Id.

175 "It is usually necessary to provide a sensitivity analysis to reveal whether, and to what extent, the results of the analysis are sensitive to plausible changes in the main assumptions and numeric inputs." OMB CIRCULAR A-4, *supra* note 7, at 3. Rules with annual benefits or costs exceeding \$1 billion require a quantitative analysis of uncertainty. *See id.* at 41-42.

^{170 &}quot;When you have identified a range of alternatives (e.g., different levels of stringency), you should determine the cost-effectiveness of each option compared with the baseline as well as its incremental cost-effectiveness compared with successively more stringent requirements." OMB CIRCULAR A-4, *supra* note 5, at 11.

[•] Government administrative costs and savings;

F. Compare Costs with Outcomes.

Does the analysis identify the approach that maximizes net benefits?¹⁷⁶

Does the analysis identify the cost-effectiveness of each alternative considered?¹⁷⁷

Does the analysis identify all parties who would bear costs and assess the incidence of costs?¹⁷⁸

Does the analysis identify all parties who would receive benefits and assess the incidence of benefits?¹⁷⁹

APPENDIX II: REGULATORY ANALYSIS EVALUATIONS FOR ALL ECONOMICALLY SIGNIFICANT DHS REGULATIONS

Vessel Security: 1625-AA46	
Date	10/22/03
Component agency	Coast Guard
Total Evaluation Score	6
Transparency Score	2

Rule Summary

This rule provides security measures for certain vessels calling on U.S. ports. It also requires the owners or operators of vessels to designate security

177 "When an agency determines that a regulation is the best available method of achieving the regulatory objective, it shall design its regulations in the most cost-effective manner to achieve the regulatory objective." Exec. Order 12,866, *supra* note 4, at 51,736.

Both benefit-cost analysis (BCA) and cost-effectiveness analysis (CEA) provide a systematic framework for identifying and evaluating the likely outcomes of alternative regulatory choices. A major rulemaking should be supported by both types of analysis wherever possible. Specifically, you should prepare a CEA for all major rulemakings for which the primary benefits are improved public health and safety to the extent that a valid effectiveness measure can be developed to represent expected health and safety outcomes.

OMB CIRCULAR A-4, supra note 7, at 9.

178 "Your regulatory analysis should provide a separate description of distributional effects (i.e., how both benefits and costs are distributed among sub-populations of particular concern) so that decision makers can properly consider them along with the effects on economic efficiency." OMB CIRCULAR A-4, *supra* note 7, at 14.

179 Id.

^{176 &}quot;Each agency shall assess both the costs and the benefits of the intended regulation and, recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs." Exec. Order 12,866, *supra* note 4, at 51,736.

officers for vessels, develop security plans based on security assessments and surveys, implement security measures specific to the vessel's operation, and comply with Maritime Security Levels. This rule is one in a series of final rules on maritime security.¹⁸⁰

Element Scores and Evaluations

Identify the Desired Outcomes = 1

Does the analysis clearly identify ultimate outcomes that affect citizens' quality of life?

The "benefits assessment" in the final rule discusses a risk evaluation tool called N-RAT. N-RAT is used to calculate scores for each entity before and after implementing security measures. N-RAT is an attempt to calculate probability times outcome, based on expert judgments. It is not very well documented.

Does the analysis identify how these outcomes are to be measured?

N-RAT "risk points" attempt to measure outcomes before the fact, but there is no proposed mechanism for testing the conclusions derived from it. This is an interesting attempt which may have significant flaws—e.g. worst case scenarios seem to have equal weight even if one worst case might have worse consequences than another worst case.

Does the analysis provide a coherent and testable theory showing how the regulation will produce the desired outcomes?

No. The analysis asserts that measures are necessary, but it also asserts that vessel owners might not make the exact expenditures contemplated. N-RAT maps activity (measures to reduce vulnerability) directly into outcome (reduced vulnerability) based on expert judgment, which apparently isn't testable.

Does the analysis present credible empirical support for the theory? *No.*

When the outcome involves uncertain events, does the analysis identify how the regulation would affect the size of the outcome and the size of the risk?

N-RAT attempts to measure probability times outcome. But it assumes with one hundred percent certainty that a measure intended to reduce

¹⁸⁰ See also Implementation of National Maritime Security Initiatives, 68 Fed. Reg. 60448-01 (Oct. 22, 2003) (codified at 33 C.F.R. Pts. 2, 101 & 102). vulnerability will in fact reduce vulnerability by the amount experts say it will.

Assess Evidence of Market Failure or Other Systemic Problem = 0

Does the analysis identify a market failure or other systemic problem? *No.*

Does the analysis outline a coherent and testable theory that explains why the problem (associated with the outcome above) is systemic rather than anecdotal?

No.

Does the analysis present credible empirical support for the theory? *No.*

If the existence or severity of the problem is uncertain, does the analysis evaluate the likelihood that the problem will occur or the likely extent of the problem?

No.

<u>Identify the Uniquely Federal Role = 1</u>

Does the analysis consider whether other levels of government have better knowledge or incentives to address the problem?

No.

Does the analysis identify "spillovers" across state borders that would justify a federal role?

No.

Does the analysis identify how the proposed regulation interacts with other federal regulations?

Yes. The entire suite of six maritime security regulations is analyzed together. The analysis asserts no conflicts with other federal regulations.

Assess Effectiveness of Alternative Approaches = 0

Does the analysis enumerate other options to address the problem? *No*.

Is the range of options 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 disclosure, addressing any government failures that caused the original problem)?

N/A

Does the analysis evaluate how alternative approaches would affect the amount of the outcome achieved?

No.

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?

The analysis assumes expenditures will not be made unless mandated, but it provides no way of measuring improved security other than by using *N*-*R*AT.

<u>Identify Costs = 2</u>

Does the analysis identify and quantify marginal costs of all options considered?

No alternatives are considered by the analysis, but the cost of the chosen option is identified pretty thoroughly.

Does the analysis identify all expenditures likely to arise as a result of the regulation?

Probably.

Does the analysis identify how the regulation would likely affect the prices of goods and services?

No.

Does the analysis examine costs that stem from changes in human behavior as consumers and producers respond to the regulation?

No.

Does the analysis translate costs into alternative metrics of interest to decision-makers (e.g., dollars, lives lost, life-years lost, etc.)?

No.

If costs are uncertain, does the analysis present a range of estimates and/or perform a sensitivity analysis?

Not really, but the two Marsec levels might be interpreted as a range of possibilities. This is not really presented as a sensitivity analysis.

Compare Costs with Outcomes = 2

Does the analysis identify the approach that maximizes net benefits? *There is no way to know this in this case.*

Does the analysis identify the cost-effectiveness of each alternative considered?

The analysis does address the cost-effectiveness in terms of risk point reduction for the one alternative chosen.

Does the analysis identify all parties who would bear costs and assess the incidence of costs?

The analysis calculates costs for different types of vessels and different sizes of businesses.

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Does the analysis identify all parties who would receive benefits and assess the incidence of benefits?

No.

Area Maritime Security: 1625-AA42	
Date	10/22/03
Component Agency	Coast Guard
Total Evaluation Score	5
Transparency Score	2

Rule Summary

This final rule establishes U.S. Coast Guard Captains of the Ports as Federal Maritime Security Coordinators, and establishes requirements for Area Maritime Security Plans and Area Maritime Security Committees. This rule is one in a series of final rules on maritime security.¹⁸¹

Element Scores and Evaluations

Identify the Desired Outcomes = 1

Does the analysis clearly identify ultimate outcomes that affect citizens' quality of life?

