

**2010 Report to Congress
on the Benefits and Costs of
Federal Regulations
and Unfunded Mandates on
State, Local, and Tribal Entities**



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**Office of Management and Budget
Office of Information and Regulatory Affairs**

**2010 REPORT TO CONGRESS
ON THE BENEFITS AND COSTS OF FEDERAL REGULATIONS AND
UNFUNDED MANDATES ON STATE, LOCAL, AND TRIBAL ENTITIES**

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EXECUTIVE SUMMARY

In accordance with the Regulatory-Right-to-Know Act,¹ the Office of Management and Budget (OMB) prepared this draft Report to Congress on the Benefits and Costs of Federal Regulations (Report). This is the thirteenth annual Report since OMB began issuing this Report in 1997. The Report summarizes estimates by Federal regulatory agencies of the quantified and monetized benefits and costs of major Federal regulations reviewed by OMB over the last ten years (see page 7, below, for the criteria for identifying “major” regulations for this report).

The principal findings are as follows.

- The estimated annual benefits of major Federal regulations reviewed by OMB from October 1, 1999, to September 30, 2009, for which agencies estimated and monetized both benefits and costs, are in the aggregate between \$128 billion and \$616 billion, while the estimated annual costs are in the aggregate between \$43 billion and \$55 billion. These ranges reflect uncertainty in the benefits and costs of each rule at the time that it was evaluated.
- Some rules are estimated to produce far higher net benefits than others. Moreover, there is substantial variation across agencies in the total net benefits produced by rules. For example, the air pollution rules from the Environmental Protection Agency (EPA) produced 60 to 87 percent of the benefits and 58 to 64 percent of the costs. Most rules have net benefits, but some rules have net costs.
- During the fiscal year 2009, executive agencies promulgated 66 major rules.
 - For 16 rules, the issuing agencies quantified and monetized both benefits and costs. Those 16 rules were estimated to result in a total of \$8.6 billion to \$28.9 billion in annual benefits and \$3.7 billion to \$9.5 billion in annual costs.
 - For three rules, the issuing agency (the Department of the Interior) quantified and monetized only benefits. All of these rules involved migratory bird hunting.
 - For 12 rules, the issuing agencies quantified and monetized only costs. The Departments of Health and Human Services, Labor, and Transportation also presented budgetary amounts for four rules.
 - For 22 rules, the issuing agencies quantified and monetized only the budgetary transfer amounts. The Department of Transportation presented transfer amounts for a rule in addition to accounting for benefits and costs associated with the rulemaking.
 - For 13 rules, the issuing agencies did not provide monetized benefits, costs, or budgetary transfer amounts.
- The independent regulatory agencies, whose regulations are not subject to OMB review under Executive Order 12866, issued 13 major final rules (11 of which

¹ Section 624 of the Treasury and General Government Appropriations Act of 2001, Pub. L. No. 106-554, 31 U.S.C. § 1105 note.

regulated the financial sector). The Government Accountability Office (GAO) reported that, for one of these rules, the Securities and Exchange Commission monetized both benefits and costs, and that, for another six of these rules, the Nuclear Regulatory Commission and the Securities and Exchange Commission monetized only costs.

It is important to emphasize that the figures here have significant limitations. For example, the aggregate estimates do not capture the non-monetized benefits and costs of rules. Many rules have benefits and costs that cannot be quantified or monetized in light of existing information. In fulfilling their statutory mandates, agencies must often act in the face of substantial uncertainty about the likely consequences. In some cases, monetization of particular categories of benefits (such as ecological and homeland security benefits) can present significant challenges. Some rules produce benefits (such as reductions in discrimination) that are not adequately captured in monetary equivalents. In addition, and significantly, prospective estimates may contain erroneous assumptions, producing inaccurate predictions; retrospective analysis can be an important way of increasing accuracy. While the estimates in this Report provide valuable information about the effects of regulations, they should not be taken to be either precise or complete.

In compliance with the Regulatory Right-to-Know Act, this Report also offers four recommendations for reform. The unifying goal is to ensure that regulation is evidence-based and data-driven, and that it is based on the best available work in both science and social science (with full respect for scientific integrity). By achieving this goal, agencies will be in a better position to avoid the risks of overregulation and underregulation, to eliminate unnecessary burdens, and to choose appropriate responses.

To that end, the Report briefly outline recent steps and best practices that are consistent with last year's recommendations for empirically informed approaches, increased openness about costs and benefits, and use of transparency as a regulatory tool. For the future, the Report:

1. identifies a series of steps that might be taken in order to improve regulatory impact analysis, with particular emphasis on increasing transparency about the anticipated consequences of regulations and the various regulatory alternatives (including those that are less burdensome).
2. recommends continued use of disclosure as a regulatory tool and offers a brief discussion of relevant empirical findings (with specific reference to recent OIRA guidance on the topic of disclosure and simplification).
3. recommends consideration of certain low-cost approaches to the problem of childhood obesity (including disclosure).
4. consistent with the goal of open government, emphasizes the potential value of public suggestions about regulatory changes that might serve to promote economic growth, with particular reference to increasing employment, innovation, and competitiveness.

Chapter III provides an update on agency implementation of the Information Quality Act (IQA) (Section 515 of the Treasury and General Government Appropriations Act, 2001 (Pub. L.

No. 106-554, 31 U.S.C. § 3516 note)). The chapter summarizes (a) the current status of correction requests that were received by agencies in FY 2009, along with an update on the status of requests received during FY 2003 through FY 2008 and (b) agency annual reports for the Information Quality Bulletin for Peer Review for FY 2009. In FY 2009, Federal agencies received 17 correction requests and completed 167 peer reviews, of which 31 were influential scientific assessments.

This Report is being issued along with OMB's Fifteenth Annual Report to Congress on Agency Compliance with the Unfunded Mandates Reform Act (UMRA), (Pub. L. No. 104-4, 2 U.S.C. § 1538). OMB reports on agency compliance with Title II of UMRA, which requires that each agency conduct a cost-benefit analysis and select the least costly, most cost-effective, or least burdensome alternative before promulgating any proposed or final rule that may result in expenditures of more than \$100 million (adjusted for inflation) in any one year by State, local, and tribal governments, or by the private sector. Each agency must also seek input from State, local, and tribal governments.

PART I: 2010 REPORT TO CONGRESS
ON THE BENEFITS AND COSTS OF FEDERAL REGULATIONS

INTRODUCTION

The Regulatory Right-to-Know Act calls for the Office of Management and Budget (OMB) to submit to Congress each year “an accounting statement and associated report” including:

- (A) an estimate of the total annual benefits and costs (including quantifiable and nonquantifiable effects) of Federal rules and paperwork, to the extent feasible:
 - (1) in the aggregate;
 - (2) by agency and agency program; and
 - (3) by major rule;
- (B) an analysis of impacts of Federal regulation on State, local, and tribal government, small business, wages, and economic growth; and
- (C) recommendations for reform.

The statute does not define “major rule.” For the purposes of this Report, we define major rules to include all final rules promulgated by an Executive Branch agency that meet any one of the following three conditions:

- Rules designated as major under 5 U.S.C. § 804(2);²
- Rules designated as meeting the analysis threshold under the Unfunded Mandates Reform Act of 1995 (UMRA);³ or
- Rules designated as “economically significant” under section 3(f)(1) of Executive Order 12866.⁴

Chapter I summarizes the benefits and costs of major regulations issued between September 1999 and September 2009 and examines in more detail the benefits and costs of major Federal regulations issued in fiscal year 2009. It also discusses regulatory impacts on State, local, and tribal governments, small business, wages, and economic growth. Chapter II provides discussion on the recommendations for reform. Chapter III provides an update on agency implementation of the Information Quality Act (IQA) (Section 515 of the Treasury and

²A major rule is defined in Subtitle E of the Small Business Regulatory Enforcement Fairness Act of 1996 as a rule that is likely to result in: "(A) an annual effect on the economy of \$100,000,000 or more; (B) a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions; or (C) significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic and export markets." P.L. 104-121 Sec. 804, 5 U.S.C. § 804(2).

³A written statement containing a qualitative and quantitative assessment of the anticipated benefits and costs of the Federal mandate is required under the Section 202(a) of the Unfunded Mandates Reform Act of 1995 for all rules that may result in: "the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100,000,000 or more (adjusted annually for inflation) in any one year." 2 U.S.C. § 1532(a).

⁴A regulatory action is considered “economically significant” under Executive Order 12866 § 3(f)(1) if it is likely to result in a rule that may have: "an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities."

General Government Appropriations Act, 2001 (Pub. L. No. 106-554, 31 U.S.C. § 3516 note)).
Chapter IV summarizes agency compliance with UMRA.

CHAPTER I: THE BENEFITS AND COSTS OF FEDERAL REGULATIONS

This chapter consists of two parts: the accounting statement and a brief report on regulatory impacts on State, local, and tribal governments, small business, and wages. Part A revises the benefit-cost estimates in last year's Report by updating the estimates to the end of fiscal year 2009 (September 30, 2009). As in previous Reports, this chapter uses a ten-year look-back. Estimates are based on the major regulations reviewed by OMB from October 1, 1999 to September 30, 2009.⁵ For this reason, 16 rules reviewed from October 1, 1998 to September 30, 1999 (fiscal year 1999) were included in the totals for the 2009 Report but are not included in this Report. A list of these FY 1999 rules can be found in Appendix B (see Table B-1). The removal of the 16 FY 1999 rules from the ten-year window is accompanied by the addition of 16 FY 2009 rules.

All estimates presented in this chapter are agency estimates of benefits and costs or transparent modifications of agency information performed by OMB.⁶ This chapter also includes a discussion of major rules issued by independent regulatory agencies, although OMB does not review these rules under Executive Order 12866.⁷ This discussion is based solely on data provided by these agencies to the Government Accountability Office (GAO) under the Congressional Review Act.

Aggregating benefit and cost estimates of individual regulations—to the extent they can be combined—provides significant information about the effects of regulations. But the resulting estimates are neither precise nor complete. Three points deserve emphasis.

1. Individual regulatory impact analyses vary greatly in rigor and rely on different assumptions, including baseline scenarios, methods, and data. To take just one example, agencies offer different valuations for mortality and morbidity reductions. Summing across estimates involves the aggregation of analytical results that are not strictly comparable. OMB continues to investigate inconsistencies in how agencies answer central regulatory questions and seeks to identify and to promote best practices. As we have noted, some benefits and costs are difficult or impossible either to quantify or to turn into monetary equivalents. For purposes of policy, such non-quantified benefits and costs may be important. Some regulations have significant non-quantified benefits and costs that serve as a key factor in an agency's decision to promulgate a particular rule.

⁵All previous Reports are available at: http://www.whitehouse.gov/omb/inforeg_regpol_reports_congress/.

⁶OMB used agency estimates where available. The benefit and cost ranges represent lowest and highest agency estimates using both 3 and 7 percent discount rates. If an agency quantified but did not monetize estimates, we used standard assumptions to monetize them, as explained in Appendix A. Inflation adjustments are performed using the latest available Gross Domestic Product (GDP) deflator and all amortizations are performed using a discount rate of 7 percent, unless the agency has already presented annualized, monetized results using a different explicit discount rate. OMB did not independently estimate benefits or costs when agencies did not provide quantified estimates.

⁷Section 3(b) of Executive Order 12866 excludes "independent regulatory agencies as defined in 44 U.S.C. 3502(10)" from OMB's regulatory review purview.

2. Prospective analyses may turn out to overestimate or underestimate both benefits and costs; retrospective analysis can be important as a corrective mechanism.⁸ In order to promote data-driven regulation, OMB continues to be interested in, and to recommend, efforts to use retrospective analysis to improve regulations, perhaps by expanding them, perhaps by streamlining them, perhaps by reducing or repealing them, perhaps by redirecting them.
3. Considerations of equity, or distributional factors, may be highly relevant. If, for example, a regulation would help or hurt those at the bottom of the economic ladder, or those who are suffering from some kind of acute condition or extreme deprivation, agencies may want to take, and in the past have sometimes taken, that fact into account. (In the recent past, agencies have referred to equity or distributional impacts in the context of regulations eliminating the ban on entry into the United States of those who are HIV-positive; barring lifetime limits on health insurance payments; and preventing denial of health insurance to children with preexisting conditions.) So far as we are aware, there is only limited analysis of the distributional effects of regulation in general or in significant domains; such analysis could prove illuminating.

A. Estimates of the Aggregated Annual Benefits and Costs of Regulations Reviewed by OMB over the Last Ten Years

1. In General

Since OMB began to compile records in 1981 through the end of calendar year 2009, Federal agencies have published 132,820 final rules in the *Federal Register*. Of these final rules, 21,508 have been reviewed by OMB under Executive Order 12866 or its predecessor, Executive Order 12291 through fiscal year 2009. Of these OMB-reviewed rules, 1,268 are considered major rules, primarily due to their anticipated impact on the economy (i.e., estimated benefits or costs were in excess of \$100 million in at least one year). Since 1981, OMB has reviewed 367 major rules with estimated benefits or costs to the private sector or State and local governments of over \$100 million annually.

Table 1-1 presents estimates of the total annual benefits and costs of 95 regulations reviewed by OMB over the ten-year period from October 1, 1999, to September 30, 2009, broken down by issuing agency, that met two conditions:⁹ (1) each rule was estimated to

⁸ See Greenstone (2009). In its 2009 Report, OMB recommended greater use of retrospective analysis; we continue to support that recommendation.

⁹ OMB discusses, in this Report and in previous Reports, the difficulty of estimating and aggregating the benefits and costs of different regulations over long time periods and across many agencies using different methodologies. Any aggregation involves the assemblage of benefit and cost estimates that are not strictly comparable. In part to address this issue, the 2003 Report included OMB's new regulatory analysis guidance, OMB Circular A-4 that took effect on January 1, 2004 for proposed rules and January 1, 2005 for final rules. The guidance recommends what OMB defines as "best practices" in regulatory analysis, with a goal of strengthening the role of science, engineering, and economics in rulemaking. The overall goal of this guidance is a more transparent, accountable and credible regulatory process and a more consistent regulatory environment. OMB expects that as more agencies adopt our

generate benefits or costs of approximately \$100 million in any one year; and (2) a substantial portion of its benefits and costs were quantified and monetized by the agency or, in some cases, monetized by OMB. The estimates are therefore not a complete accounting of all the benefits and costs of all regulations issued by the Federal Government during this period.¹⁰

As discussed in previous Reports, OMB chose a ten-year period for aggregation because pre-regulation estimates prepared for rules adopted more than ten years ago are of questionable relevance today. The estimates of the benefits and costs of Federal regulations over the period October 1, 1999, to September 30, 2009, are based on agency analyses conducted prior to issuance of the regulation and subjected to public notice and comments and OMB review under Executive Order 12866.