N-RAT is used to calculate scores before and after implementing security measures. *N-RAT* is an attempt to calculate probability times outcome (risk) based on expert judgments.

Does the analysis identify how these outcomes are to be measured?

The analysis does not really do this, but it is trying to measure something with N-RAT risk points. It would be preferable if there was a dollar figure associated with a risk point or something similar. There are potentially significant flaws with N-RAT discussed above in the evaluation of the Vessel Security regulation.

Does the analysis provide a coherent and testable theory showing how the regulation will produce the desired outcomes?

No. The analysis asserts that the measures are necessary, but it also asserts facility owners might not make the exact expenditures contemplated. N-RAT maps activity (measures to reduce vulnerability) directly into

¹⁸¹ See also Implementation of National Maritime Security Initiatives, 68 Fed. Reg. 60448-01 (Oct. 22, 2003) (codified at 33 C.F.R. Pts. 2, 101 & 102).

outcome (reduced vulnerability) based on expert judgment, which apparently isn't testable.

Does the analysis present credible empirical support for the theory? *No*.

When the outcome involves uncertain events, does the analysis identify how the regulation would affect the size of the outcome and the size of the risk?

N-*Rat attempts to measure probability times outcome, but it assumes, with one hundred percent certainty, that a measure intended to reduce vulnerability will in fact reduce vulnerability by the amount the experts say it will.*

Assess Evidence of Market Failure or Other Systemic Problem = 0

Does the analysis identify a market failure or other systemic problem? *No.*

Does the analysis outline a coherent and testable theory that explains why the problem (associated with the outcome above) is systemic rather than anecdotal?

No.

Does the analysis present credible empirical support for the theory? *No.*

If the existence or severity of the problem is uncertain, does the analysis evaluate the likelihood that the problem will occur or the likely extent of the problem?

No.

<u>Identify the Uniquely Federal Role = 1</u>

Does the analysis consider whether other levels of government have better knowledge or incentives to address the problem?

No.

Does the analysis identify "spillovers" across state borders that would justify a federal role?

No.

Does the analysis identify how the proposed regulation interacts with other federal regulations?

Yes. The suite of six maritime security regulations is analyzed together.

Assess Effectiveness of Alternative Approaches = 0

Does the analysis enumerate other options to address the problem? *No*.

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Is the range of options 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 disclosure, addressing any government failures that caused the original problem)?

No.

Does the analysis evaluate how alternative approaches would affect the amount of the outcome achieved?

No.

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?

No.

Identify Costs = 2

Does the analysis identify and quantify marginal costs of all options considered?

No options are considered by the analysis, but the costs associated with chosen action are discussed.

Does the analysis identify all expenditures likely to arise as a result of the regulation?

Probably.

Does the analysis identify how the regulation would likely affect the prices of goods and services?

No.

Does the analysis examine costs that stem from changes in human behavior as consumers and producers respond to the regulation?

No.

Does the analysis translate costs into alternative metrics of interest to decision-makers (e.g., dollars, lives lost, life-years lost, etc.)?

No.

If costs are uncertain, does the analysis present a range of estimates and/or perform a sensitivity analysis?

Not really, but the discussion of Marsec I and II levels might be interpreted as a range of possibilities.

<u>Compare Costs with Outcomes = 1</u>

Does the analysis identify the approach that maximizes net benefits? *No*.

Does the analysis identify the cost-effectiveness of each alternative considered?

Risk points reduced per dollar spent.

Does the analysis identify all parties who would bear costs and assess the incidence of costs?

No.

Does the analysis identify all parties who would receive benefits and assess the incidence of benefits?

No.

Facility Security: 1625-AA43	
Date	10/22/03
Component Agency	Coast Guard
Total Evaluation Score	6
Transparency Score	2: Cost analysis and benefit discussion in final rule. Citation for N-RAT discussion didn't work.

Rule Summary

This rule provides security measures for certain facilities in U.S. ports. It also requires owners or operators of facilities to designate security officers for facilities, develop security plans based on security rules and regulations assessments and surveys, implement security measures specific to the facility's operations, and comply with Maritime Security Levels. This rule is one in a series of final rules on maritime security.¹⁸²

Element Scores and Evaluations

Identify the Desired Outcomes = 1

Does the analysis clearly identify ultimate outcomes that affect citizens' quality of life?

The regulation involves prevention of unlawful acts that threaten vessels. Risk points are reduced. N-RAT is used to calculate scores before and after implementing security measures.

Does the analysis identify how these outcomes are to be measured?

Outcomes measured by N-RAT risk points. See discussion above in Vessel Security regulation. The issue with N-RAT is that it assumes the probability that the measure will reduce risk by the stated amount is one hundred percent, but there's no proposed way to test this.

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¹⁸² See also Implementation of National Maritime Security Initiatives, 68 Fed. Reg. 60448-01 (Oct. 22, 2003) (codified at 33 C.F.R. Pts. 2, 101 & 102).

Does the analysis provide a coherent and testable theory showing how the regulation will produce the desired outcomes?

No. The analysis asserts that the measures are necessary, but it also asserts facility owners might not make the exact expenditures contemplated. N-RAT maps activity directly into outcomes, based on expert judgment, which isn't testable.

Does the analysis present credible empirical support for the theory? *No*.

When the outcome involves uncertain events, does the analysis identify how the regulation would affect the size of the outcome and the size of the risk?

No.

<u>Assess Evidence of Market Failure or Other Systemic Problem = 0</u> Does the analysis identify a market failure or other systemic problem? *No.*

Does the analysis outline a coherent and testable theory that explains why the problem (associated with the outcome above) is systemic rather than anecdotal?

No. It asserts the N-RAT determined that the vessels covered "may" be involved in a transportation security incident.

Does the analysis present credible empirical support for the theory? *No*.

If the existence or severity of the problem is uncertain, does the analysis evaluate the likelihood that the problem will occur or the likely extent of the problem?

No.

<u>Identify the Uniquely Federal Role = 1</u>

Does the analysis consider whether other levels of government have better knowledge or incentives to address the problem?

No.

Does the analysis identify "spillovers" across state borders that would justify a federal role?

No.

Does the analysis identify how the proposed regulation interacts with other federal regulations?

Yes. The suite of six maritime security regulations is analyzed together. The analysis asserts no conflict with the other regulations.

<u>Assess Effectiveness of Alternative Approaches = 0</u>

Does the analysis enumerate other options to address the problem?

The regulatory flexibility portion mentions an "Alternative Security Program" but doesn't analyze that program.

Is the range of options 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 disclosure, addressing any government failures that caused the original problem)?

No options are considered.

Does the analysis evaluate how alternative approaches would affect the amount of the outcome achieved?

No options are considered.

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?

No options are considered.

<u>Identify Costs = 2</u>

Does the analysis identify and quantify marginal costs of all options considered?

It does so for the only option considered.

Does the analysis identify all expenditures likely to arise as a result of the regulation?

Probably.

Does the analysis identify how the regulation would likely affect the prices of goods and services?

No.