In assembling these tables of estimated benefits and costs, OMB applied a uniform format for the presentation to make agency estimates more closely comparable with each other (for example, annualizing benefit and cost estimates). OMB monetized quantitative estimates where the agency did not do so. For example, for a few rulemakings within the ten-year window of this Report, we have converted agency projections of quantified benefits, such as estimated injuries avoided per year or tons of pollutant reductions per year, to dollars using the valuation estimates discussed in Appendix A of this Report and Appendix B of our 2006 Report.¹¹

Table 1-1: Estimates of the Total Annual Benefits and Costs of Major Federal Rules by Agency, October 1, 1999 - September 30, 2009 (millions of 2001 dollars)

Agency	Number of Rules	Benefits	Costs
Department of Agriculture	6	906-1,315	1,014-1,353
Department of Energy	8	6,251-8,500	3,328-3,856
Department of Health and Human Services	20	21,895-44,435	4,651-6,232
Department of Homeland Security	1	20-29	13-99

recommended best practices, the benefits and costs we present in future reports will become more comparable across agencies and programs. OMB is working with the agencies to ensure that their impact analyses follow the guidance.

¹⁰ In many instances, agencies were unable to quantify all benefits and costs. We have conveyed the essence of these unquantified effects on a rule-by-rule basis in the columns titled “Other Information” in Appendix A of this and previous Reports. The monetized estimates we present necessarily exclude these unquantified effects.

¹¹ The 2006 Report is available at http://www.whitehouse.gov/omb/inforeg_regpol_reports_congress/. We note that there are ongoing discussions regarding the scientific assumptions underlying the benefits per ton numbers that we use to monetize benefits that were not monetized. If, for instance, assumptions similar to those described at <http://www.epa.gov/air/benmap/bpt.html> were used, these estimates would be somewhat higher.

Agency	Number of Rules	Benefits	Costs
Department of Housing and Urban Development	1	2,303	884
Department of Justice	1	275	108-118
Department of Labor	5	252-1,375	301-327
Department of Transportation	23	14,158-24,983	6,603-12,502
Environmental Protection Agency ¹²	30	81,903-533,066	25,789-29,227
Total	95	127,962-616,282	42,700-54,597

The aggregate benefits reported in Table 1-1 are comparable to those presented in the 2009 Report. As with previous Reports, the reported monetized benefits continue to be in the same order of magnitude as the reported monetized cost or one order of magnitude greater. Three agencies, the Department of Health and Human Services, the Department of Transportation, and the Environmental Protection Agency, issue the majority of rules—73 of 95. The Department of Transportation and the Environmental Protection Agency tend to issue private mandate rules generally aimed at improving safety and health; the Department of Health and Human Services tend to issue rules that transfer resources from one entity to another, generally the Federal Government to various health sectors.

Table 1-2 provides additional information on aggregate benefits and costs for specific agency programs. In order for a program to be included in Table 1-2, the program needed to have finalized three or more major rules in the last ten years with monetized benefits and costs.

Table 1-2: Estimates of Annual Benefits and Costs of Major Federal Rules: Selected Programs and Agencies, October 1, 1999 - September 30, 2009 (millions of 2001 dollars)

Agency	Number of Rules	Benefits	Costs
Department of Agriculture			
Animal and Plant Health Inspection Service	3	862-1,163	726-931
Department of Energy			
Energy Efficiency and Renewable Energy	8	6,251-8,500	3,328-3,856

¹² These totals include EPA's March 2005 final "Clean Air Interstate Rule." On July 11, 2008, the D.C. Circuit vacated this rule; however, in response to EPA's petition, the Court on December 23, 2008, remanded the rule without vacatur, which keeps it in effect while EPA conducts further proceedings consistent with the Court's July 11 opinion.

Agency	Number of Rules	Benefits	Costs
Department of Health and Human Services			
Food and Drug Administration	10	2,551-22,287	893-1,256
Center for Medicare and Medicaid Services	8	18,075-20,811	3,377-4,561
Department of Labor			
Occupational Safety and Health Administration	3	242-1,365	342-369
Department of Transportation			
National Highway Traffic Safety Administration	11	11,758-21,504	5,202-10,772
Environmental Protection Agency			
Office of Air	19	77,383-518,941	20,581-23,706
Office of Water	7	1,975-5,593	2,044-2,313

The ranges of benefits and costs reported in Tables 1-1 and 1-2 were calculated by adding the lower bounds of agencies' estimates for each of the underlying rules to generate an aggregate lower bound, and similarly adding the upper bounds of agencies' estimates to generate an aggregate upper bound.¹³ The range reported by the agency for each rule reflects the agency's uncertainty about the likely impact of the rule. In some cases, this range is a confidence interval based on a formal uncertainty analysis. In most cases, however, the ranges are generated using an informal sensitivity analysis in which input parameters are varied across a "plausible" range.

The benefits and costs presented in Tables 1-1 and 1-2 are not necessarily correlated. In other words, when interpreting the meaning of these ranges, the reader should not assume that when benefits are in fact on the low end of their range, costs will also tend to be on the low end of their range. This is because, for some rules, there are factors that affect costs that have little correlation with factors that affect benefits (and vice-versa). Accordingly, to calculate the range of net benefits (i.e., benefits minus costs), one should not simply subtract the lower bound of the benefits range from the lower bound of the cost range, and similarly for the upper bound. Rather, it may be possible for the true benefits to be at the lower bound and true costs to be at the upper bound, as well as vice-versa. Thus, for example, it is possible that the net benefits of DOL rules, taken together, could range from -\$75 million to approximately \$1.1 billion per year.

¹³ The approach of adding ranges likely overstates the uncertainty in the total benefits and costs for each agency. The actual ranges are probably somewhat tighter than our estimates.

2. EPA Air Rules

It should be clear that the rules with the highest benefits and the highest costs, by far, come from the Environmental Protection Agency and in particular its Office of Air. More specifically, EPA rules account for 60 to 87 percent of the monetized benefits and 58 to 60 percent of the monetized costs. The rules that aim to improve air quality account for 94 to 97 percent of the benefits of EPA rules. Most of the large estimated benefits of EPA rules are attributable to the reduction in public exposure to a single air pollutant: fine particulate matter. Of its 19 air rules, the rule with the highest estimated benefit is the Clean Air Fine Particle Implementation Rule, with benefits ranging from \$19 billion to \$167 billion per year. The cost estimate for the Clean Air Fine Particle Implementation Rule is also the highest at \$7.3 billion per year. Because the benefits and costs associated with the clean air rules provide a majority of the total benefits and costs across the Federal Government, we provide additional information.

With respect to many of these rules, there is substantial uncertainty in benefits estimates. We note that EPA has invested substantial resources to quantify some aspects of that uncertainty over the last few years. Even so, significant uncertainty remains in this domain. More generally, the ranges of benefits and costs presented in Tables 1-2 should be treated with considerable caution. If the reasons for uncertainty differ across individual rules, aggregating high and low-end estimates can result in totals that may be misleading. In the case of the EPA rules reported here, however, a substantial portion of the uncertainty is similar across several rules, including (1) the uncertainty in the reduction of premature deaths associated with reduction in particulate matter and (2) the monetary value of reducing mortality risk. EPA continues to improve methods to quantify the degree of technical uncertainty in benefits estimates and to make other improvements to EPA's Regulatory Impact Analyses.^{14 15} Midway through FY 2009, EPA made

¹⁴For example, a committee of the National Research Council/National Academy of Sciences released the study National Research Council (2002), which recommends improvements to EPA benefits estimates. In addition, we continue to work with EPA to incorporate recommendations from recent NRC reports, Miller, et al (2006) and National Research Council (2008).

¹⁵ The wide range of benefits estimates for particle control does not capture the full extent of the scientific uncertainty in measuring the health effects associated with exposure to fine particulate matter and its constituent elements. The six key assumptions in the benefits estimates are as follows:

1. Inhalation of fine particles is causally associated with premature death at concentrations near those experienced by most Americans on a daily basis. Although biological mechanisms for this effect have not been established definitively yet, the weight of the available epidemiological evidence supports an assumption of causality.
2. All fine particles, regardless of their chemical composition, are equally potent in causing premature mortality. This is an important assumption, because PM produced via transported precursors emitted from EGUs may differ significantly from direct PM released from diesel engines and other industrial sources, but no clear scientific grounds exist for supporting differential effects estimates by particle type.
3. The impact function for fine particles is approximately linear within the range of ambient concentrations under consideration. Thus, the estimates include health benefits from reducing fine particles in areas with varied concentrations of PM, including both regions that are in attainment with fine particle standard and those that do not meet the standard.
4. The forecasts for future emissions and associated air quality modeling are valid. Although recognizing the difficulties, assumptions, and inherent uncertainties in the overall enterprise, these analyses are based on peer-reviewed scientific literature and up-to-date assessment tools, and we believe the results are highly useful in assessing this proposal.

changes to some underlying assumptions as well as updates to some of the model inputs. These changes are reflected in EPA's more recent Regulatory Impact Analyses.

3. Rules that Decrease Compliance Costs

We note as well that several actions resulted in a *decrease* in compliance costs. The net cost savings generated by these regulations are included as “negative costs” for those years. To be consistent, we have also modified our estimates for later years to include regulatory actions that reduced net costs. In 2004, the Department of Transportation (DOT) issued two regulations that resulted in net cost savings: one rule reduced minimum vertical separation for airspace and the other increased competition in the computer reservation system for airline travel.

Because these estimates exclude non-major rules and rules adopted more than ten years ago, the total benefits and costs of all Federal rules now in effect are likely to be significantly larger than the sum of the benefits and costs reported in Table 1-1. More research would be necessary to produce comprehensive estimates of total benefits and costs by agency and program. And as noted, it is important to consider retrospective, as opposed to *ex ante*, estimates of both benefits and costs.

4. Qualifications

In order for comparisons or aggregations to be meaningful, benefit and cost estimates should correctly account for all substantial effects of regulatory actions, some of which may not be reflected in the available data. Any comparison or aggregation across rules should also consider a number of factors that our presentation is not able to take into account. Agencies have adopted different methodologies—for example, different monetized values for effects (such as mortality¹⁶ and morbidity), different baselines in terms of the regulations and controls already in

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5. Some rules apply a national dollar benefit-per-ton estimate of the benefits of reducing directly emitted fine particulates from point sources. Because they are based on national-level analysis, the benefit-per-ton estimates used here do not reflect local variability in population density, meteorology, exposure, baseline health incidence rates, or other local factors that might lead to an over-estimate or under-estimate of the actual benefits of controlling directly emitted fine particulates.
 6. The value of mortality risk reduction is taken largely from studies of the willingness to accept risk in the labor market.

¹⁶ Agencies often design health and safety regulation to reduce risks to life, and valuation of the resulting benefits can be an important part of the analysis. What is sometimes called the “value of a statistical life” (VSL) is best understood not as the “valuation of life,” but as the valuation of statistical mortality risks; for example, a mortality risk of 1/50,000 might be valued at \$100, producing a VSL of \$5 million. Building on an extensive and growing literature, OMB Circular A-4 provides background and discussion of the theory and practice of calculating VSL. It concludes that a substantial majority of the studies of VSL indicate a value that varies “from roughly \$1 million to \$10 million per statistical life.” In practice, agencies have tended to use a value toward or above the middle of this distribution.

Two agencies, EPA and DOT, have developed official guidance on VSL. In its 2009 update, DOT adopts a value of \$6.0 million (\$2009), and requires all the components of the Department to use that value in their RIAs. EPA

place, different rates of time preference, and different treatments of uncertainty. These differences are reflected in the estimates provided in Tables 1-1 and 1-2. And while we have generally relied on agency estimates in monetizing benefits and costs, our reliance on those estimates in this Report should not necessarily be taken as an OMB endorsement of all the varied methodologies used by agencies to estimate benefits and costs.

We have noted that many of these major rules have important non-quantified benefits and costs that may have been a key factor in an agency's decision to select a particular approach. In important cases, agencies have been unable to quantify the benefits of rules, simply because existing information does not permit reliable estimates. These qualitative issues are discussed in Table A-1 of Appendix A, agency rulemaking documents, and previous editions of this Report.

Finally, EPA adopted National Ambient Air Quality Standards (NAAQS) for particulate matter (PM) in 2006. EPA estimates that the actions necessary to meet the revised standards would yield benefits ranging from \$4 billion to \$40 billion per year, and would impose costs of \$3 billion per year. EPA will finalize implementing rules that will achieve emission reductions and impose costs that account for a major portion of the benefit and cost estimates associated with the NAAQS rules. Thus, to prevent double-counting, the estimates for the PM NAAQS would be excluded, and estimates associated with the implementing rules promulgated in subsequent years would be used instead. Similarly, the estimates for the Ozone NAAQS are

recently changed its VSL to an older value of \$6.3 million (\$2000) and adjusts this value for real income growth to later years. In its final rule setting a new primary standard for nitrogen dioxide, for example, EPA adjusted this VSL to account for a different currency year (\$2006) and for income growth to 2020, which yields a VSL of \$8.9 million. EPA stated in this RIA, however, that it is continuing its efforts to update this guidance, and that it anticipated presenting results from this effort to its Science Advisory Board, with draft guidance following soon thereafter.

For the agencies that have not developed binding internal guidelines, we have done a brief review of RIAs and other materials to understand how VSLs have been used in practice. Although the Department of Homeland Security has no official policy on VSL, it recently sponsored a report through its U.S. Customs and Border Protection, and has used the recommendations of this report to inform VSL values for several recent rulemakings. This report recommends \$6.3 million (\$2008) and also recommends that DHS adjust this value upward over time for real income growth (in a manner similar to EPA's adjustment approach).

Other regulatory agencies that have used a VSL in individual rulemakings include DOL's Occupational Safety and Health Administration (OSHA) and HHS' Food and Drug Administration (FDA). In OSHA's rulemaking setting a Permissible Exposure Limit for Hexavalent Chromium, OSHA specifically referred to EPA guidance to justify a VSL of \$7.0 million (\$2003), as the types of air exposure risks regulated in this rulemaking were similar to those in EPA rulemakings. The FDA has consistently used values of \$5.0 and \$6.5 million (\$2002) in several of its rulemakings to monetize mortality risks, but it also uses a monetary value of the remaining life-years saved by alternative policies. This is sometimes referred to as a "Value of a Statistical Life Year" or VSLY. (See Circular A-4 for discussion.)

Our review suggests that in recent years, actual agency practice has avoided significant or puzzling inconsistencies. We have not found recent values below \$5 million or above \$9 million, and hence agency practice suggests a narrower band than that found in the literature review in Circular A-4. For a recent overview by the Congressional Research Service, see Copeland (2010).

excluded. However, we do include the benefit and cost estimates for the National Ambient Air Quality Standards (NAAQS) for lead in 2009 because the implementing regulations are not yet in place.

B. Trends in Annual Benefits and Costs of Regulations Reviewed by OMB over the Last Ten Years

Figure 1-1 shows the benefits and costs of rules issued from October 1, 1999, to September 30, 2009, for which reasonably complete monetized estimates of both benefits and costs are available.¹⁷ With one notable exception, the monetized additional costs of private mandates tend to be around or below \$10 billion per year. On average, over \$5 billion in annual costs have been added each year over this period to the total regulatory burden.

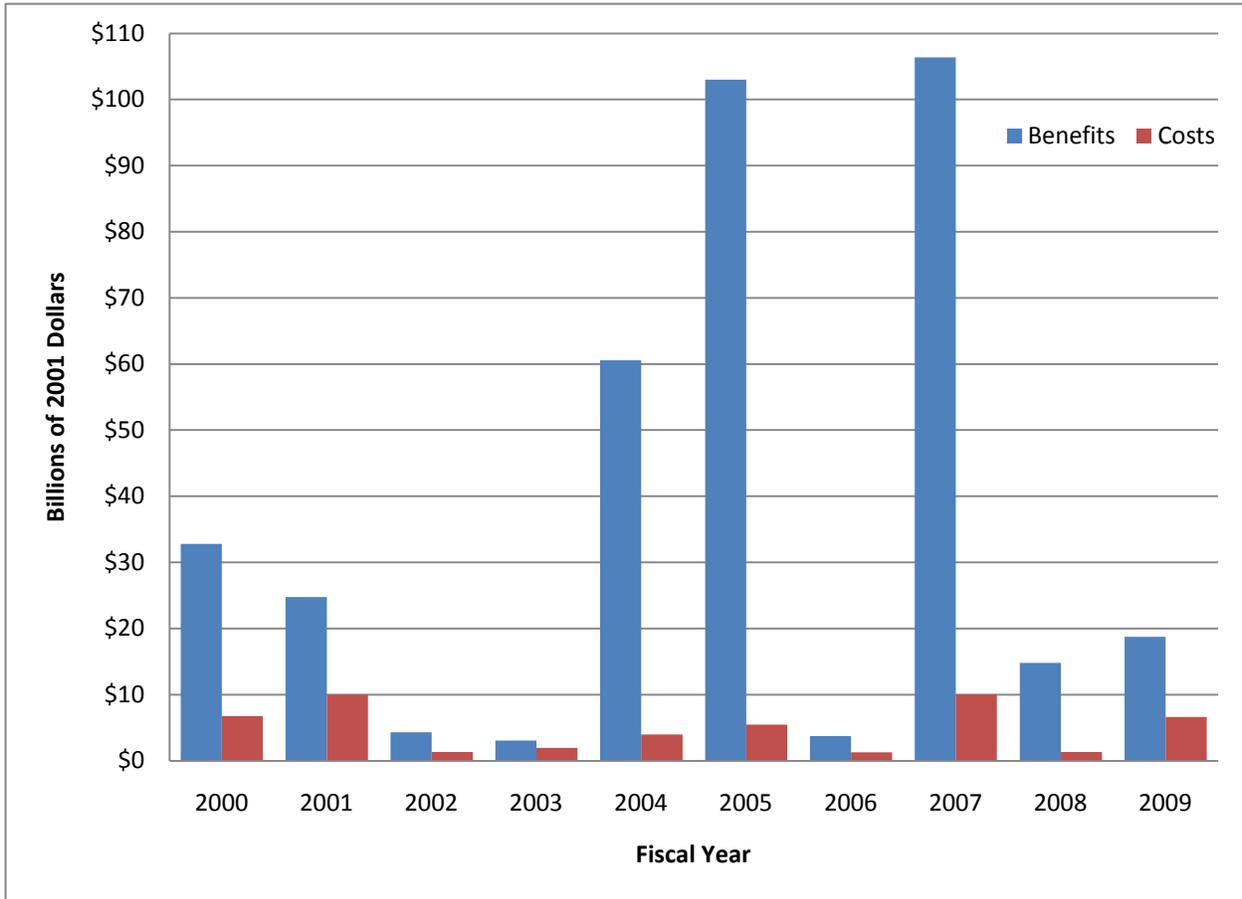
Variability in benefit estimates appears greater than in cost estimates. Benefit estimates for the rules (with two noted exceptions)¹⁸ that comprise the overall estimates are presented in various tables in the 10 annual Reports that OMB has completed (including this Report). Note that the three highest years for benefits (2004, 2005, and 2007) are mostly explained by three EPA regulations: the 2004 non-road diesel engine rule, the 2005 interstate air quality rule, and the clean air fine particulate implementation rule.¹⁹

¹⁷To present benefits and cost estimates by fiscal year, we report the midpoints of the ranges reported in table 1-1.

¹⁸The exceptions, as discussed above, are DOT's 2008 hours of service rule (see Footnote 20), and DHS's 2005 air cargo security requirements rule.

¹⁹This chart does include the impacts of EPA's 2005 Clean Air Interstate Rule. On July 11, 2008, the DC Circuit Court vacated rule; however, in response to EPA's petition, the Court on December 23, 2008, remanded the rule without vacatur, which keeps this rule in effect while EPA conducts further proceedings consistent with the Court's July 11 opinion.

**Figure 1-1: Total Annual Benefits and Costs of Major Rules by Fiscal Year
(October 1, 1999 - September 30, 2009)**



The estimates we report here are prospective estimates made by agencies during the rulemaking process. As noted, it is possible that retrospective studies will show (as they sometimes have) that the benefits and costs were either overestimated or underestimated. As discussed elsewhere in this Report (see Appendix A) as well as previous Reports, the aggregate estimates of benefits and costs derived from estimates by different agencies and over different time periods are subject to significant methodological inconsistencies and differing assumptions. In addition, the groundwork for the regulations issued by one administration is often begun in a previous administration.²⁰

²⁰For example, FDA's trans fat rule was proposed by the Clinton administration and issued by the Bush Administration while the groundwork for EPA's 2004 non-road diesel engine rule was set by the NAAQS rules issued in 1997. Moreover, Congress and the Judiciary also play a role in the timing and outcomes of regulations.

C. Estimates of the Benefits and Costs of FY 2009's Major Rules

1. Major Rules Issued by Executive Agencies

In this section, we examine in more detail the estimated benefits and costs of the 66 major final rules for which OMB concluded review during the 12-month period beginning October 1, 2008, and ending September 30, 2009. These major rules represent approximately 20 percent of the 352 final rules reviewed by OMB and approximately one percent of the 3,543 final rules published in the *Federal Register* during this period. OMB believes, however, that the benefits and costs of major rules account for the majority of the total benefits and costs of all rules subject to OMB review.²¹

The 66 rules also include rules that implement Federal budgetary programs, which primarily caused income transfers, usually from taxpayers to program beneficiaries. We refer to these income transfers as “transfers.”

Table 1-4 lists each of these 66 regulations and, where available, provides information on their monetized benefits, costs and transfers. We summarize the available information on the non-monetized impacts, where available, for these regulations in the “other information” column of Table A-1.

The Department of Health and Human Services promulgated the largest number of rules: sixteen. Eleven of these largely transfer income from one group of entities to another without imposing significant private mandates. The Department of Transportation issued the most rules containing private mandates. Seven out of nine rules contain significant private mandates; two rules—Part 121 Pilot Age Limit and Requirements for Temporary Vehicle Trade-In Program—contain significant income transfers.

Agencies reported monetized benefits and costs, along with relevant transfers, of sixteen of the 66 regulations in FY 2009. These estimates are aggregated by agency in Table 1-3 and are included in the ten-year aggregates in Tables 1-1 and 1-2.²² Agencies monetized only benefits

²¹ We discussed the relative contribution of major rules to the total impact of Federal regulation in detail in the “response-to-comments” section on pages 26-27 of the 2004 Report. In summary, our evaluation of a few representative agencies found that major rules represented the vast majority of the benefits and costs of all rules promulgated by these agencies and reviewed by OMB.

²² Note that while the DOT’s Hours of Service of Drivers final rule is listed in Table 1-4, the benefits and costs of this rule are not included in the benefit and cost totals for 2008 in Table 1-1. This is because this interim final rule reestablished policies on the maximum time truck drivers were able to drive per day and per week, and the minimum period before which truck drivers could restart the count of their weekly driving time. These policies were put in place through previous rulemakings on the same subject, but were vacated in 2007 by the United States Court of Appeals for the DC Circuit, which held that the Agency had failed to provide an opportunity for public comment on certain aspects of their Regulatory Impact Analysis. Furthermore, the analysis accompanying this interim final rule analyzed the impact of maintaining these policies relative to the disruptive impact of their prompt removal, not relative to previous fully-implemented policies. Since OMB already reported and attributed the benefits and costs of the Hours of Service Regulations to other rulemakings, and those policies were maintained by this interim final rule, we felt that including the benefits and costs of this rulemaking in the ten-year totals would constitute double counting.

for three of the 66 regulations. Agencies monetized only costs, along with relevant transfers, for twelve of the remaining 66 regulations. In addition, agencies assessed the income transfers associated with twenty-two rules without assessing potential social benefits and costs associated with the transfer. Thirteen of the 66 regulations did not report monetized benefits or costs associated with the agency action.

Table 1-3: Estimates, by Agency, of the Total Annual Benefits and Costs of Major Rules: October 1, 2008 - September 30, 2009 (millions of 2001 dollars)

Agency	Number of Rules	Benefits	Costs
Department of Energy	2	1,297-3,109	261-738
Department of Health and Human Services	4	1,466-12,175	841-1,913
Department of Housing and Urban Development	1	2,303	884
Department of Transportation ²³	8	3,081-6,150	1,586-3,735
Environmental Protection Agency	1	455-5,203	113-2,241
Total	16	8,602-28,940	3,685-9,512

Ten of the sixteen are primarily intended to protect health and safety. These include rules from HHS, DOT, and EPA, which affect health and safety through improvements in patient safety, pipeline safety, and environmental quality. Rules issued by the Department of Homeland Security are excluded because homeland security is a much broader goal than public health and safety *per se*, and the agency did not report estimated benefits.

DOI's Migratory Bird Hunting regulations assessed only benefits. These regulations are promulgated annually to allow hunting of migratory game birds. The agency assessed the consumer welfare increase associated with these allowances. These benefits should take into account the value of recreational alternatives. Administrative costs are of course relevant and could help inform a full analysis.

Four of twelve rules that report only monetized costs are homeland security regulations adopted in the past year by the Department of Homeland Security (DHS). The benefits of some homeland security regulations are a function of the likelihood and severity of a hypothetical future terrorist attack; on both issues, judgments are conjectural. For this reason, such benefits are difficult to forecast, quantify, and monetize. (Earlier reports have discussed this difficulty

²³ See Footnote 20.

and potential responses, including “breakeven analysis,” which attempts to specify the level of benefits that would support the judgment that the benefits justify the costs.)

OMB reviewed 33 economically significant “transfer rules”—rules that implement or adjust Federal budgetary programs. The budget outlays associated with these rules are transfers from taxpayers to program beneficiaries, on behalf of program beneficiaries, or fees collected from program beneficiaries. The Department of Agriculture (USDA) and the Department of Health and Human Services (HHS) promulgated more than half of these rules. HHS’ rule that removes essential use designations from inhalers that administer epinephrine has both private mandate and income transfer components, because the rule bans the use of chlorofluorocarbons (CFCs) as propellants, thereby reducing emissions of ozone-depleting substances.²⁴ Of these 33 rules, agencies reported the estimated income transfers in 22 rules.

Although rules that facilitate Federal budget programs are subject to Executive Order 12866 and OMB Circular A-4, and are reviewed by OMB, past Reports have focused primarily on regulations that have effects largely through private sector mandates. This focus is justified in part on the ground that agencies typically do not estimate the social costs and benefits of transfer rules. Instead they report the estimated budgetary impacts. We recognize that markets embed distortions and that the transfers are not lump-sum. Hence, transfer rules may impose real costs on society to the extent that they cause people to change behavior, either by directly prohibiting or mandating certain activities, or, more often, by altering prices and costs. The costs resulting from these behavior changes are referred to as the “deadweight loss” associated with the transfer. The Regulatory Right-to-Know Act requires OMB to report the social costs and benefits of these rules, and OMB encourages agencies to report these costs and benefits for transfer rules; OMB will consider incorporating these estimates into future Reports.

Two rules, DOI’s Alternative Energy and Alternate Uses of Existing Facilities on the Outer Continental Shelf and DOI’s Oil Shale Leasing and Operations, assessed the policy implications of the rules using scenario-based analysis. Because the market for these rules is in its infancy, constructing the appropriate baselines and projecting the anticipated effects of the rules were difficult. Instead, the agency opted to use a more tractable approach to assess the potential effects of the rule. The scenario-based approach analyzes the costs “if” certain scenarios emerge, thus suggesting that “if” the situation turns out to be X, “then” the benefits and costs would be Y. Because the “if-then” nature of scenario-based analysis does not allow confident assessments of benefits and costs, these rules are categorized as not estimating benefit, cost, or transfer effects.

²⁴ This rule is projected to increase the price of inhalers, thereby increasing Medicare outlays.

Table 1-4: Estimates of the Total Annual Benefits and Costs of Major Rules Reviewed, October 1, 2008 - September 30, 2009 (millions of 2001 dollars)²⁵

Rule	Agency	Benefit	Cost	Transfer
Rules For Which Both Benefits and Costs Were Estimated				
Energy Efficiency Standards for Commercial Refrigeration Equipment	DOE/EE	196 Range: 186-224	81 Range: 69 - 81	NA
Energy Efficiency Standards for General Service Fluorescent Lamps and Incandescent Lamps	DOE/EE	1,924 Range: 1,111-2,886	486 Range: 192 - 657	NA
Patient Safety and Quality Improvement Act of 2005 Rules	HHS/AHRQ	93 Range: 69-136	97 Range: 87-121	NA
Revisions to HIPAA Code Sets	HHS/CMS	209 Range: 77-261	217 Range: 44- 238	NA
Updates to Electronic Transactions (Version 5010)	HHS/CMS	1,988 Range: 1,114-3,194	1,090 Range: 661-1,449	NA
Prevention of Salmonella Enteritidis in Shell Eggs	HHS/FDA	1,284 Range: 206-8,583	74 million Range: 48-106	NA
Real Estate Settlement Procedures Act (RESPA); To Simplify and Improve the Process of Obtaining Mortgages and Reduce Consumer Costs (FR-5180)	HUD/OH	2,303	884	6,980
Part 121 Pilot Age Limit	DOT/FAA	35 Range: 30-35	4	197
Washington, DC, Metropolitan Area Special Flight Rules Area	DOT/FAA	239 Range: 10-839	92 Range: 89-382	NA
Hours of Service of Drivers²⁶	DOT/FMCSA	0-1,760	0-105	NA
New Entrant Safety Assurance Process	DOT/FMCSA	472-602	60-72	NA
Passenger Car and Light Truck Corporate Average Fuel Economy Model Year 2011	DOT/NHTSA	1,665 Range: 857-1,905	979 Range: 650-1,910	NA
Reduced Stopping Distance Requirements for Truck Tractors	DOT/NHTSA	1,250 Range: 1,250-1,520	46 Range: 23- 164	NA
Roof Crush Resistance	DOT/NHTSA	652 Range: 374-1,160	896 Range: 748-1,189	NA

²⁵ DOL's Prohibited Transaction Exemption for Provision of Investment Advice to Participants in Individual Account Plans Rule, DOT's Congestion Management Rule for John F. Kennedy International Airport and Newark Liberty International Airport Rule, and DOT's Congestion Management Rule for LaGuardia Airport Rule have been rescinded since being finalized in FY 2009. In addition, EPA's Revisions to the Spill Prevention, Control, and Countermeasure (SPCC) Rule finalized in FY2009 has been superseded by a final rule published in FY2010. These rules are not included Tables 1-1, 1-3, 1-4 and A-1.