Does the analysis examine costs that stem from changes in human behavior as consumers and producers respond to the regulation?

No.

Does the analysis translate costs into alternative metrics of interest to decision-makers (e.g., dollars, lives lost, life-years lost, etc.)?

No.

If costs are uncertain, does the analysis present a range of estimates and/or perform a sensitivity analysis?

The Marsec levels I and II discussion could be interpreted as a sensitivity analysis.

Compare Costs with Outcomes = 2

Does the analysis identify the approach that maximizes net benefits? *No*.

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Does the analysis identify the cost-effectiveness of each alternative considered?

Risk points are reduced per dollar.

Does the analysis identify all parties who would bear costs and assess the incidence of costs?

Yes. The analysis examines the effects on companies and includes a separate analysis of small business impacts.

Does the analysis identify all parties who would receive benefits and assess the incidence of benefits?

No.

Biometric Data Collection: 1650-AA00	
Date	08/31/04
Component Agency	Border and Transportation Security Directorate
Total Evaluation Score	8
Transparency Score	2

Rule Summary

This rule establishes the United States Visitor and Immigrant Status Technology Program (US-VISIT), an integrated, automated entry-exit system that records the arrival and departure of aliens, verifies aliens' identities, and authenticates aliens' travel documents through comparison of biometric identifiers.

Element Scores and Evaluations

Identify the Desired Outcomes = 1

Does the analysis clearly identify ultimate outcomes that affect citizens' quality of life?

Yes, but only in terms of activities and intermediate outcomes like improving timeliness and accuracy of the determination of a traveler's immigration status and admissibility, enhancing enforcement of the law, etc.

Does the analysis identify how these outcomes are to be measured?

Not explicitly, but it would be possible to infer measurements from some. Does the analysis provide a coherent and testable theory showing how the regulation will produce the desired outcomes?

No.

Does the analysis present credible empirical support for the theory? *No*.

When the outcome involves uncertain events, does the analysis identify how the regulation would affect the size of the outcome and the size of the risk?

No.

<u>Assess Evidence of Market Failure or Other Systemic Problem = 0</u>

Does the analysis identify a market failure or other systemic problem? *No. The analysis simply asserts a "public interest in security."*

Does the analysis outline a coherent and testable theory that explains why the problem (associated with the outcome above) is systemic rather than anecdotal?

No.

Does the analysis present credible empirical support for the theory? *No*.

If the existence or severity of the problem is uncertain, does the analysis evaluate the likelihood that the problem will occur or the likely extent of the problem?

No.

<u>Identify the Uniquely Federal Role = 1</u>

Does the analysis consider whether other levels of government have better knowledge or incentives to address the problem?

No, but the analysis asserts no conflict because other levels of government don't have a role.

Does the analysis identify "spillovers" across state borders that would justify a federal role?

No.

Does the analysis identify how the proposed regulation interacts with other federal regulations?

No.

Assess Effectiveness of Alternative Approaches = 2

Does the analysis enumerate other options to address the problem? *Yes.*

Is the range of options 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 disclosure, addressing any government failures that caused the original problem)?

The range of options is medium. It involves collecting biographic data only, full air, sea, and land capability, etc.—different means of gathering the data.

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Does the analysis evaluate how alternative approaches would affect the amount of the outcome achieved?

Not directly, though it claims alternatives would achieve different amounts.

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?

The analysis assumes that the baseline is data not gathered.

<u>Identify Costs = 2</u>

Does the analysis identify and quantify marginal costs of all options considered?

Yes, but only for the option chosen.

Does the analysis identify all expenditures likely to arise as a result of the regulation?

The analysis only identifies equipment as an expenditure.

Does the analysis identify how the regulation would likely affect the prices of goods and services?

No.

Does the analysis examine costs that stem from changes in human behavior as consumers and producers respond to the regulation?

No.

Does the analysis translate costs into alternative metrics of interest to decision-makers (e.g., dollars, lives lost, life-years lost, etc.)?

The analysis notes both dollar and time costs, but doesn't translate them.

If costs are uncertain, does the analysis present a range of estimates and/or perform a sensitivity analysis?

No.

<u>Compare Costs with Outcomes = 2</u>

Does the analysis identify the approach that maximizes net benefits?

The analysis claims that the option chosen accomplishes the most within funding constraints.

Does the analysis identify the cost-effectiveness of each alternative considered?

A Pilot study examined the cost-effectiveness of several ways of gathering data.

Does the analysis identify all parties who would bear costs and assess the incidence of costs?

The analysis identifies parties, but no incidence is identified.

Does the analysis identify all parties who would receive benefits and assess the incidence of benefits?

No.

Automated Passenger Information System (APIS): 1651-AA37			
Date	04/07/2005		
Component Agency	Bureau of Customs and Border Protection		
Total Evaluation Score	9		
Transparency Score	4		

Rule Summary

This rule amends the Bureau of Customs and Border Protection regulations pertaining to the filing of commercial vessel and aircraft manifests for passengers and crew members. Collectively, the provisions of this rule require the electronic transmission of manifest information for passengers and crew members onboard commercial vessels and aircraft, in advance of arrival in and departure from the United States, and for crew members and non-crew members onboard commercial aircraft that continue within and fly over the United States, in advance of the departure of those flights.

Element Scores and Evaluations

Identify the Desired Outcomes = 2

Does the analysis clearly identify ultimate outcomes that affect citizens' quality of life?

The regulation reduces the risk of a terrorist threat. It reduces flight diversions, cancellations, delays, etc. It reduces incidence of penalties for airlines that previously submitted inaccurate and or incomplete manifest submissions. The regulation results in increased safety, fewer bad people on airplanes, less delay, lower costs from delay/inaccuracy, and easier submission of information. "Enhance security" is listed in accounting statement as the only benefit.

Does the analysis identify how these outcomes are to be measured? *No*.

Does the analysis provide a coherent and testable theory showing how the regulation will produce the desired outcomes?

Sometimes.

Does the analysis present credible empirical support for the theory?

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A little—e.g. the analysis claims that CBP "targeting efficiency" is thirty times better than random examinations of passengers; it is not clear what this means but reference is to the annual Performance and Accountability Report.

When the outcome involves uncertain events, does the analysis identify how the regulation would affect the size of the outcome and the size of the risk?

No.

<u>Assess Evidence of Market Failure or Other Systemic Problem = 1</u>

Does the analysis identify a market failure or other systemic problem?

The analysis does not identify a market failure or systemic problem regarding original government actions—just security. But it does note that airlines face fines and costs due to the way the current system is designed.

Does the analysis outline a coherent and testable theory that explains why the problem (associated with the outcome above) is systemic rather than anecdotal?

No.

Does the analysis present credible empirical support for the theory? *No*.

If the existence or severity of the problem is uncertain, does the analysis evaluate the likelihood that the problem will occur or the likely extent of the problem?

No.

Identify the Uniquely Federal Role = 1

Does the analysis consider whether other levels of government have better knowledge or incentives to address the problem?

No.

Does the analysis identify "spillovers" across state borders that would justify a federal role?

No.

Does the analysis identify how the proposed regulation interacts with other federal regulations?

The analysis asserts no conflict and is designed to coordinate with the U.S. Coast Guard.

<u>Assess Effectiveness of Alternative Approaches = 1</u>

Does the analysis enumerate other options to address the problem?

Yes, but it abstains from analyzing alternatives that fall outside the scope of the statutory mandate.

Is the range of options 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 disclosure, addressing any government failures that caused the original problem)?

Narrow—lower-cost alternative for small carriers and "no action" are the only options considered.

Does the analysis evaluate how alternative approaches would affect the amount of the outcome achieved?

Not really—the analysis asserts that "no action" wouldn't comply with the law.

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?

The analysis says that eighty percent of carriers are already in compliance, but it does not estimate the value of including the rest.

<u>Identify Costs = 2</u>

Does the analysis identify and quantify marginal costs of all options considered?

Yes, but not many costs are considered.

Does the analysis identify all expenditures likely to arise as a result of the regulation?

Probably.

Does the analysis identify how the regulation would likely affect the prices of goods and services?

No.

Does the analysis examine costs that stem from changes in human behavior as consumers and producers respond to the regulation?

No.

Does the analysis translate costs into alternative metrics of interest to decision-makers (e.g., dollars, lives lost, life-years lost, etc.)?

The analysis provides some suggestive figures on the costs of inaccurate information transmittal and delay; it considers labor hours as well as expenditures; it also mentions costs of rerouting planes/passengers.

If costs are uncertain, does the analysis present a range of estimates and/or perform a sensitivity analysis?

No, but it takes a conservative approach to costs, attributing all costs of the information transmission to the regulation even though eighty percent of firms are already claimed to be in compliance.

<u>Compare Costs with Outcomes = 2</u>

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Does the analysis identify the approach that maximizes net benefits?

Between the two alternatives, yes. The analysis implies higher-cost option for small firms could convey no additional benefit.

Does the analysis identify the cost-effectiveness of each alternative considered?

No.

Does the analysis identify all parties who would bear costs and assess the incidence of costs?

Probably all; it examines incidence for different types of carriers, but doesn't discuss consumer costs.

Does the analysis identify all parties who would receive benefits and assess the incidence of benefits?

The analysis identifies common carriers, passengers, and the general public as beneficiaries, but doesn't get into the details.

H1-B Visa Allocation: 1615-AB32	
Date	05/05/05
Component Agency	U.S. Citizenship and Immigration Services
Total Evaluation Score	4
Transparency Score	4

Rule Summary

This rule implements changes made by the Omnibus Appropriations act for Fiscal Year 2005 to the numerical limits of the H-1B nonimmigrant visa category and the fees for filing of H-1B petitions.

Element Scores and Evaluations

Identify the Desired Outcomes = 1

Does the analysis clearly identify ultimate outcomes that affect citizens' quality of life?

The regulation mentions acquisition of needed workers, but provides no analysis. It also says "compliance with the law" and revenues to be spent on programs are benefits. "Fair and equitable allocation of additional H1-B numbers made available in FY2005" (intermediate outcome related to efficiency of government program).

Does the analysis identify how these outcomes are to be measured? *Only for the revenues.*

Does the analysis provide a coherent and testable theory showing how the regulation will produce the desired outcomes?

Not really; the agency probably assumes it's obvious.

Does the analysis present credible empirical support for the theory? *No.*

When the outcome involves uncertain events, does the analysis identify how the regulation would affect the size of the outcome and the size of the risk?

No.

Assess Evidence of Market Failure or Other Systemic Problem = 1

Does the analysis identify a market failure or other systemic problem?

The analysis identified the fact that the visa cap was too low as a systemic problem. There is no explanation of why the fees are necessary; they appear to simply raise revenue for other goals.

Does the analysis outline a coherent and testable theory that explains why the problem (associated with the outcome above) is systemic rather than anecdotal?

Yes, for the visa cap. No, for the costs.

Does the analysis present credible empirical support for the theory?

The visa cap was reached in October.

If the existence or severity of the problem is uncertain, does the analysis evaluate the likelihood that the problem will occur or the likely extent of the problem?

No analysis of whether visa cap problem is permanent, temporary, variable, etc. or justification for fees.

Identify the Uniquely Federal Role = 0

Does the analysis consider whether other levels of government have better knowledge or incentives to address the problem?

No.

Does the analysis identify "spillovers" across state borders that would justify a federal role?

No.

Does the analysis identify how the proposed regulation interacts with other federal regulations?

Slightly; the analysis notes that fees will be codified.

Assess Effectiveness of Alternative Approaches = 0

Does the analysis enumerate other options to address the problem? *No.*

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Is the range of options 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 disclosure, addressing any government failures that caused the original problem)?

There is no range of options considered

Does the analysis evaluate how alternative approaches would affect the amount of the outcome achieved?

No.

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?

The analysis implies that there will be fewer visas; it says nothing about costs.

<u>Identify Costs = 1</u>

Does the analysis identify and quantify marginal costs of all options considered?

Some, but not all.

Does the analysis identify all expenditures likely to arise as a result of the regulation?

Only fees; not time costs or other inefficiencies.

Does the analysis identify how the regulation would likely affect the prices of goods and services?

No.

Does the analysis examine costs that stem from changes in human behavior as consumers and producers respond to the regulation?

The agency acknowledges that some employers may not request visas or hire individuals who might need visas due to the fees but it doesn't do any analysis.

Does the analysis translate costs into alternative metrics of interest to decision-makers (e.g., dollars, lives lost, life-years lost, etc.)?

No.

If costs are uncertain, does the analysis present a range of estimates and/or perform a sensitivity analysis?

The agency considers some variability that has a small effect.

Compare Costs with Outcomes = 1

Does the analysis identify the approach that maximizes net benefits? *No*.

Does the analysis identify the cost-effectiveness of each alternative considered?

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No.

Does the analysis identify all parties who would bear costs and assess the incidence of costs?

The analysis discusses incidence on employers and employees.

Does the analysis identify all parties who would receive benefits and assess the incidence of benefits?

No.

Community Disaster Loans: 1660-AA44	
Date	10/18/05
Component Agency	FEMA
Total Evaluation Score	3
Transparency Score	4

Rule Summary

This rule implements the Special Community Disaster Loans Program authorized in the Community Disaster Loan Act of 2005. The rule describes the procedures and requirements for a program designed to provide loans for essential services to local governments that have experienced a loss in revenue due to a major disaster. These regulations do not apply to the traditional Community Disaster Loans Program, which is permanently authorized.

Element Scores and Evaluations

Identify the Desired Outcomes = 1

Does the analysis clearly identify ultimate outcomes that affect citizens' quality of life?

The analysis doesn't, but elsewhere the agency says that its purpose is to restore local government services in areas hit by Hurricane Katrina.

Does the analysis identify how these outcomes are to be measured? *No*.

Does the analysis provide a coherent and testable theory showing how the regulation will produce the desired outcomes?

No.

Does the analysis present credible empirical support for the theory? *No.*

When the outcome involves uncertain events, does the analysis identify how the regulation would affect the size of the outcome and the size of the risk?

No.

<u>Assess Evidence of Market Failure or Other Systemic Problem = 0</u> Does the analysis identify a market failure or other systemic problem? *No.*

Does the analysis outline a coherent and testable theory that explains why the problem (associated with the outcome above) is systemic rather than anecdotal?

No.

Does the analysis present credible empirical support for the theory? *No*.

If the existence or severity of the problem is uncertain, does the analysis evaluate the likelihood that the problem will occur or the likely extent of the problem?