²⁶ See Footnote 20.

Rule	Agency	Benefit	Cost	Transfer
Pipeline Safety: Standards for Increasing the Maximum Allowable Operating Pressure for Gas Transmission Pipelines	DOT/PHMSA	85 Range: 85-89	13 Range: 13-14	NA
Review of the National Ambient Air Quality Standards for Lead	EPA/AR	455-5,203	113-2,241	NA
Rules For Which Only Benefits Were Estimated				
Migratory Bird Hunting; 2008 to 2009 Migratory Game Bird Hunting Regulations	DOI/FWS	870 Range: 711-1,001	Not estimated	NA
Migratory Bird Hunting; 2009 to 2010 Migratory Game Bird Hunting Regulations	DOI/FWS	272 Range: 234-309	Not estimated	NA
Migratory Bird Hunting; 2009 to 2010 Migratory Game Bird Hunting Regulations	DOI/FWS	272 Range: 234-309	Not estimated	NA
Rules For Which Only Costs Were Estimated				
Surety Bond Requirement for Suppliers of Durable Medical Equipment, Prosthetics, Orthotics, and Supplies	HHS/CMS	Not estimated	86	153
Use of Ozone-Depleting Substances; Removal of Essential Use Designations [Epinephrine]	HHS/FDA	Not estimated	300 Range: 154-940	47-470
Family and Medical Leave Act of 1993; Conform to the Supreme Court's Ragsdale Decision	DOL/ESA	Not estimated	226 Range: 224-226	8
Requirements for Temporary Vehicle Trade-In Program	DOT/NHTSA	Not estimated	46	883
Air Cargo Screening	DHS/TSA	Not estimated	231 Range: 191- 273	NA
Secure Flight Program	DHS/TSA	Not estimated	297 Range: 262-348	NA
Importer Security Filing and Additional Carrier Requirements	DHS/USCBP	Not estimated	1,923 Range: 744-3,009	NA
Documents and Receipts Acceptable for Employment Eligibility Verification	DHS/USCIS	Not estimated	118	NA
Refuge Alternatives for Underground Coal Mines	DOL/MSHA	Not estimated	45 Range: 41- 45	NA
Prohibition on Funding of Unlawful Internet Gambling	Treas/DO	Not estimated	75	NA
Greenhouse Gas Mandatory Reporting Rule	EPA/AR	Not estimated	64 Range: 64-86	NA
FAR Case 2007-013, Employment Eligibility Verification	FAR	Not estimated	134 Range: 127-141	NA
Rules For Which Benefits and Costs Were Not Estimated				
Abandoned Mine Land Program	DOI/OSMRE	Not estimated	Not estimated	NA
TARP Limits on Compensation	Treas/DO	Not estimated	Not estimated	NA
Transfer Rules for which Benefits and Costs Were Not Estimated				

Rule	Agency	Benefit	Cost	Transfer
Direct and Counter-Cyclical Program (DCP)	USDA/FSA	Not estimated	Not estimated	3,236-3,381
Emergency Loss Assistance Program (ELAP) and Livestock Forage Disaster Program (LFP)	USDA/FSA	Not estimated	Not estimated	441
Sugar Program	USDA/FSA	Not estimated	Not estimated	118-134
Conservation Reserve Program	USDA/FSA	Not estimated	Not estimated	19
Conservation Stewardship Program	USDA/ NRCS	Not estimated	Not estimated	826- 889
Environmental Quality Incentives Program	USDA/ NRCS	Not estimated	Not estimated	9,381-10,141
State Broadband Data and Development Grant Program	DOC/NTIA	Not estimated	Not estimated	223
CHAMPUS/TRICARE: Inclusion of TRICARE Retail Pharmacy Program in Federal Procurement of Pharmaceuticals	DOD/ DODOASHA	Not estimated	Not estimated	1,832 Range: 1,447- 2,229
TRICARE; Outpatient Hospital Prospective Payment System	DOD/ DODOASHA	Not estimated	Not estimated	383
Federal Perkins Loan, Federal Family Education Loan (FFEL), and William D. Ford Federal Direct Loan (DL) Programs	ED/OPE	Not estimated	Not estimated	1,609
Student Assistance General Provisions; TEACH Grant, Federal Pell Grant, and Academic Competitiveness Grant, and National Science and Mathematics Access to Retain Talent Grant Programs	ED/OPE	Not estimated	Not estimated	208
Production Incentives for Cellulosic Biofuels	DOE/EE	Not estimated	Not estimated	5 Range:0-93
Child Support Provisions of the Deficit Reduction Act	HHS/ACF	Not estimated	Not estimated	81
Changes to the Hospital Outpatient Prospective Payment System and Ambulatory Surgical Center Payment System for CY 2009	HHS/CMS	Not estimated	Not estimated	669
Medicare Program; Medicare Advantage and Prescription Drug Programs MIPPA Drug Formulary and Protected Classes Policies	HHS/CMS	Not estimated	Not estimated	838-874 and 71 -73
Medicare Program; Revisions to the Medicare Advantage and Prescription Drug Benefit Programs	HHS/CMS	Not estimated	Not estimated	394-417
Premiums and Cost Sharing (CMS-2244-F)	HHS/CMS	Not estimated	Not estimated	407
Prospective Payment System and Consolidated Billing for Skilled Nursing Facilities—Update for FY 2010	HHS/CMS	Not estimated	Not estimated	335

Rule	Agency	Benefit	Cost	Transfer
Prospective Payment System for Inpatient Rehabilitation Facilities for FY 2010	HHS/CMS	Not estimated	Not estimated	135
Revisions to Payment Policies Under the Physician Fee Schedule for CY 2009	HHS/CMS	Not estimated	Not estimated	2,508
State Flexibility for Medicaid Benefit Packages	HHS/CMS	Not estimated	Not estimated	664
Refinement of Income and Rent Determinations in Public and Assisted Housing Programs (FR-4998)	HUD/ HUDSEC	Not estimated	Not estimated	0-1,594
Transfer Rules For Which Transfers, Benefits and Costs Were Not Estimated				
Mandatory Country of Origin Labeling of Beef, Pork, Lamb, Fish, Perishable Agricultural Commodities, and Peanuts (LS-07-0081)	USDA/AMS	Not estimated	Not estimated	Not estimated
Marketing Assistance Loans and Loan Deficiency Payments	USDA/FSA	Not estimated	Not estimated	Not estimated
Wetlands Reserve Program	USDA/ NRCS	Not estimated	Not estimated	Not estimated
HOPE for Homeowners Program: Program Regulation	BDHHP	Not estimated	Not estimated	Not estimated
Regulations to Implement the DTV Delay Act	DOC/NTIA	Not estimated	Not estimated	Not estimated
Advanced Technology Vehicles Manufacturing Incentive Program	DOE/ENDEP	Not estimated	Not estimated	Not estimated
Energy Efficiency and Conservation Block Grants; Notice of Allocation Formulas	DOE/ENDEP	Not estimated	Not estimated	Not estimated
Changes to the Hospital Inpatient and Long-Term Care Prospective Payment System for FY 2010	HHS/CMS	Not estimated	Not estimated	Not estimated
Oil Shale Leasing and Operations	DOI/BLM	Not estimated	Not estimated	Not estimated
Alternative Energy and Alternate Uses of Existing Facilities on the Outer Continental Shelf	DOI/MMS	Not estimated	Not estimated	Not estimated
Post-9/11 GI Bill	VA	Not estimated	Not estimated	Not estimated

() indicates negative.
NA is not applicable.

For regulations intended to reduce mortality risks, another analytic tool that can be used to assess regulations is cost-effectiveness analysis. Consistent with the Circular A-4, some agencies develop estimates of the “net cost per life saved” for regulations intended to improve public health and safety. To calculate this figure, the costs of the rule minus any monetized benefits other than mortality reduction are placed in the numerator, and the expected reduction in mortality in terms of total number of lives saved is placed in the denominator. This measure avoids any assignment of monetary values to reductions in mortality risk. It still reflects, however, a concern for economic efficiency, insofar as choosing a regulatory option that reduces a given amount of mortality risk at a lower net cost to society would conserve scarce resources

compared to choosing another regulatory option that would reduce the same amount of risk at greater net costs.

Table 1-5 presents the net cost per life saved for the five health and safety rules for which calculation is possible. The net cost per life saved is calculated using a 3 percent discount rate and using agencies' best estimates for costs and expected mortality reduction where those were provided by the agency. There is substantial variation in the net cost per life saved by these rules, ranging from *negative* (that is, the non-mortality-related benefits outweigh the costs), to potentially as high as \$11.0 million.

This table is designed to be illustrative rather than definitive, and continuing work must be done to ensure that estimates of this kind are complete and not misleading. For example, some mortality-reducing rules have a range of other benefits, including reductions in morbidity, and it is important to include these benefits in cost-effectiveness analysis. Other rules have benefits that are exceedingly difficult to quantify but nonetheless essential to consider; consider rules that improve water quality or have aesthetic benefits. Nonetheless, it is clear that some rules are far more cost-effective than others, and it is valuable to take steps to catalogue variations and to increase the likelihood that scarce resources will be used as effectively as possible.

Table 1-5: Estimates of the Net Costs per Life Saved of Selected Health and Safety Rules Reviewed by OMB in Fiscal Year 2009 (in millions of 2001 dollars)

Rule	Agency	Net Cost per Life Saved	Notes
Prevention of Salmonella Enteritidis in Shell Eggs	HHS/FDA	Negative	Morbidity benefits exceed costs.
New Entrant Safety Assurance Process	DOT/FMCSA	Negative	Property damage and morbidity benefits exceed costs.
Reduced Stopping Distance Requirements for Truck Tractors	DOT/NHTSA	Negative	Property damage benefits exceed costs.

Rule	Agency	Net Cost per Life Saved	Notes
Roof Crush Resistance	DOT/NHTSA	\$6.4 - 11.0	The agency estimates that the rule will prevent 135 fatalities and 1065 nonfatal injuries annually. These figures translate into 156 equivalent fatalities. The main estimates value equivalent fatalities prevented at \$6.1 million. It follows that the value of nonfatal injuries prevented is \$6.1 million * (156 - 135) = \$128.1 million annually. Total costs associated with the rule range from \$875 million to \$1400 million annually. If we subtract the injury benefits from costs, the range of net cost per life saved is thus \$5.5 million to \$9.4 million (2007 dollars). Adjusting to \$2001 yields \$6.4 million to \$11.0 million.

2. Major Rules Issued by Independent Agencies

The Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA)²⁷ requires the Government Accountability Office (GAO) to submit to Congress reports on major rules, including rules issued by agencies not subject to Executive Order 12866 — the independent regulatory agencies. In preparing this Report, we reviewed the information contained in GAO reports on benefits and costs of major rules issued by independent agencies for the period of October 1, 2008 to September 30, 2009.²⁸ GAO reported that three agencies issued a total of 13 major rules during this period.

Table 1-7 lists each of these rules and the extent to which GAO reported benefit and cost estimates for the rule. Of the 11 rules that were issued to regulate the financial sector, only one rule provided complete monetized benefit and cost information: the SEC’s final rule on Enhanced Disclosure and New Prospectus Delivery Option for Registered Open-End Management Investment Companies. The SEC conducts some benefit-cost analysis of its rules, but it generally does not quantify and monetize benefits and costs. The Federal Reserve System promulgated five rules: three final rules and two interim final rules. The agency did not, however, prepare benefit-cost analyses to assess the effects of the rules. The Nuclear Regulatory Commission promulgated a safety rule and provided a qualitative benefit assessment along with monetized cost estimates. OMB does not know whether the rigor of the analyses conducted by these agencies is similar to that of the analyses performed by agencies subject to OMB review.

We emphasize that for purposes of obtaining a full accounting, it would be highly desirable to obtain better information on the costs and benefits of the rules issued by independent

²⁷ Pub. L. No. 104-121.

²⁸ Footnote 2, above, states the criteria for including rules in the report. In practice, a rule was considered “major” for the purposes of the report if (a) it was estimated to have either annual costs or benefits of \$100 million or more or (b) it was likely to have a significant impact on the economy.

regulatory agencies. The absence of such information is a continued obstacle to transparency, and it might also have adverse effects on public policy.

OMB provides in Appendix C of this Report a summary of the information available on the regulatory analyses for major rules by the independent agencies over the past ten years. This summary is similar to the ten-year look-back for regulation included in recent Reports. It examines the number of major rules promulgated by independent agencies as reported to the GAO from 1999 through 2009, which are presented in Table C-1.²⁹ Information is also presented on the extent to which the independent agencies reported benefit and cost information for these rules in Tables C-2 through C-4.

²⁹ OMB did not finalize a Report in 1999; OMB reconstructed the estimates for this period based on GAO reports. Prior to the 2003 Report, OMB did not report on independent agency major rules on a fiscal year basis, but rather on an April-March cycle. Similar to last year, OMB is reporting all of the rules from 2000 through 2009 on a fiscal year basis (see Table C-1). The number of rules presented in earlier Reports may therefore not match the number of rules presented here.

**Table 1-7: Major Rules Issued by Independent Regulatory Agencies,
October 1, 2008 - September 30, 2009**

Agency	Rule	Information on Benefits or Costs	Monetized Benefits	Monetized Costs
Federal Reserve System	Capital Adequacy Guidelines; Small Bank Holding Company Policy Statement: Treatment of Subordinated Securities Issued to the United States Treasury Under the Emergency Economic Stabilization Act of 2008 (74 FR 26077)	No	No	No
Federal Reserve System	Capital Adequacy Guidelines: Treatment of Perpetual Preferred Stock Issued to the United States Treasury Under the Emergency Economic Stabilization Act of 2008 (73 FR 62851, 74 FR 26081)**	No	No	No
Federal Reserve System	Truth in Lending (74 FR 5244, 74 FR 36077)**	No	No	No
Nuclear Regulatory Commission	Power Reactor Security Requirements (74 FR 13926)	Yes	No	Yes
Nuclear Regulatory Commission	Revision of Fee Schedules; Fee Recovery for FY 2009 (74 FR 27642)	Yes	No	Yes
Securities and Exchange Commission	Amendments to Regulation SHO (73 FR 61706)*	Yes	No	No
Securities and Exchange Commission	Amendments to Rules for Nationally Recognized Statistical Rating Organizations (74 FR 6456)	Yes	No	Yes
Securities and Exchange Commission	Commission Guidance and Revisions to the Cross-Border Tender Offer, Exchange Offer, Rights Offerings, and Business Combination Rules and Beneficial Ownership Reporting Rules for Certain Foreign Institution (73 FR 60050)	Yes	No	No
Securities and Exchange Commission	Disclosure of Short Sales and Short Positions by Institutional Investment Managers (73 FR 61678)*	Yes	No	Yes
Securities and Exchange Commission	Enhanced Disclosure and New Prospectus Delivery Option for Registered Open-End Management Investment Companies (74 FR 4546)	Yes	Yes	Yes
Securities and Exchange Commission	Foreign Issuer Reporting Enhancements (73 FR 58300)	Yes	No	No
Securities and Exchange Commission	Indexed Annuities and Certain Other Insurance Contracts (73 FR 3138)	Yes	No	Yes
Securities and Exchange Commission	Interactive Data to Improve Financial Reporting (74 FR 6776)	Yes	No	No

* Interim Final Rule

** Interim Final Rule and Final Rule

D. The Impact of Federal Regulation on State, Local, and Tribal Governments, Small Business, Wages, and Economic Growth

Sec. 624 (a)(2) of the Regulatory Right-to-Know Act requires OMB to present an analysis of the impacts of Federal regulation on State, local, and tribal governments, small business, wages, and economic growth.