No.

<u>Identify the Uniquely Federal Role = 1</u>

Does the analysis consider whether other levels of government have better knowledge or incentives to address the problem?

No, but the agency asserts that there is no federalism impact.

Does the analysis identify "spillovers" across state borders that would justify a federal role?

No, but the agency asserts that there is no federalism impact.

Does the analysis identify how the proposed regulation interacts with other federal regulations?

No, but the agency asserts that there is no federalism impact.

Assess Effectiveness of Alternative Approaches = 0

Does the analysis enumerate other options to address the problem? *No.*

Is the range of options 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 disclosure, addressing any government failures that caused the original problem)?

No.

Does the analysis evaluate how alternative approaches would affect the amount of the outcome achieved?

No.

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?

2008]

No.

Identify Costs = 1

Does the analysis identify and quantify marginal costs of all options considered?

No options are considered.

Does the analysis identify all expenditures likely to arise as a result of the regulation?

The analysis discusses how loans may exceed \$100 million per year. It notes the appropriations ceiling, but makes no measurement of compliance costs due to regulation.

Does the analysis identify how the regulation would likely affect the prices of goods and services?

No.

Does the analysis examine costs that stem from changes in human behavior as consumers and producers respond to the regulation?

No.

Does the analysis translate costs into alternative metrics of interest to decision-makers (e.g., dollars, lives lost, life-years lost, etc.)?

No.

If costs are uncertain, does the analysis present a range of estimates and/or perform a sensitivity analysis?

No.

<u>Compare Costs with Outcomes = 0</u>

Does the analysis identify the approach that maximizes net benefits? *No*.

Does the analysis identify the cost-effectiveness of each alternative considered?

No.

Does the analysis identify all parties who would bear costs and assess the incidence of costs?

No.

Does the analysis identify all parties who would receive benefits and assess the incidence of benefits?

No.

Air Cargo Security: 1652-AA23	
Date	05/26/06
Component Agency	Transportation Security Administration
Total Evaluation Score	5

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Transparency Score	3 (had to read final plus initial because
	the final rule only discussed changes to the
	initial)

Rule Summary

This rule requires airport operators, aircraft operators, foreign air carriers, and indirect air carriers to implement security measures in the air cargo supply chain as directed under the Aviation and Transportation Security Act. The rule also amends the applicability of the requirement for a "twelve-five" security program for aircraft with a maximum certificated takeoff weight of more than 12,500 pounds.

Element Scores and Evaluations

Identify the Desired Outcomes = 1

Does the analysis clearly identify ultimate outcomes that affect citizens' quality of life?

The agency cites a reduced risk to traveling passengers, aircraft and other property, and people/property that could be damaged by using aircraft as a weapon.

Does the analysis identify how these outcomes are to be measured? *No*.

Does the analysis provide a coherent and testable theory showing how the regulation will produce the desired outcomes?

The analysis asserts if we do these things, risk will be reduced, but doesn't say by how much.

Does the analysis present credible empirical support for the theory? *No.*

When the outcome involves uncertain events, does the analysis identify how the regulation would affect the size of the outcome and the size of the risk?

The analysis reports the size of damage from terrorist events, notes that this regulation is not the only factor affecting risk, but doesn't calculate the size of the risk.

<u>Assess Evidence of Market Failure or Other Systemic Problem = 0</u>

Does the analysis identify a market failure or other systemic problem?

No—the agency just assumes that requiring these specific measures is mandatory.

Does the analysis outline a coherent and testable theory that explains why the problem (associated with the outcome above) is systemic rather than anecdotal?

No.

Does the analysis present credible empirical support for the theory? *No*.

If the existence or severity of the problem is uncertain, does the analysis evaluate the likelihood that the problem will occur or the likely extent of the problem?

No.

<u>Identify the Uniquely Federal Role = 0</u>

Does the analysis consider whether other levels of government have better knowledge or incentives to address the problem?

No.

Does the analysis identify "spillovers" across state borders that would justify a federal role?

No.

Does the analysis identify how the proposed regulation interacts with other federal regulations?

No.

<u>Assess Effectiveness of Alternative Approaches = 1</u>

Does the analysis enumerate other options to address the problem?

The analysis doesn't, but the final analysis says that DHS sought comment on several alternatives of greater or lesser severity; these alternatives were rejected based on cost or remaining vulnerability.

Is the range of options 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 disclosure, addressing any government failures that caused the original problem)?

Medium.

Does the analysis evaluate how alternative approaches would affect the amount of the outcome achieved?

No, but it asserts some of the less restrictive ones would leave vulnerabilities.

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?

The analysis implicitly assumes that the baseline is that none of these measures get implemented.

2008]

<u>Identify Costs = 2</u>

Does the analysis identify and quantify marginal costs of all options considered?

Only for one option.

Does the analysis identify all expenditures likely to arise as a result of the regulation?

Yes, the analysis seems comprehensive, and is adjusted upward in response to comments.

Does the analysis identify how the regulation would likely affect the prices of goods and services?

No.

Does the analysis examine costs that stem from changes in human behavior as consumers and producers respond to the regulation?

No.

Does the analysis translate costs into alternative metrics of interest to decision-makers (e.g., dollars, lives lost, life-years lost, etc.)?

No.

If costs are uncertain, does the analysis present a range of estimates and/or perform a sensitivity analysis?

No.

<u>Compare Costs with Outcomes = 1</u>

Does the analysis identify the approach that maximizes net benefits?

Not really. It tries to, but since they made no effort to quantify benefits, this is pretty hard. It appears as though they attempted to pick the alternative that was not restrictively costly, but without discussing outcomes; it's like they picked it out of a hat.

Does the analysis identify the cost-effectiveness of each alternative considered?

No.

Does the analysis identify all parties who would bear costs and assess the incidence of costs?

Probably, but only direct costs. The analysis doesn't discuss how this regulation could affect consumer costs or behavior.

Does the analysis identify all parties who would receive benefits and assess the incidence of benefits?

No.

Travel Documents: 1651-AA66	
Date	11/24/06
Component Agency	Bureau of Customs and Border

	Protection; Department of State
Total Evaluation Score	15
Transparency Score	4

Rule Summary

This rule finalizes the first phase of a joint Department of State plan, known as the Western Hemisphere Travel Initiative, to implement new documentation requirements for certain United States citizens and nonimmigrant aliens entering the United States. As a result of this rule, all United States citizens and nonimmigrant aliens from Canada, Bermuda, and Mexico departing from or entering the United States from within the Western hemisphere at air ports-of-entry will be required to present a valid passport.

Element Scores and Evaluations

<u>Identify the Desired Outcomes = 2</u>

Does the analysis clearly identify ultimate outcomes that affect citizens' quality of life?

The analysis correctly identifies the benefits and identifies how, in theory, to calculate the benefits.

Does the analysis identify how these outcomes are to be measured?

Theoretically it does, but it says that data doesn't permit measurement in practice. The analysis notes some small cost savings from standardization of documents that can be measured in dollars.

Does the analysis provide a coherent and testable theory showing how the regulation will produce the desired outcomes?

The analysis argues that requiring passports will reduce terrorists' ability to cross borders—an intermediate outcome. It relies heavily on the fact that various authorities (e.g. 9-11 Commission) say this. It doesn't discuss levels of effectiveness, incidence of passport fraud, or how much this will affect ultimate outcomes.

Does the analysis present credible empirical support for the theory?

No. It basically asserts that requiring passports will reduce terrorist entry.

When the outcome involves uncertain events, does the analysis identify how the regulation would affect the size of the outcome and the size of the risk?

No, but it recognizes the possibility of an effect.

2008]

Assess Evidence of Market Failure or Other Systemic Problem = 2

Does the analysis identify a market failure or other systemic problem?

Yes. The multitude of acceptable documents increases processing time at the borders and increases risk of terrorists crossing borders, thus increasing costs and risk.

Does the analysis outline a coherent and testable theory that explains why the problem (associated with the outcome above) is systemic rather than anecdotal?

The analysis provides no measurement of how big the problem is or how big the threat is.

Does the analysis present credible empirical support for the theory?

The analysis provides mostly anecdotes and citations to authority. The agency does mention the number of different document types that CBP officers have to look at under the status quo.

If the existence or severity of the problem is uncertain, does the analysis evaluate the likelihood that the problem will occur or the likely extent of the problem?

No.

Identify the Uniquely Federal Role = 1

Does the analysis consider whether other levels of government have better knowledge or incentives to address the problem?

No.

Does the analysis identify "spillovers" across state borders that would justify a federal role?

No.

Does the analysis identify how the proposed regulation interacts with other federal regulations?

The analysis asserts no conflict.

Assess Effectiveness of Alternative Approaches = 3

Does the analysis enumerate other options to address the problem? *Yes.*

Is the range of options 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 disclosure, addressing any government failures that caused the original problem)?

Narrow—alternative ways of verifying passenger identity and citizenship are considered, but all assume this is necessary and will not occur in the absence of regulation.

Does the analysis evaluate how alternative approaches would affect the amount of the outcome achieved?

There are some quantitative statements about why many of the alternatives wouldn't be as effective as the chosen action.

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?

The analysis assumes that the baseline is current law. It acknowledges that passport demand grows over time and the regulation will affect the size of the increase. It also acknowledges that a benefits baseline can't be calculated. It doesn't discuss the probability that airlines could require passports on their own in absence of regulation.

Identify Costs = 5

Does the analysis identify and quantify marginal costs of all options considered?

Yes.

Does the analysis identify all expenditures likely to arise as a result of the regulation?

Very likely.

Does the analysis identify how the regulation would likely affect the prices of goods and services?

Yes. The size and percentage of price change can be found in appendix.

Does the analysis examine costs that stem from changes in human behavior as consumers and producers respond to the regulation?

The analysis calculates the number of people who will forego travel due to passport costs, deadweight loss to consumers, but not deadweight loss to producers.

Does the analysis translate costs into alternative metrics of interest to decision-makers (e.g., dollars, lives lost, life-years lost, etc.)?

The analysis examines dollar costs of passports plus number of travelers who would forego trips from or to the United States.

If costs are uncertain, does the analysis present a range of estimates and/or perform a sensitivity analysis?

The agency performs both a sensitivity analysis and Monte Carlo analysis.

<u>Compare Costs with Outcomes = 2</u>

Does the analysis identify the approach that maximizes net benefits?

2008]

No, because benefits aren't calculated. The analysis makes the assertion that benefits are maximized by the chosen action without any support.

Does the analysis identify the cost-effectiveness of each alternative considered?

It examines costs and cost savings in many cases.

Does the analysis identify all parties who would bear costs and assess the incidence of costs?

Yes.

Does the analysis identify all parties who would receive benefits and assess the incidence of benefits?

Not explicitly. The analysis does discuss cost savings associated with using passports as well as security gains for the general public.

Transportation Worker Identification Card (TWIC): 1652-AA41	
Date	01/25/07
Component Agency	Coast Guard
Total Evaluation Score	6
Transparency Score	4

Rule Summary

This rule requires security threat assessments of persons in secure areas of U.S. ports and implements access control measures which prevent individuals who may pose security threats from gaining unescorted access to secure areas of ports. This rule prohibits individuals who do not possess a Transportation Worker Identification Card ("TWIC") from having unescorted access to secure areas at affected maritime facilities.

Element Scores and Evaluations

Identify the Desired Outcomes = 1

Does the analysis clearly identify ultimate outcomes that affect citizens' quality of life?

The regulation will increase security by requiring secure biometric ID's for people entering secure areas and controlling access. It will reduce the number of high risk individuals with unescorted access to secure areas.

Does the analysis identify how these outcomes are to be measured? *No*.

Does the analysis provide a coherent and testable theory showing how the regulation will produce the desired outcomes?

The analysis does not provide this information on the probability or severity of a terrorist incident. It asserts that a biometric ID will reduce number of high risk individuals with access.

Does the analysis present credible empirical support for the theory? *No*.

When the outcome involves uncertain events, does the analysis identify how the regulation would affect the size of the outcome and the size of the risk?

No.

<u>Assess Evidence of Market Failure or Other Systemic Problem = 0</u> Does the analysis identify a market failure or other systemic problem? *No.*

Does the analysis outline a coherent and testable theory that explains why the problem (associated with the outcome above) is systemic rather than anecdotal?

No.

Does the analysis present credible empirical support for the theory? *No*.

If the existence or severity of the problem is uncertain, does the analysis evaluate the likelihood that the problem will occur or the likely extent of the problem?

No.

<u>Identify the Uniquely Federal Role = 0</u>

Does the analysis consider whether other levels of government have better knowledge or incentives to address the problem?

No.

Does the analysis identify "spillovers" across state borders that would justify a federal role?

No.

Does the analysis identify how the proposed regulation interacts with other federal regulations?

No.

<u>Assess Effectiveness of Alternative Approaches = 2</u>

Does the analysis enumerate other options to address the problem? *Yes.*

Is the range of options 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 disclosure, addressing any government failures that caused the original problem)?

2008]

Medium—the analysis included discussion of an alternative that falls outside of the agency's mandate: private issuance of credentials or security threat assessment of each employee.

Does the analysis evaluate how alternative approaches would affect the amount of the outcome achieved?

No, but the analysis asserts the alternatives would be less effective.

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?

"No required ID" appears to be the baseline, but there is no analysis of what the private sector would do without regulation.

Identify Costs = 2

Does the analysis identify and quantify marginal costs of all options considered?

Yes—it presents both initial and recurring costs.

Does the analysis identify all expenditures likely to arise as a result of the regulation?

Probably.

Does the analysis identify how the regulation would likely affect the prices of goods and services?

No.

Does the analysis examine costs that stem from changes in human behavior as consumers and producers respond to the regulation?

No.

Does the analysis translate costs into alternative metrics of interest to decision-makers (e.g., dollars, lives lost, life-years lost, etc.)?

No.

If costs are uncertain, does the analysis present a range of estimates and/or perform a sensitivity analysis?

Yes.

Compare Costs with Outcomes = 1

Does the analysis identify the approach that maximizes net benefits? *No*.

Does the analysis identify the cost-effectiveness of each alternative considered?

No.

Does the analysis identify all parties who would bear costs and assess the incidence of costs?

It probably identifies the parties.

Does the analysis identify all parties who would receive benefits and assess the incidence of benefits?

No.