1. Impacts on State, Local, and Tribal Governments

Over the past ten years, five rules have imposed costs of more than \$100 million per year (\$2001) on State, local, and tribal governments (and thus have been classified as public sector mandates under the Unfunded Mandates Reform Act of 1995):³⁰

- *EPA's National Pollutant Discharge Elimination: System B Regulations for Revision of the Water Pollution Control Program Addressing Storm Water Discharges* (1999): This rule expands the existing National Pollutant Discharge Elimination System program for storm water control. It covers smaller municipal storm sewer systems and construction sites that disturb one to five acres. The rule allows for the exclusion of certain sources from the program based on a demonstration of the lack of impact on water quality. EPA estimates that the total cost of the rule on Federal and State levels of government and on the private sector is \$803.1 million annually. EPA has considered alternatives to the rule, including the option of not regulating, but found that the rule was the option that was “most cost effective or least burdensome, but also protective of the water quality.”
- *EPA's National Primary Drinking Water Regulations; Arsenic and Clarifications to Compliance and New Source Contaminants Monitoring* (2001): This rule reduces the level of arsenic that is allowed to be in drinking water from 50 ppb to 10 ppb. It also revises current monitoring requirements and requires non-transient, non-community water systems to come into compliance with the standard. This rule may affect State, local, or tribal governments or the private sector at an approximate annualized cost of \$189 million for a 3 percent discount rate, and \$216 for a 7 percent discount rate. The monetized benefits of the rule range from \$146 million to \$206 million per year.³¹ Qualitative benefits may include reductions in skin and kidney cancer where the skin cancer endpoints are well-established.

³⁰We note that EPA's rules setting air quality standards for ozone and particulate matter may ultimately lead to expenditures by State, local, or tribal governments of \$100 million or more. However, Title II of the Unfunded Mandates Reform Act provides that agency statements of compliance with Section 202 must be conducted “unless otherwise prohibited by law.” 2 U.S.C. § 1532 (a). The conference report to this legislation indicates that this language means that the section “does not require the preparation of any estimate or analysis if the agency is prohibited by law from considering the estimate or analysis in adopting the rule.” H.R. Conf. Rep. No. 104-76 at 39 (1995). EPA has stated, and the courts have affirmed, that under the Clean Air Act, the criteria air pollutant ambient air quality standards are health-based and EPA is not to consider costs in setting the standards.

³¹ Benefits were estimated to be constant across time and so annualized benefits are equal at 3 and 7 percent discount rates.

- *EPA's National Primary Drinking Water Regulations: Long Term 2 Enhanced Surface Water Treatment (2005)*: The rule protects against illness due to cryptosporidium and other microbial pathogens in drinking water and addresses risk-risk trade-offs with the control of disinfection byproducts. It requires the use of treatment techniques, along with monitoring, reporting, and public notification requirements, for all public water systems that use surface water sources. The monetized benefits of the rule range from approximately \$260 million to \$1.8 billion. The monetized costs of the rule range from approximately \$80 million to \$130 million.
- *EPA's National Primary Drinking Water Regulations: Stage 2 Disinfection Byproducts Rule (2006)*: The rule protects against illness due to drinking water disinfectants and disinfection byproducts (DBPs).³² The rule effectively tightens the existing standards by making them applicable to each point in the drinking water distribution system individually, rather than only on an average basis to the system as a whole. EPA has determined that this rule may contain a Federal mandate that results in expenditures by State, local, and tribal governments, and the private sector, of \$100 million or more in any one year. While the annualized costs fall below the \$100 million threshold, the costs in some future years may be above the \$100 million mark as public drinking water systems make capital investments and finance these through bonds, loans, and other means.
- *DHS's Chemical Facility Anti-Terrorism Standards Rule (2007)*: This rule establishes risk-based performance standards for the security of our nation's chemical facilities. It requires covered chemical facilities to prepare Security Vulnerability Assessments (SVAs), which identify facility security vulnerabilities, and to develop and implement Site Security Plans (SSPs), which include measures that satisfy the identified risk-based performance standards. The rule also provides DHS with the authority to seek compliance through the issuance of Orders, including Orders Assessing Civil Penalty and Orders for the Cessation of Operations. DHS has determined that this rule constitutes an unfunded mandate on the private sector. In the regulatory impact assessment published with this rule, DHS estimates that there are 1,500 to 6,500 covered chemical facilities. DHS also assumes that this rule may require certain municipalities that own and/or operate power generating facilities to purchase security enhancements. Although DHS is unable to determine if this rule will impose an enforceable duty upon State, local, and tribal governments of \$100 million (adjusted annually for inflation) or more in any one year, it has been included in this list for the sake of completeness.

Although these five rules were the only ones over the past ten years to require expenditures by State, local, and tribal governments exceeding \$100 million (adjusted for inflation), they were not the only rules with impacts on other levels of governments. For

³² While causal links have not been definitively established, a growing body of evidence has found associations between exposure to DBPs and various forms of cancer, as well as several adverse reproductive endpoints (e.g., spontaneous abortion).

example, many rules have monetary impacts lower than the \$100 million threshold, and agencies are also required to consider the federalism implications of rulemakings under Executive Order 13132.

2. Impact on Small Business

Consistent with the direction in the Regulatory Right-to-Know Act to consider the effects of regulations on small business, Executive Order 12866, “Regulatory Planning and Review” recognizes the need to attend to such effects. That Executive Order calls on agencies to tailor their regulations by business size in order to impose the least burden on society, consistent with the achievement of regulatory objectives. It also calls for the development of short forms and other efficient regulatory approaches for small businesses and other entities. Moreover, in the findings section of SBREFA, Congress states that “... small businesses bear a disproportionate share of regulatory costs and burdens.”³³ Each firm has to determine whether a regulation applies, how to comply, and whether it is in compliance. As firms increase in size, fixed costs of regulatory compliance are spread over a larger revenue and employee base, which often results in lower regulatory costs per unit of output.

In conformity with these principles, many statutes and regulations explicitly attempt to reduce burdens on small businesses, in part to promote economic growth, in part to ensure against unnecessary or unjustified adverse effects on employment and wages. For example, agencies frequently tailor regulations to limit the costs imposed on small business and to offer regulatory relief, including explicit exemptions for small businesses and slower phase-in schedules, allowing adequate periods of transition. Moreover, agencies are required to assess the effect of regulations on small businesses under the Regulatory Flexibility Act (RFA).³⁴ Under the RFA, whenever an agency comes to the conclusion that a particular regulation will have a significant economic effect on a substantial number of small entities, the agency must conduct both an initial and final regulatory flexibility analysis. This analysis must include an assessment of the likely burden of the rule on small entities and an analysis of alternatives that may afford relief to small entities while still accomplishing the regulatory goals. OMB works closely with agencies to promote compliance with RFA and to tailor regulations to reduce unjustified costs and to create appropriate flexibility.

The evidence of the effects of regulation on small business remains far from clear. We have cited in previous Reports research by the Small Business Administration (SBA) Office of Advocacy, suggesting that small entities disproportionately shoulder regulatory and paperwork burdens. The Office of Advocacy has sponsored three studies that estimate the burden of regulation on small businesses.³⁵ In a study sponsored by SBA (and cited in our 2003 Report), Dean, et al, concludes that environmental regulations act as barriers to entry for small firms.³⁶ In a more recent study, published in 2005, Crain finds that regulatory costs per employee decline as firm size—as measured by the number of employees per firm—increases. Crain finds that the

³³ Section 202(2) of Pub. L. No. 104-121.

³⁴ 5 U.S.C. §§ 601-612.

³⁵ Crain (2005). The other two reports are Hopkins (1995) and Crain and Hopkins (2001).

³⁶ Dean, et al. (2000).

total cost of Federal regulation (environmental, workplace, economic, and tax compliance regulation) is 45 percent greater per employee for firms with fewer than 20 employees than for firms with over 500 employees.

Becker offers a more complex view, focusing on the effect of air pollution regulation on small business.³⁷ He finds although “progressively larger facilities had progressively higher unit abatement costs, *ceteris paribus*,”³⁸ the relationship between the firm size and the pollution abatement costs vary depending on the regulated pollutant. For troposphere ozone, the regulatory burden seems to fall substantially on the smallest three quartiles of plants. For SO_x, the relationship between regulatory burden and the firm size seems to be U-shaped. For total suspended particles, new multi-unit emitting plants in the smallest size class had \$265 more capital expenditure (per \$10,000 of value added) in non-attainment counties than similar plants in attainment counties, while “those in the larger size classes had an additional \$511-687 in expenditure...though the rise was not monotonic.”³⁹

The evidence in the literature is therefore preliminary, inconclusive, and mixed. OMB continues to investigate the evolving literature on the relevant questions in order to obtain a more precise picture. It is clear, however, that some regulations have significant adverse effects on small business, and that it is appropriate to take steps to create flexibility in the event that those adverse effects cannot be justified by commensurate benefits.

3. Impact on Wages and Employment

Regulations of many different markets and areas of activity can ultimately affect labor markets, producing changes in wages and employment levels. Some regulations can have adverse effects on both dimensions, especially if they significantly increase costs; other regulations might produce benefits. The relevant effects can be quite complex, since in general equilibrium, regulation in one market can have ripple effects across many markets, making it difficult to generalize. We discuss here the effect of labor market regulations and economic regulations on wages and employment. We note as well a recent finding that in the environmental area, domestic regulation has led US-based multinational companies “to increase their foreign assets in polluting industries by 5.3 percent and their foreign output by 9 percent”⁴⁰; OMB continues to investigate the possibility that domestic regulation might lead companies to do business abroad.

a. Labor market regulations

It is perhaps simplest to analyze the effects of direct regulation of labor markets, as they can be plausibly analyzed using a relatively simple partial equilibrium framework—
i.e., one that focuses exclusively on the labor market, ignoring the effects through other markets.

³⁷ Becker (2005).

³⁸ *Ibid.*, p. 163.

³⁹ *Ibid.*, p. 165.

⁴⁰ Hanna (2010), p. 160.

There are many different types of labor market regulations. Perhaps the most obvious are direct price controls, such as minimum wage laws. Another form of labor market regulation consists of regulations that mandate particular employer-provided benefits, such as the requirement under the Family and Medical Leave Act (FMLA) to provide unpaid leave to care for a new child; in the same category are rules that affect working conditions such as workplace safety regulations under the Occupational Safety and Health Act. Another category of labor market regulation is anti-discrimination law, which protects certain classes of workers from discrimination in hiring and wage-setting decisions. Still another form of labor market regulation governs the ability of workers and firms to bargain collectively; in general, U.S. competition law prohibits collusion among employers but allows collective bargaining by workers.

The effects of these approaches must be analyzed separately. Here we outline the theory and evidence on the effect of mandated benefits regulations on wages and employment levels. To be concrete, consider a workplace safety regulation. Summers provides the standard price-theoretic treatment of such regulations.⁴¹ Such a regulation will shift the labor supply curve down by the amount that workers value the increase in safety, so that workers are willing to supply more labor for a given wage than in the absence of the regulation. Because it imposes compliance costs on employers, the regulation also shifts the labor demand curve down by the amount of the compliance cost. If workers value the mandated benefit at more than it costs employers to provide, then both the employment level and net wages (i.e., monetary compensation plus the value of non-monetary benefits such as safety) will rise. Under standard assumptions, employers have incentives to provide such benefits, but various market failures may result in suboptimal provision of such benefits. Conversely, if workers value the mandated benefit at less than its cost, then the employment level and net wages will fall. This simple model assumes that wages can indeed perfectly adjust downwards in response to the mandated Benefits—but if wages are sticky, then the regulation could result in a fall in employment levels and an increase in net wages.

In the case of group-specific mandated benefits, which are targeted at identifiable groups of workers in the population, the theoretical analysis is more complicated. Jolls provides the leading account and emphasizes that the interaction of group-specific mandated benefits regulation with anti-discrimination law determines its consequences for labor markets.⁴² Take, for instance, regulations under the Americans with Disabilities Act (ADA) that require that employers accommodate the special needs of disabled employees—a group-specific mandated benefit. The law also forbids employers from discriminating against disabled workers in hiring and compensation decisions. Because it is easier to enforce the prohibition of discrimination in wage setting than in hiring decisions, Jolls argues that the law will result in no reduction in wages for disabled workers but a reduction in their employment level, because employers will prefer to hire (cheaper) non-disabled workers. In contrast, group-specific mandates that target women, such as maternity leave mandates, are more likely to have an effect on wages because women are disproportionately represented in a few occupations, and hence their wages can more easily be adjusted downward without triggering anti-discrimination enforcement. These

⁴¹ Summers (1989).

⁴² Jolls (2000).

mandates can be analyzed in the standard framework provided by Summers described above, and because wages adjust down, are less likely to have a negative effect on employment.

The empirical literature does not offer unambiguous conclusions, but some studies provide support for the predictions of these simple partial equilibrium models. Acemoglu and Angrist find that the ADA resulted in no decrease in relative wages of disabled people but a decrease in employment levels.⁴³ In contrast, Gruber finds that regulations that require employers to provide comprehensive coverage for childbirth in health insurance plans result in a fall in women's wages but no effect on their employment levels.⁴⁴ Studies examining the effect of the FMLA in the US, however, find little effect on either relative employment levels or wages of women, perhaps because the mandated leave is short and unpaid and many employers provided maternity leave prior to the law.⁴⁵ OMB continues to investigate the growing literature on these topics; the references here are meant to be illustrative rather than exhaustive.

b. Economic regulation

Rate regulations and restrictions on entry in product markets—commonly referred to as “economic regulation”—can also have important effects on labor markets. As emphasized by Peoples,⁴⁶ restrictions on entry into an industry can make unionization of the industry easier because as a result the industry is dominated by a few large firms, which lowers the cost of organizing workers. The resulting high unionization rates give unions in the regulated industries substantial bargaining power, and as a result wages in regulated industries, which historically include trucking, electricity, and airlines, are higher. Moreover, rate regulations that allow firms in these industries to pass costs on to customers may make it easier for unions to bargain for relatively high wages.

However, economic regulation also results in higher prices in the product market, which workers must pay as consumers. Blanchard and Giavazzi show in theoretical terms that the increased markups in the product market caused by widespread economic regulation can result in both lower real wages of workers, measured in terms of purchasing power, and lower employment levels.⁴⁷ The theoretical negative effect of entry regulation on employment was supported empirically by Bertrand and Kramarz,⁴⁸ who examine entry restrictions in the French retail industry and find that they have reduced employment growth in France.

4. Impact on Economic Growth

Measuring the effects of regulation on economic growth is a complex task. Some forms

⁴³ Acemoglu and Angrist (2001).