Chemical Facility Standards: 1601-AA41	
Date	04/09/07
Component Agency	None (DHS rule)
Total Evaluation Score	10
Transparency Score	4

Rule Summary

This rule establishes risk-based performance standards for the security of chemical facilities in the United States. The rule requires covered facilities to prepare Security Vulnerability Analyses ("SVA"), and to develop Site Security Plans ("SSP"), which include measures that satisfy the identified risk-based performance standards. It also allows certain facilities to submit Alternate Security Programs in lieu of an SVA, SSP, or both. The rule contains associated provisions addressing inspections and audits, recordkeeping, and the protection of information that constitutes Chemical-terrorism Vulnerability Information. The rule provides DHS with authority to seek compliance through the issuance of Orders, including Orders Assessing Civil Penalty and Orders for the Cessation of Operations.

Element Scores and Evaluations

Identify the Desired Outcomes = 2

Does the analysis clearly identify ultimate outcomes that affect citizens' quality of life?

Yes. The criteria for selecting high-risk sites are related to effects on human health, national security, or economic impact.

Does the analysis identify how these outcomes are to be measured?

No. The owners of high risk sites must develop a plan to reduce the likelihood of a terrorist attack and the likelihood of success, but the analysis never says how much security is enough, how much the various measures will improve it, or what criteria DHS will use to determine whether the performance resulting from a proposed plan is adequate. Though couched as a performance-based standard, it could turn into a design-based standard depending on judgments DHS makes in evaluating firms' plans.

Does the analysis provide a coherent and testable theory showing how the regulation will produce the desired outcomes?

2008]

The analysis offers plausible explanations of how various measures will improve security.

Does the analysis present credible empirical support for the theory?

No. The actual level of "performance" required by the performance standard is a black box.

When the outcome involves uncertain events, does the analysis identify how the regulation would affect the size of the outcome and the size of the risk?

Not really. The analysis doesn't say how much the regulation will reduce risk, just that it will.

Assess Evidence of Market Failure or Other Systemic Problem = 2

Does the analysis identify a market failure or other systemic problem? Yes—Externality. Individual firms may not have the incentive to secure beyond the privately optimal level up to the socially optimal level.

Does the analysis outline a coherent and testable theory that explains why the problem (associated with the outcome above) is systemic rather than anecdotal?

No.

Does the analysis present credible empirical support for the theory? *No.*

If the existence or severity of the problem is uncertain, does the analysis evaluate the likelihood that the problem will occur or the likely extent of the problem?

No.

Identify the Uniquely Federal Role = 0

Does the analysis consider whether other levels of government have better knowledge or incentives to address the problem?

No.

Does the analysis identify "spillovers" across state borders that would justify a federal role?

No.

Does the analysis identify how the proposed regulation interacts with other federal regulations?

The analysis only identifies this in the Final Regulatory Flexibility Analysis.

Assess Effectiveness of Alternative Approaches = 2

Does the analysis enumerate other options to address the problem? *Yes.*

Is the range of options 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 disclosure, addressing any government failures that caused the original problem)?

One qualitatively different option is considered but not analyzed in detail—a more prescriptive design standard. The analysis also considered cost effects of tightening or loosening criteria used to determine which facilities pose the highest risks.

Does the analysis evaluate how alternative approaches would affect the amount of the outcome achieved?

No, but it asserts a more prescriptive standard would provide additional costs with no additional benefits.

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?

The analysis acknowledges that firms have improved security since 9-11 but assumes current practice will be the baseline; no further improvement is expected without regulation.

<u>Identify Costs = 3</u>

Does the analysis identify and quantify marginal costs of all options considered?

The analysis considers additional costs of tightening or loosening highrisk criteria, but not for a design standard.

Does the analysis identify all expenditures likely to arise as a result of the regulation?

Probably.

Does the analysis identify how the regulation would likely affect the prices of goods and services?

No.

Does the analysis examine costs that stem from changes in human behavior as consumers and producers respond to the regulation?

No.

Does the analysis translate costs into alternative metrics of interest to decision-makers (e.g., dollars, lives lost, life-years lost, etc.)?

Yes. The analysis builds up dollar cost estimates from hours, materials, etc.—it is focused on expenditures, not opportunity costs.

If costs are uncertain, does the analysis present a range of estimates and/or perform a sensitivity analysis?

Yes—the agency performs a Monte Carlo analysis.

2008]

<u>Compare Costs with Outcomes = 1</u>

Does the analysis identify the approach that maximizes net benefits? *No—the amount and value of benefits is not estimated.*

Does the analysis identify the cost-effectiveness of each alternative considered?

No.

Does the analysis identify all parties who would bear costs and assess the incidence of costs?

The agency analyzes effects on firms in different risk classes and firms of different sizes.

Does the analysis identify all parties who would receive benefits and assess the incidence of benefits?

No.

Immigration Benefit Application: 1615-AB53	
Date	05/30/07
Component Agency	United States Citizenship and Immigration Services
Total Evaluation Score	8
Transparency Score	2: Accompanying Fee analysis wasn't referenced by name, with no specific citation to the docket, took some effort to find in the docket

Rule Summary

This rule adjusts the fee schedule for U.S. Citizenship and Immigration Services immigration and naturalization benefit applications and petitions, including nonimmigrant applications and visa petitions. These fees fund the cost of processing applications and petitions for immigration benefits and services and associated operating costs.

Element Scores and Evaluations

Identify the Desired Outcomes = 2

Does the analysis clearly identify ultimate outcomes that affect citizens' quality of life?

The analysis asserts that the benefits of immigration are well-known and supported by thousands of commenters. The rule will eliminate the backlog in processing immigrants by providing more funding.

Does the analysis identify how these outcomes are to be measured?

No, but it implies the reduction in backlog and wait times might be a good one.

Does the analysis provide a coherent and testable theory showing how the regulation will produce the desired outcomes?

The analysis asserts that more money will eliminate backlogs. The need for the fee increase is demonstrated in the "fee analysis" document. There is a \$3 million dollar-a-day deficit for immigration services. Increasing the fee will close the gap if there is not an equal increase in spending on immigration services.

Does the analysis present credible empirical support for the theory?

It does not present systematic evidence, although the historical example seems to indicate they're right.

When the outcome involves uncertain events, does the analysis identify how the regulation would affect the size of the outcome and the size of the risk?

No.

<u>Assess Evidence of Market Failure or Other Systemic Problem = 3</u> Does the analysis identify a market failure or other systemic problem? *Yes—backlogs*.

Does the analysis outline a coherent and testable theory that explains why the problem (associated with the outcome above) is systemic rather than anecdotal?

The analysis asserts that a lack of funding has caused backlogs.

Does the analysis present credible empirical support for the theory?

Fee analysis supports the claim that more funding will reduce backlog.

If the existence or severity of the problem is uncertain, does the analysis evaluate the likelihood that the problem will occur or the likely extent of the problem?

The problem isn't uncertain.

Identify the Uniquely Federal Role = 0

Does the analysis consider whether other levels of government have better knowledge or incentives to address the problem?

No.

Does the analysis identify "spillovers" across state borders that would justify a federal role?

No.

Does the analysis identify how the proposed regulation interacts with other federal regulations?

No.

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<u>Assess Effectiveness of Alternative Approaches = 1</u>

Does the analysis enumerate other options to address the problem?