⁴⁴ Gruber (1994).

⁴⁵ Waldfogel (1999) and Baum (2003). Ruhm (1998) examines parental leave mandates in Europe and finds that they are associated with increases in women's relative employment levels and reductions in their relative wages.

⁴⁶ Peoples (1998).

⁴⁷ Blanchard and Giavazzi (2003).

⁴⁸ Bertrand and Kramarz (2002).

of regulation are likely to have a positive effect on growth, whether through prevention of disease among workers, avoiding accidents in the transportation sector, or ensuring efficient operation of credit markets. At the same time, the direct impacts of such regulations on the overall economy may be difficult to demonstrate because of other changes in the economy. Excessive and unnecessary regulations, on the other hand, place undue burdens on companies and workers and may cause growth and overall productivity to slow; but this effect is difficult to measure. As we have noted, there is some evidence that domestic environmental regulation has led some US-based multinationals to invest in other nations (especially in the domain of manufacturing), and in that sense, such regulation may have an adverse on domestic growth.

One difficulty with measuring the overall effects of regulation on the economy is identifying the appropriate measure of output. Economists frequently look at Gross Domestic Product (GDP), but GDP may not adequately account for the beneficial effects of some regulations. For example, GDP does not capture directly the benefits of regulation, such as environmental protection, that does not result in increases in goods or services produced,⁴⁹ Efforts to expand the national accounts to incorporate omitted factors – such as improvements in environmental quality in satellite accounts—suggest the incompleteness of existing measures.

A detailed literature explores some of the potentially deeper limitations of national income and product accounting; there is a complex and not fully understood relationship between GDP growth and improved lives or subjective well-being (insofar as these may be measured).⁵⁰ A general finding is that there is a significant difference between self-reported life satisfaction and self-reported day-to-day experience; the measure of “life satisfaction” evidently captures judgments that are not captured in day-to-day experience, and vice-versa. A rapidly developing literature, focused principally on subjective well-being, explores the relationship between economic growth and well-being, and it may well turn out to have implications for regulatory policy and uses of cost-benefit analysis.⁵¹ For example, a regulatory initiative may have effects on subjective well-being, or actual experience, that cost-benefit analysis does not fully capture. Consider just a few of many examples from the relevant literature:

- Contributing to the extensive literature on the relevance of relative (as opposed to absolute) economic position, Luttmer reports that higher earnings of neighbors are associated with lower levels of self-reported happiness, suggesting that subjective well-being may be partly a function of relative income.⁵²
- Examining changes over time in the United States and Britain, Blanchflower and Oswald find that in the last quarter-century, reported levels of well-being have

⁴⁹ See Sen (1999a, 1999b), Krueger (2009), Kahneman, et al. (2004), and Stiglitz, et al. (2010).

⁵⁰ See Blanchflower and Oswald (2004) for a finding that over the last quarter-century, growth in GDP in the United States and Britain has not been accompanied by growth in reported levels of well-being. See Krueger (2009) for a discussion of subjective well-being and its measurement; for a recent discussion, with special emphasis on the complex relationship between well-being and economic growth, see Bok (2010). See also Stevenson and Wolfers (2008b) showing movements in happiness inequality that do not parallel movements in income inequality. For a finding of “a clear positive link between average levels of subjective well-being and GDP per capita across countries,” see Stevenson and Wolfers (2008a).

⁵¹ See, e.g., Vitarelli (2010); Adler and Posner (2008).

⁵² Luttmer (2005).

declined in the United States and remained flat in Britain and are affected by such factors as relative income and age; they estimate the monetary values of events such as unemployment and divorce and find that both impose the welfare equivalent of large losses in monetary terms.⁵³

- More ambitiously, Krueger, et al, offer an alternative measure of well-being—National Time Accounting—that proposes to measure and analyze how people spend and experience their time.⁵⁴ One claim is that such measures provide important information that is not fully or adequately captured in GDP or other existing measures.

There are also questions about the importance of subjective measures and about whether objective measures—about, for example, longevity, health, education, and per capita income—provide valuable information that subjective measures cannot encompass. In any case, work of the sort outlined here might ultimately make it possible to connect regulatory initiatives to a variety of possible measures of changes in growth and well-being.

Few studies attempt directly to measure the effects of the level of regulation, in general, on the level of output in the economy. Jorgenson and Wilcoxon modeled dynamic simulations with and without environmental regulation on long-term growth in the United States to assess the effects and reported that the long-term cost of regulation is a 2.59 percent reduction in Gross National Product.⁵⁵

Numerous studies attempt to measure the effects of a particular set of regulations—environmental regulation—on various indicators of economic activity in the United States. Berman and Bui gives a helpful summary of this literature.⁵⁶ When evaluating this literature, the reader should recall that many environmental regulations affect provision of non-market goods that are not explicitly reflected in standard measures of economic activity.

- Berman and Bui find that during a period of aggressive environmental regulation, productivity increased among the petroleum refineries located in the Los Angeles from 1987 to 1992, suggesting that “[a]batement costs may severely overstate the true cost of environmental regulation”⁵⁷ and that “abatment associated with the SCAQMD regulations was productivity enhancing.”⁵⁸
- Using the simulation model, Jorgensen and Wilcoxon estimate that between 1973 and 1985 three types of environmental regulation were responsible for “a drop in GNP growth of .191 percentage points.”⁵⁹

⁵³ Blanchflower and Oswald (2004).

⁵⁴ Krueger, et al (2009). Krueger and Schkade (2008) also have examined the reliability of subjective well-being measures. For a general account, see Diener, et al. (2009).

⁵⁵ Jorgensen and Wilcoxon (1990).

⁵⁶ Berman and Bui (2001).

⁵⁷ *Ibid*, p. 509.

⁵⁸ *Ibid*, p. 499. SCAQMD is South Coast Air Quality Management District.

⁵⁹ Jorgensen and Wilcoxon (1990), p. 338.

- Gray and Shadbegian examine the investment activity of paper mills from 1979 to 1990,⁶⁰ and their findings suggest that “plants with relatively high pollution abatement capital expenditures over the period invest less in productive capital. The reduction in productive investment is greater than the increase in abatement investment, leading to lower total investment at high abatement cost plants. The magnitude of this impact is quite large, suggesting that a dollar of pollution abatement investment reduces productive investment by \$1.88 at that plant. This seems to reflect both environmental investment crowding out productive investment within a plant, and firms shifting investment towards plants facing less stringent abatement requirements. Estimates placing less weight on within-firm reallocation of investment indicate approximate dollar-for-dollar (\$0.99) crowding out of productive investment.”⁶¹
- Becker and Henderson⁶² find that in response to ground-level ozone regulation in polluting industries “birth [of plants] fall dramatically in nonattainment counties, compared to attainment counties....This shift in birth patterns induces a reallocation of stocks of plants toward attainment areas. Depending on the interpretation of reduced-form coefficients, net present value for a typical new plant in a nonattainment area could fall by 13-22 percent.”⁶³
- Greenstone⁶⁴ finds that “in the first 15 years after the [Clean Air Act Amendments] became law (1972-1987, nonattainment counties (relative to attainment ones) lost approximately 590,000 jobs, \$37 billion in capital stock and \$75 billion (1987 dollars) of output in polluting industries.”⁶⁵
- List, et al., examined the effects of air quality regulation stringency and location decisions of new plants in New York State from 1980 to 1990, and found that regulatory stringency and the decision to locate is negatively correlated, and the current parametric estimates of this negative correlation may be understated.⁶⁶
- As noted, Hanna⁶⁷ finds that domestic environmental regulation has had an effect in increasing the outbound foreign direct investment of US-based multinational firms. The results include an increase in foreign investments in polluting industries by 5.3 percent and in foreign output by 8 percent; the results are concentrated in manufacturing.

⁶⁰ Gray and Shadbegian (1998).

⁶¹ *Ibid*, p. 254-255.

⁶² Becker and Henderson (2000).

⁶³ *Ibid*, pp. 414-415.

⁶⁴ Greenstone (2002).

⁶⁵ *Ibid*, p. 1213.

⁶⁶ List, et al. (2003).

⁶⁷ Hanna (2010).

These studies provide helpful information, but existing evidence remains partial and incomplete. OMB continues to investigate the underlying questions; no clear consensus has emerged on the answers.

CHAPTER II: RECOMMENDATIONS FOR REFORM

The Regulatory Right-to-Know Act charges OMB with making “recommendations for reform.”⁶⁸ In its 2009 Report, OMB recommended three potential reforms that might improve regulatory policy and analysis. First, OMB recommended consideration of empirically informed approaches to regulation, with an emphasis on relevant empirical findings and on disclosure policies, simplification, appropriate default rules, salience, and the role of social norms. Second, OMB suggested consideration of several steps to improve regulatory impact analysis, including clear, tabular presentation of both costs and benefits. Third, OMB recommended that regulatory impact analysis should be seen and used as a central part of open government. With each of these recommendations, OMB offered concrete suggestions for possible improvements. The unifying goal is to promote data-driven, evidence-based regulation and to select approaches on the basis of empirical findings, rather than intuition, anecdote, or guesswork.

A. Recent Developments

OMB continues to support these recommendations. In the last year, agencies and OMB have worked together on a continuing basis to promote low-cost, low-burden approaches, with particular attention to disclosure policies, default rules, and simplification. (Such approaches draw on relevant empirical findings in social science, including but not limited to behavioral economics and psychology.) It is clear, for example, that some disclosures are too complex to be useful, and that disclosure requirements must be attuned to how people actually process information. Clear, simple, salient, and meaningful disclosures are generally most useful. Vague, excessively detailed, or abstract disclosure may not actually inform people; disclosure works best if people are aware, or made aware, of what path to take to avoid costs or to obtain benefits. Presentation greatly matters; if, for example, a potential outcome is framed as a loss, it may have more impact than if it is presented as a gain. (“Loss aversion” is a standard finding in the empirical literature; people are highly adverse to losses from the status quo.) To be effective, disclosure requirements should be tested in advance, preferably through quasi-experimental studies, and not merely through focus group testing, which can be unreliable as a guide to actual behavior.

It is also clear that undue complexity, through confusing requirements or forms, can have serious adverse effects, including noncompliance with law or nonparticipation in important programs. Sensible default rules (including automatic enrollment, as in savings and health care plans) can ease people’s choices and have significant benefits. More generally, simplification of forms, increased coordination, elimination of duplication and redundancy, and substitution of electronic for paper filing can reduce costs and produce large gains.

OMB has worked closely with agencies on all of these issues. In June 2010, OIRA released explicit guidance on disclosure and simplification as regulatory tools. The guidance is included as Appendix D here. We offer a brief discussion of recent developments here.

⁶⁸ 31 U.S.C. § 1105 note, Pub. L. 106–554, § 1(a)(3) [title VI, § 624], Dec. 21, 2000, 114 Stat. 2763, 2763A–161.

1. Disclosure

In numerous cases, agencies have used disclosure to promote regulatory goals. In 2009 and 2010, the Occupational Safety and Health Administration placed a significant subset of its fatality, illness, and injury data online, in a step that should promote accountability and promote safer workplaces.⁶⁹ In 2009, the Environmental Protection Agency issued a Greenhouse Gas Reporting rule, requiring disclosure by many of the most significant emitters.⁷⁰ The data should help businesses to track their own emissions, to compare them to similar facilities, and eventually to identify low-cost reductions. Another example of continuing agency efforts to improve the quality of disclosure, with reference to empirical findings, involves the labeling of tires. In March 2010, OMB sent a review letter to NHTSA regarding its proposed labeling of tires for fuel efficiency, safety, and durability. In that letter, OMB urged NHTSA to conduct consumer testing to identify a label that is clear, comprehensible, and meaningful to consumers. NHTSA subsequently finalized its rule on tire test procedures while undertaking further investigation before committing to a final decision on the design of the label.

Much recent legislation also attempts to use disclosure as a regulatory tool. For example, the Credit Card Accountability, Responsibility, and Disclosure Act of 2009 is designed in large part to ensure that credit card users are adequately informed. The Affordable Care Act of 2010 contains a number of disclosure requirements designed to promote accountability and informed choice with respect to health care.

These and many other efforts to promote disclosure fit well with the goals of OMB's Open Government Directive, which is intended in part to ensure that high-value data sets are placed online.⁷¹ Posting such data sets can promote regulatory goals, and often at low cost, by virtue of the power of publicity. One example is the Emergency Planning and Community Right-to-Know Act, enacted by Congress in 1986. At first, this law seemed to be largely a bookkeeping measure, requiring a Toxic Release Inventory in which firms reported what pollutants they were using. But available evidence indicates that it has had beneficial effects, helping to spur reductions in toxic releases throughout the United States.⁷²

Indeed, many high-value data sets count as such because their publication helps agencies to further their statutory missions. The Open Government Directive explicitly emphasizes this point,⁷³ and numerous agencies have disclosed high-value data sets and developed open government plans. Disclosure of many of the data sets (for example, in the domain of safety and health) should promote agency missions; the open government plans enlist openness for the same reason. A particular advantage of disclosure requirements is that they can spur the creation of "applications," by the public and private sector, for frequent use, perhaps promoting regulatory goals. Recalls.gov and FlyOnTime.us are only two of many examples.

⁶⁹ See <http://www.osha.gov/oshstats/work.html>.

⁷⁰ *Mandatory Reporting of Greenhouse Gases; Final Rule*, 74 FED. REG. 56259-519 (Oct. 30, 2009).

⁷¹ Available at http://www.whitehouse.gov/omb/assets/memoranda_2010/m10-06.pdf.

⁷² See Hamilton (2005)..

⁷³ *Id.* at 7-8.

By harnessing technology, disclosure policies can also help to track the performance of both public and private institutions, thus increasing information and promoting accountability. For example, the Information Technology Dashboard (it.USASpending.gov), created in 2009 and significantly improved in June 2010, provides the public with an online window into the details of Federal information technology investments and enables users to track the progress of investments over time. People can see spending by government department, as graphs display performance against schedule, costs, and an informed assessment of how well agencies are meeting their objectives. A concrete result of the IT Dashboard has been to improve accountability and thus performance. Similarly, the dashboard of the Office of Information and Regulatory Affairs (OIRA) (www.RegInfo.gov) offers significant information about regulations, both proposed and final, that are under review at OIRA. The dashboard of the Centers for Medicare & Medicaid Services (CMS) (www.cms.gov/dashboard) permits tracking of how much is spent on Medicare patients in hospitals for many treated illnesses and conditions. Other dashboards have been put in place and many others are easy to imagine, promoting transparency about public and private institutions and building on existing programs that use disclosure as a regulatory tool.

The Food and Drug Administration has acted to provide greater information about the regulatory process through a plan designed to improve transparency in its programs, while also protecting confidentiality. In early 2010, the FDA initiated two websites that answer questions about how it approves drugs and monitors adverse reactions and provide detailed monthly information about the workload of approval applications at the agency.⁷⁴ In May, the FDA's Transparency Task Force issued 21 draft proposals for additional disclosure about products under investigation for approval.⁷⁵ The goal of this disclosure would be to provide greater information to patients, doctors, and other manufacturers about the regulatory process.⁷⁶

2. Default rules

In the past year, several agencies have adopted, proposed, or considered default rules in order to encourage greater participation in programs they consider desirable. In the United States, employers have long asked workers whether they want to enroll in 401(k) plans; under a common approach, the default rule is non-enrollment. Even when enrollment is easy, the number of employees who enroll, or “opt in,” has sometimes been relatively low.⁷⁷ Recently, a number of employers have responded by changing the default to automatic enrollment, by which employees are enrolled unless they opt *out*. The results are clear; significantly more employees end up enrolled with an “opt-out” design than with “opt-in.”⁷⁸ This is so even when “opt out” is

⁷⁴ These websites can be accessed through the following addresses: <http://www.fda.gov/fdabasics>, and <http://www.fda.gov/fdatrack>.

⁷⁵“FDA Transparency Initiative: Draft Proposals for Public Comment Regarding Disclosures Policies of the U.S. Food and Drug Administration,” Transparency Task Force, U.S. Department of Health and Human Services, Food and Drug Administration, May 2010.

⁷⁶ For a description of the plan, see Asamoah and Sharfstein (2010).

⁷⁷ See Madrian and Shea (2001); and Gale, et al. (2009).

⁷⁸ Gale, et al. (2009).

easy. Importantly, automatic enrollment has significant benefits for all groups, and with particular improvements in anticipated savings for Hispanics, African-Americans, and women.⁷⁹

A great deal of research has attempted to explore exactly why default rules have such a large effect on outcomes.⁸⁰ There appear to be three contributing factors. The first involves inertia and procrastination.⁸¹ To alter the effect of the default rule, people must make an active choice to reject the default. In view of the power of inertia and the tendency to procrastinate, people may simply continue with the status quo. The second factor involves what might be taken to be an implicit endorsement of the default rule. Many people appear to conclude that the default was chosen for a reason; they believe that they should not depart from it unless they have particular information to justify a change.⁸² Third, the default rule might establish the reference point for people's decisions; the established reference point has significant effects because people dislike losses from that reference point.⁸³ If, for example, the default rule favors energy efficient light bulbs, then the loss (in terms of reduced efficiency) may loom large and there will be a tendency to continue with energy efficient light bulbs. But if the default rule favors less efficient (and initially less expensive) light bulbs, then the loss in terms of upfront costs may loom large and there will be a tendency to favor less efficient light bulbs.⁸⁴

The Pension Protection Act (PPA) of 2006 draws directly on empirical findings by encouraging employers to adopt automatic enrollment plans. The PPA does this by providing nondiscrimination safe harbors for elective deferrals; by matching contributions under plans that include an automatic enrollment feature; and by providing protections from state payroll-withholding laws to allow for automatic enrollment. Building on these efforts, President Obama asked the Internal Revenue Service (IRS) and the Treasury Department to undertake initiatives to make it easier for employers to adopt such plans. The IRS has issued guidance that demonstrates how a 401(k) or SIMPLE IRA plan sponsor can adopt automatic enrollment for employees.⁸⁵ This guidance includes (a) pre-approved sample automatic enrollment language for 401(k) sponsors, (b) pre-approved sample automatic contribution language for SIMPLE IRA plan sponsors, and (c) guidance to help small employers add automatic enrollment to their SIMPLE IRA plans. In January 2010, the Employee Benefits Security Administration issued an Advanced Notice of Proposed Rulemaking seeking comment on whether it should modify 401(k) rules or ERISA rules to encourage greater use of opt-out rules for retirement plans.

Similarly, the Affordable Care Act of 2010 contains a provision calling for large employers automatically to enroll employees in health care plans, while also allowing opt-out. A related example is the Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA), which promotes simplicity by giving states new tools with which to enroll eligible but unenrolled children in Medicaid and CHIP. Among these tools is the option to develop and

⁷⁹See Orszag and Rodrieguez (2009); Papke, Walker, and Dworsky (2009); and Chiteji and Walker (2009).

⁸⁰ See Gale, et al. (2009); Dinner, et al. (2009); and Carroll, et al. (2009).

⁸¹ See Carroll et al. (2009); and Madrian and Shea (2001).

⁸² See McKenzie et al. (2006) and Madrian and Shea (2001).

⁸³ See Dinner et al. (2009).

⁸⁴ *Id.*

⁸⁵ The President's announcement can be found at <http://www.whitehouse.gov/blog/Weekly-Address-Labor-Day-and-Fair-Rewards-for-Hard-Work/>. Details on the automatic enrollment initiatives are available at <http://www.irs.gov/retirement/article/0,,id=212061,00.html>.

implement Express Lane Eligibility, which allows states to enroll and renew children in Medicaid and CHIP on the basis of eligibility findings by other government agencies.

Changes in default rules can also produce savings for taxpayers. In 2010, the Department of Homeland Security announced a change in the default setting for payroll statements from paper to electronic. By making electronic statements the default option (while giving employees the option to opt out in favor of paper), agencies are highly likely to reduce costs. It would be useful to identify other contexts in which sensible default rules, or automatic or simplified enrollment, might operate in the service of legal requirements and agreed-upon social goals.

3. Simplification

In the recent past, there have been numerous efforts by agencies, working with OMB, to simplify regulations and requirements. Consider the following examples:

- A series of steps have been taken recently toward simplifying the Free Application for Federal Student Aid (FAFSA), reducing the number of questions through skip logic and allowing electronic retrieval of information. Use of a simpler and shorter form is accompanied by a pilot initiative to permit online users to transfer data previously supplied electronically in their tax forms directly onto their FAFSA application.⁸⁶ These steps are intended to simplify the application process for financial aid and thus to increase access to college; such steps are expected to enable many students to receive aid, and attend college, when they previously could not do so. The Department of Education continues to consider ways to increase simplicity and to ease applications.
- To simplify the delivery of payments, the Social Security Administration has initiated the Direct Express card program. Under this program, Social Security and Supplemental Security Income recipients receive their money via debit cards. This program improves reliability and convenience and reduces costs and paperwork for both the SSA and recipients. (Other programs might build on this approach, considering the choice between an “opt in” and “opt out” design, and simplifying people’s choices. Some such programs might be designed to help vulnerable populations, including those without bank accounts, by giving them such accounts or the functional equivalent; the Treasury Department initiatives, described below, are a significant step in this direction.)
- In 2010, the Treasury Department proposed to take several steps to increase simplicity by moving to electronic systems. Perhaps most important, the Department proposed to make electronic payments to people receiving Social Security, Supplemental Security Income, Veterans, Railroad Retirement and Office of Personnel Management benefits. If the rule is finalized, individuals will be able to receive benefits through direct deposit into a bank account or the Direct Express debit card. In addition, businesses currently permitted to use paper Federal Tax Deposit coupons will be required to make those deposits electronically (thus saving an

⁸⁶ On the importance of such steps, see Bettinger et al. (2009).

- estimated \$65 million in the first five years). Finally, Treasury will eliminate the option to purchase paper savings bonds through payroll deductions. Payroll savers will be encouraged to continue their purchases through Treasury Direct, a web-based system that allows investors to buy and hold electronic savings bonds. It is estimated that the result of these steps will be to save over \$400 million in the first five years.
- In September 2009, the Occupational Safety and Health Administration published a notice of proposed rulemaking that would align its rules for labeling and identifying hazardous chemicals with the United Nations Globally Harmonized System of Classification and Labeling of Chemicals. By simplifying labeling requirements, this is expected to save costs for companies that have to comply with the regulation and make it easier for workers to understand the hazards of chemicals that they are using.
 - In 2010, OMB asked agencies for initiatives that would promote electronic filing through “fileable” forms; substitute electronic for paper signatures; reduce the frequency of filing; increase administrative simplification; and reduce burdens on small business.⁸⁷

4. Transparent Analysis

OMB has also worked closely with agencies to improve regulatory impact analysis, and to increase transparency, by promoting (1) clarity with respect to underlying assumptions and anticipated consequences, (2) prominent tabular presentations of costs and benefits, and (3) careful consideration of the comments offered by members of the public on proposed rules. For example, the Environment Protection Agency and the Department of Transportation included clear tabular presentations in their regulations covering fuel economy standards for model year 2012-2016 cars and light-duty trucks. The EPA’s presentations, including both an aggregated and disaggregated table, are as follows:

⁸⁷ See http://www.whitehouse.gov/omb/assets/inforeg/2010_icb_datacall.pdf; for the Department of Treasury initiative, see <http://www.ustreas.gov/press/releases/tg644.htm>.

**Table 2.1: EPA’s Estimated 2012-2016 Model Year
Lifetime Discounted Costs, Benefits, and Net Benefits
(Millions of 2007 dollars)**

3% Discount Rate	
Costs	\$51,500
Benefits	\$240,200
Net Benefits	\$188,700
7% Discount Rate	
Costs	\$51,500
Benefits	\$191,700
Net Benefits	\$140,200

**Table 2.2: EPA’s Estimated 2012-2016 Model Year Economic Impacts
(Millions of 2007 dollars)**

	2020	2030	2040	2050	NPV, 3%	NPV, 7%
Vehicle Costs	\$15,600	\$15,800	\$17,400	\$19,000	\$345,900	\$191,900
Fuel Savings	-\$35,700	-\$79,800	-\$119,300	-\$171,200	-\$1,545,600	-\$672,600
Benefits from Reduced CO ₂ Emissions at each assumed SCC value						
Avg SCC at 5%	\$900	\$2,700	\$4,600	\$7,200	\$34,500	\$34,500
Avg SCC at 3%	\$3,700	\$8,900	\$14,000	\$21,000	\$176,700	\$176,700
Avg SCC at 2.5%	\$5,800	\$14,000	\$21,000	\$30,000	\$299,600	\$299,600
95 th percentile SCC at 3%	\$11,000	\$27,000	\$43,000	\$62,000	\$538,500	\$538,500
Other Impacts						
Criteria Pollutant Benefits	unquantified	\$1,200- \$1,300	\$1,200- \$1,300	\$1,200- \$1,300	\$21,000	\$14,000
Energy Security Impacts (price shock)	\$2,200	\$4,500	\$6,000	\$7,600	\$81,900	\$36,900
Reduced Refueling	\$2,400	\$4,800	\$6,300	\$8,000	\$87,900	\$40,100
Value of Increased Driving	\$4,200	\$8,800	\$13,000	\$18,400	\$171,500	\$75,500
Accidents, Noise, Congestion	-\$2,300	-\$4,600	-\$6,100	-\$7,800	-\$84,800	-\$38,600
Quantified Net Benefits at each assumed SCC value						
Avg SCC at 5%	\$27,500	\$81,500	\$127,000	\$186,900	\$1,511,700	\$643,100
Avg SCC at 3%	\$30,300	\$87,700	\$136,400	\$200,700	\$1,653,900	\$785,300
Avg SCC at 2.5%	\$32,400	\$92,800	\$143,400	\$209,700	\$1,776,800	\$908,200
95 th percentile SCC at 3%	\$37,600	\$105,800	\$165,400	\$241,700	\$2,015,700	\$1,147,100

Similarly, the Department of Labor included the following table in its proposed rule protecting occupational safety with respect to working surfaces and protective equipment:

Table 2.3: Net Benefits and Cost Effectiveness of the Proposed Revision to OSHA’s Walking-Working Standards

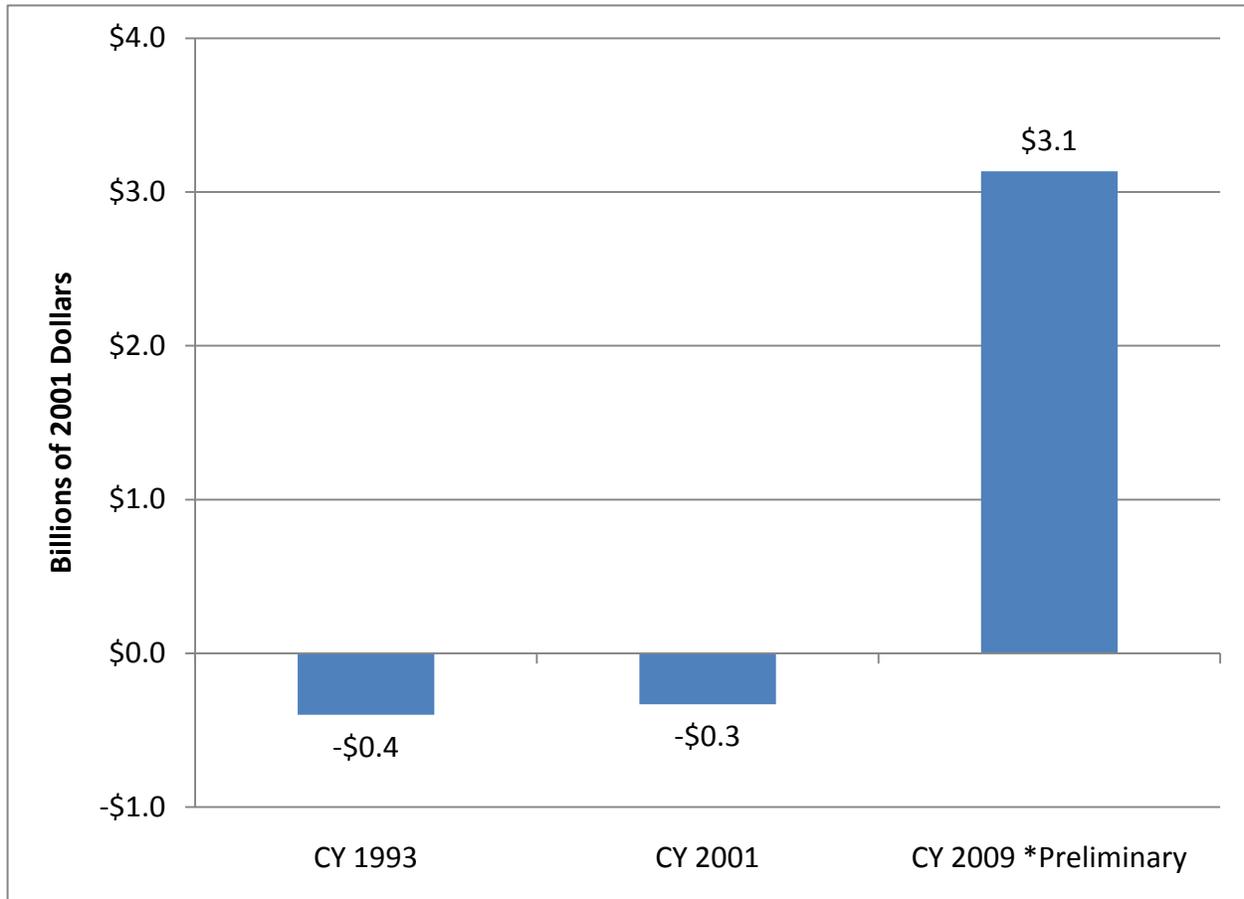
Annualized Costs	
§1910.22 General Requirements	\$15.7 million
§1910.23 Ladders	\$9.7 million
§1910.24 Step Bolts and Manhole Steps	\$3.7 million
§1910.27 Scaffolds	\$73.0 million
§1910.28 Duty to Have Fall Protection	\$0.09 million
§1910.29 Fall Protection Systems Criteria and Practices	\$8.4 million
§1910.30 Training Requirements	\$44.1 million
§1910.140 Fall Protection	\$18.5 million
Total Annual Costs	\$173.2 million
Annual Benefits	
Number of Injuries Prevented	3,706
Number of Fatalities Prevented	20
Monetized Benefits (assuming \$50,000 per injury and \$7.2 million per fatality prevented)	\$328.5 million
OSHA standards that are updated and consistent with voluntary standards.	Unquantified
Net Benefits (benefits minus costs)	\$155.4 million
Cost Effectiveness: Compliance with the proposed standards would result in the prevention of 1 fatality and 231 injuries for every \$10 million in costs, or alternatively, \$1.90 in benefits per dollar of costs.	