The analysis enumerates one other option. It mentions initiatives seeking alternative funding, but dismisses them as only presenting costs with no benefits.

Is the range of options 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 disclosure, addressing any government failures that caused the original problem)?

Narrow.

Does the analysis evaluate how alternative approaches would affect the amount of the outcome achieved?

No.

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?

Yes, sort of. It discusses the problems associated with leaving the fee at its current levels and also gets credit for mentioning that current cost savings practices are still not enough to make up for the budget deficit.

<u>Identify Costs = 1</u>

Does the analysis identify and quantify marginal costs of all options considered?

No. Just fee revenue totals.

Does the analysis identify all expenditures likely to arise as a result of the regulation?

No.

Does the analysis identify how the regulation would likely affect the prices of goods and services?

No.

Does the analysis examine costs that stem from changes in human behavior as consumers and producers respond to the regulation?

The analysis asserts no change due to excess demand to immigrate to the United States. But might the fee alter the mix of immigrants?

Does the analysis translate costs into alternative metrics of interest to decision-makers (e.g., dollars, lives lost, life-years lost, etc.)?

No.

If costs are uncertain, does the analysis present a range of estimates and/or perform a sensitivity analysis?

No.

HOMELAND SECURITY

<u>Compare Costs with Outcomes = 1</u>

Does the analysis identify the approach that maximizes net benefits? *No, but it argues that the benefits of the rule exceed the costs.*

Does the analysis identify the cost-effectiveness of each alternative considered?

No.

Does the analysis identify all parties who would bear costs and assess the incidence of costs?

The analysis only focuses on costs to applicants; it doesn't explain how a fee increase could affect the broader economy.

Does the analysis identify all parties who would receive benefits and assess the incidence of benefits?

Yes. It asserts that reducing the backlog provides benefits to the American public and immigrants.

Passenger Manifests: 1651-AA62	
Date	08/23/07
Component Agency	Bureau of Customs and Border Protection
Total Evaluation Score	12
Transparency Score	4

Rule Summary

This rule implements the Intelligence Reform and Terrorism Prevention Act of 2004, which requires that electronic manifest information for passengers onboard commercial aircraft arriving in and departing from the United States, as well as passengers and crew onboard arriving and departing commercial vessels, be vetted by DHS against a government-established and maintained terrorist watch-list prior to departure of the aircraft or vessel.

Element Scores and Evaluations

<u>Identify the Desired Outcomes = 3</u>

Does the analysis clearly identify ultimate outcomes that affect citizens' quality of life?

The analysis defines the outcome as safety, or keeping risky people off planes and intermediate outcome—not risk reduction. It asserts the rule will avoid costs of interviewing and detaining suspicious people on airplanes,

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and various costs to airlines and passengers when flights are delayed or diverted after a dangerous person has boarded.

Does the analysis identify how these outcomes are to be measured?

It does not do so for the safety outcomes, but it does for the avoided costs.

Does the analysis provide a coherent and testable theory showing how the regulation will produce the desired outcomes?

Apparently the Advance Passenger Information System Quick Query ("AQQ") would automatically prevent issuance of a boarding pass. For non-AQQ airlines, the analysis simply asserts that sixty minutes is the right amount of time to prepare an adequate law enforcement response. It arbitrarily assumes that the rule would be ninety percent effective.

Does the analysis present credible empirical support for the theory?

The analysis makes an arbitrary assumption that rule would keep ninety percent of bad people off of airplanes. No analysis is provided demonstrating how the rule would affect the size or likelihood of terrorist attack. It further makes an arbitrary assumption that the rule would have prevented two diversions that occurred in 2004 and one terrorist incident.

When the outcome involves uncertain events, does the analysis identify how the regulation would affect the size of the outcome and the size of the risk?

The analysis acknowledges the risk but says it's not measurable. It assumes that the rule may be only ninety percent effective in keeping people on watch lists off planes.

Assess Evidence of Market Failure or Other Systemic Problem = 1

Does the analysis identify a market failure or other systemic problem?

No. No attempt is made to explain why airline and airports don't have adequate incentives to produce an optimal level of safety.

Does the analysis outline a coherent and testable theory that explains why the problem (associated with the outcome above) is systemic rather than anecdotal?

Current regulations don't require pre-departure vetting.

Does the analysis present credible empirical support for the theory?

There is little empirical evidence justifying a ninety percent effective assumption or effects on the ultimate outcome, safety.

If the existence or severity of the problem is uncertain, does the analysis evaluate the likelihood that the problem will occur or the likely extent of the problem?

No, except for the assumption that the regulation would prevent two diversions per year.

HOMELAND SECURITY

Identify the Uniquely Federal Role = 0

Does the analysis consider whether other levels of government have better knowledge or incentives to address the problem?

No.

Does the analysis identify "spillovers" across state borders that would justify a federal role?

No.

Does the analysis identify how the proposed regulation interacts with other federal regulations?

No.

Assess Effectiveness of Alternative Approaches = 3

Does the analysis enumerate other options to address the problem? *Yes.*

Is the range of options 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 disclosure, addressing any government failures that caused the original problem)?

Narrow: varying stringency of the same basic regulation (different time restrictions).

Does the analysis evaluate how alternative approaches would affect the amount of the outcome achieved?

It does so only with regard to avoided costs, which are a very small part of the total benefits and the only ones measured.

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?

The analysis assumes that the current regulation is baseline; it doesn't consider whether airlines would eventually use AQQ or take other measures voluntarily.

<u>Identify Costs = 3</u>

Does the analysis identify and quantify marginal costs of all options considered?

The analysis identifies recurring costs and defines most AQQ costs as marginal costs per query.

Does the analysis identify all expenditures likely to arise as a result of the regulation?

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Expenditures were based on pilot studies of an AQQ system not yet implemented, plus an estimate of CBP's implementation costs that assumes only ten percent of airlines implement AQQ.

Does the analysis identify how the regulation would likely affect the prices of goods and services?

The analysis doesn't examine effects of transactions costs on ticket prices.

Does the analysis examine costs that stem from changes in human behavior as consumers and producers respond to the regulation?

The analysis assumes no change in passenger behavior in response to delays and inconvenience, instead of a change in the price of airline tickets.

Does the analysis translate costs into alternative metrics of interest to decision-makers (e.g., dollars, lives lost, life-years lost, etc.)?

Yes. It identifies passenger delay, earlier airport arrival, and re-routing as opportunity costs, but many key assumptions about the percentage of passengers affected are arbitrary.

If costs are uncertain, does the analysis present a range of estimates and/or perform a sensitivity analysis?

The agency performs some sensitivity analysis.

<u>Compare Costs with Outcomes = 2</u>

Does the analysis identify the approach that maximizes net benefits?

Net benefits not calculated, but the costs of each approach are calculated.

Does the analysis identify the cost-effectiveness of each alternative considered?

The analysis identifies costs, some benefits, and notes how big nonquantified benefits would have to be. It suggests the cost of one terrorist incident justifies the benefits, but notes that rule may not prevent an incident and the effect on risk can't be calculated.

Does the analysis identify all parties who would bear costs and assess the incidence of costs?

Yes, but it ignores some costs.

Does the analysis identify all parties who would receive benefits and assess the incidence of benefits?

The main focus of the analysis is on airlines and passengers; larger social benefits of thwarting terrorists are mentioned but not analyzed.