The Department of Transportation included a detailed table in its Notice of Proposed Rulemaking, “Enhanced Passenger Protections—Part 2”; we include that table as Appendix E here.

OMB and agencies have worked together to promote such transparency as a routine part of regulatory impact analysis. In part as a result of close attention to costs and benefits, the quantified benefits of final rules significantly exceeded the quantified costs for the calendar year 2009⁸⁸:

⁸⁸ The tabulation include only those rules for which reasonably complete monetized estimates of both benefits and costs are available. Figure 2-1 reports aggregate estimates by calendar year, and hence do not match estimates for “2001” and “2009” in figure 1-1 that are reported by fiscal year. As with the estimates in figure 1-1, we generally used agency estimates of central tendency when available and took midpoints when not available. Three qualifications are important: (1) the estimates for 2009 are preliminary; (2) the groundwork for a number of regulations finalized in one administration is done in a previous administration; (3) as discussed in other sections of

**Figure 2-1: Annual Net Benefits of Major Rules
First Calendar Year of an Administration (1/21 to 12/31)** ⁸⁹



In this Report, OMB offers four additional recommendations. First, OMB identifies several measures designed to meet analytical challenges, generally involving increased disclosure and transparency about the anticipated consequences of regulation. Second, OMB offers a brief discussion of disclosure as a regulatory tool, with particular emphasis on the need to attend to how people process information. Third, and with an emphasis on disclosure, OMB recommends exploration of certain low-cost approaches to the problem of childhood obesity; those approaches offer potential lessons for other programs and problems. Fourth, OMB draws

this Report, the aggregate estimates of costs and benefits, derived from different agencies' estimates and over different time periods, are subject to methodological inconsistencies and differing assumptions.

⁸⁹ The net benefits estimate for CY1993 is based on estimates reported in Figure 2-2 of the 2009 Report. The estimate for CY2001 is based on the one rule reviewed during that time period where reasonably complete monetized estimates of both benefits and costs are available—the DOT advanced air bag rule (OMB concluded review in December of 2001). In addition to the six major rules included in this Report, the estimate for CY2009 includes five major rules that will be listed and discussed in more detail in next year's Report (i.e., rules where OMB concluded review between 10/1/2009 and 12/31/2009 not included in this Report). It is for this reason that the CY2009 estimate should be considered preliminary.

on principles of open government to invite public suggestions about improvements in existing regulations, with particular reference to economic growth.

B. Analytic Challenges

With respect to regulatory impact analysis in particular, the 2009 Report recommended that (1) all significant regulations should be accompanied with clear, tabular presentations of both benefits and costs, including nonquantifiable variables; (2) consistent with agency resources and priority-setting, serious consideration should be given to retrospective analyses of the effects of especially significant regulations; (3) analysis should take account, where relevant, of the effects of the regulation on future generations and the least well-off; and (4) continuing efforts should be made to meet some difficult challenges posed by regulatory impact analysis, including treatment of variables that are difficult to quantify and monetize.

As the discussion in Chapter I suggests, (1) remains exceedingly important, and current practices can and should be improved. Some regulations are not accompanied by clear presentations of both benefits and costs, and in many cases, significant effects are neither quantified nor monetized. It is true that in some cases, a qualitative presentation is the most that can be offered in light of the limits of existing information, and in such cases, qualitative considerations should not be ignored. At the same time, transparency and accountability can be significantly improved if agencies (including independent agencies) make serious efforts at quantification. OMB recommends that such efforts should be undertaken.

OMB also believes that where regulations have effects on future generations or the least well-off, those effects are important to consider. (See the discussion below of the social cost of carbon.) Where, for example, regulation imposes significant burdens on or delivers significant benefits to low-income populations, or those suffering from serious adverse conditions (such as poor health), it may well be appropriate to identify those effects and to take them into account (to the extent permitted by law). Executive Order 12866 explicitly requires agencies to take account of “distributive impacts” and “equity.” As noted, agencies have explicitly taken account of those factors, for example in the context of rules lifting the ban on entry into the United States by those who are HIV-positive and eliminating lifetime limits on health insurance.

In this section, we offer several recommendations designed to help meet some analytical challenges. First, we make proposals for steps that might use transparency and public participation to improve analysis and as a result, regulations as well. Second, we briefly report on, and offer recommendations with respect to, recent interagency efforts with respect to the social cost of carbon (SCC); we emphasize the importance of accounting for new scientific and economic understandings.

1. Transparency and Analysis

In the Memorandum on Transparency and Open Government, issued on January 21, 2009, the President called for the establishment of “a system of transparency, public

participation, and collaboration.”⁹⁰ The memorandum elaborated the principles of such a system, designed to promote accountability and disclosure of information that “the public can readily find and use.” The memorandum noted that “[k]nowledge is widely dispersed in society, and public officials benefit from having access to that dispersed knowledge.” Implementing the President’s memorandum, the Open Government Directive of the Office of Management and Budget (OMB) requires a series of concrete measures to put into practice the commitments to transparency, participation, and collaboration.⁹¹

With respect to regulatory analysis, we recommend several steps that might promote those commitments. One goal is to promote accountability; another goal is to ensure that regulations are informed, to the extent feasible and consistent with law, by a careful analysis of the likely consequences. Once agencies and the public are so informed, it should be possible to reduce the dual risks of excessive and insufficient regulation.

a. Promoting Participation and Collaboration in the Regulatory Process

Regulations and their supporting justifications should be based on the open exchange of information and perspectives among public officials, experts in relevant disciplines, and the public as a whole. To promote that open exchange, agencies should provide the public with timely access to regulatory analyses and supporting documents (to the extent permitted by law and subject to valid privacy, confidentiality, security, or other restrictions), to ensure a meaningful opportunity for public comment. Existing technology, above all the Internet, should be enlisted to promote transparency and participation.

To that end, we recommend that to the extent feasible, agencies should publish information relevant to rulemaking, including underlying data, online and in downloadable format (in addition to any other planned or mandated publication methods). In recent guidance, OIRA required agencies to publish such information, to the extent feasible, on [regulations.gov](http://www.regulations.gov), in order to make the online record as complete as possible.⁹² Agencies should take all necessary steps to make relevant material available to the public for scrutiny and comment. Agencies should also ensure that all information provided to the public conforms to OMB “Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies.”⁹³

To the extent permitted by law and where feasible, agencies should also comply with the requirement in Executive Order 12866 that the public should receive a comment period of “not less than 60 days” for proposed regulatory actions [Section 6(a)(1)]. Consistent with that requirement, and because of the importance of promoting public participation in the rulemaking process, agencies should generally provide a similar period for public comment on their regulatory analyses and supporting documents. In some cases, of course, agencies must act expeditiously, perhaps because an interim final rule is required by statute. Even in such cases, an

⁹⁰ Available at: <http://www.gpoaccess.gov/presdocs/2009/DCPD200900010.pdf>

⁹¹ Available at: <http://www.openthegovernment.org/otg/OGD.pdf>

⁹² Available at: http://www.whitehouse.gov/omb/assets/inforeg/edocket_final_5-28-2010.pdf

⁹³ Available at http://www.whitehouse.gov/omb/fedreg_final_information_quality_guidelines/

agency should seek public comment and respond in a timely fashion to suggestions about potential improvements in rules.

b. Publicly Accessible Summaries and Tables With Key Information

Regulatory analysis should be made as transparent as possible by a prominent and accessible executive summary—written in a “plain language” manner designed to be understandable to the public—that outlines the central judgments that support regulations, including the key findings of the analysis (such as central assumptions and uncertainties). For all significant regulatory actions, agencies should provide a description of the need for the regulatory action and a clear summary of the analysis of costs and benefits, both qualitative and quantitative, as required under Executive Order 12866 Section 6(a)(3)(B)(i)-(ii).

If an agency has analyzed the costs and benefits of regulatory alternatives to the planned action (as is required for economically significant regulatory actions), the summary should include such information. If relevant and feasible, the summary should include information on the distributional impacts of regulations, identifying affected subpopulations (such as low-income and minority populations). To the extent feasible, the summary should be published online in a format that can be retrieved, downloaded, indexed, and searched by commonly used web search applications.

For all economically significant regulatory actions, we recommend that agencies should clearly and prominently present, in the preamble and in the executive summary of the regulatory impact analysis, one or more tables summarizing the assessment of costs and benefits required under Executive Order 12866 Section 6(a)(3)(C)(i)-(iii). The tables should provide a transparent statement of both quantitative and qualitative benefits and costs of the proposed or planned action as well as of reasonable alternatives. The tables should include all relevant information that can be quantified and monetized, along with relevant information that can be described only in qualitative terms. It will often be useful to accompany a simple, clear table of aggregated costs and benefits with a separate table offering disaggregated figures, showing the components of the aggregate figures. To the extent feasible in light of the nature of the issue and the relevant data, all benefits and costs should be quantified and monetized. To communicate any uncertainties, we recommend that the table should offer a range of values, in addition to best estimates, and it should clearly indicate impacts that cannot be quantified or monetized. If nonquantifiable variables are involved, they should be clearly identified. Agencies should attempt, to the extent feasible, not merely to identify such variables but also to signify their importance.

c. Simple, Straightforward Justification of Preferred Option

Consistent with Executive Order 12866 Section 6(a)(3)(C)(iii), the executive summary of the regulatory analysis should be accompanied by “an explanation of why the planned regulatory action is preferable to the identified potential alternative.” In addition, the explanation should demonstrate that the agency has selected the approach “that maximizes net benefits (including

potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity) unless a statute requires another regulatory approach” [Section 1(a)].

For all significant regulatory actions, agencies should provide a clear statement and account of their “reasoned determination that the benefits of the intended regulation justify its costs” [Section 1(b)(6)], to the extent permitted by law. They should not merely recite costs and benefits; they should also explain the grounds for that “reasoned determination,” in a way that members of the public including affected stakeholders, can understand. It is important to emphasize that this determination need not be based solely on monetized or quantifiable values; it may consider values that are hard or impossible to quantify in light of existing knowledge, as well as distributional effects, fairness, and considerations of equity (including, where relevant, considerations of environmental justice). If, for example, a regulatory action will prevent discrimination, or improve health outcomes for those with serious chronic or long-term conditions, those effects should be identified. Executive Order 12866 explicitly requires agencies to consider “distributive impacts” and “equity,” and some such effects are legitimately treated as benefits and hence are relevant to the conclusion that the benefits justify the costs.

Where nonquantified or nonmonetized variables are important to the agency’s determination, the agency should not merely recite them but should attempt to order and prioritize them. Consistent with established practice, the agency should seriously consider engaging in “breakeven analysis,” explaining how high the nonquantified or nonmonetized benefits would have to be in order for the benefits to justify the costs.⁹⁴ The determination and its underlying assumptions should be transparent to the public, and to the extent feasible and consistent with law, subject to public comment through the rulemaking process. Where the agency has proceeded even though the benefits do not justify the costs, and where the agency has not selected the approach that maximizes net benefits, it should carefully explain its reasoning (as, for example, where a statute so requires).

d. Transparent Analysis of Regulatory Alternatives

Executive Order 12866 directs agencies to analyze “potentially effective and reasonably feasible alternatives to the planned regulation, identified by the agencies or the public (including improving the current regulation and reasonably viable nonregulatory actions).” To promote accountability and transparency, agencies should provide a clear description of the principal alternatives. For economically significant actions, that description should include, to the extent feasible, an accounting of the costs and benefits of those alternatives, so as to inform the agency’s judgment and promote public scrutiny of its preferred option.

In exploring alternatives, the agency should promote a clear justification of its selection of that option, by reference to its analysis of the likely consequences of the alternative approaches. Consistent with Executive Order 12866, the agency should give careful consideration to the least burdensome alternative for achieving its goals and should select the approach that maximizes net benefits (to the extent permitted by law).

⁹⁴ Breakeven analysis has some limitations. For example, if a rule has several different types of nonmonetized benefits, breakeven analysis will be difficult to perform.

e. Reducing Uncertainty and Promoting Coordination

Executive Order 12866 provides that “Each agency shall avoid regulations that are inconsistent, incompatible, or duplicative with its other regulations or those of other Federal agencies.” It also requires regulations to be “simple and easy to understand.” To promote consistency and coordination, and to avoid uncertainty, agencies should endeavor to harmonize their programs and requirements, and should work with other agencies to ensure, to the extent feasible and consistent with law, that regulatory requirements are not “inconsistent, incompatible, or duplicative.” To obtain relevant information, to promote planning, and to reduce uncertainty, agencies should, where appropriate, provide the public and affected stakeholders with a clear understanding, in advance, of potential rulemaking action.

2. Social Cost of Carbon

The social cost of carbon (SCC) is an estimate of the monetized cumulative future damages associated with an incremental increase in carbon emissions in a given year (SCC). The SCC is intended to include (but is not limited to) changes in net agricultural productivity, harm to human health, property damages from increased flood risk, and destruction of ecosystems due to climate change associated with carbon dioxide emissions.

In 2009 and 2010, an interagency group met on a regular basis to discuss the underlying issues. The group included representatives of the Council of Economic Advisers, the Council on Environmental Quality, the Environmental Protection Agency, the National Economic Council, the Office of Energy and Climate Change, the Office of Management and Budget, the Office of Science and Technology, and the Departments of Agriculture, Commerce, Energy, Transportation, and Treasury. Technical experts from these agencies explored the scientific and economic literatures in relevant fields, discussed public comments, and examined key model inputs and assumptions. Because future generations are expected to be adversely affected by climate change, the effects on those generations are of course included in existing models. We offer a very brief outline here; for the full report of the interagency working group, see http://www1.eere.energy.gov/buildings/appliance_standards/residential/pdfs/htgp_finalrule_app16a.pdf.

The central goal of the working group was to allow agencies to incorporate the social benefits of reducing carbon dioxide (CO₂) emissions into cost-benefit analyses of regulatory actions that have small, or “marginal,” impacts on cumulative global emissions. For example, energy efficiency, fuel economy, and related regulations will result in reductions in greenhouse gas emissions, and under Executive Order 12866, those reductions should be quantified and turned into monetary equivalents for purposes of regulatory impact analysis. Building on the scientific and economic literature, and incorporating a range of uncertainties, the interagency group selected four SCC values for use in regulatory analyses. Three values are based on the average SCC from three existing models, at discount rates of 2.5, 3, and 5 percent, with the central value at 3 percent. The fourth value, which represents the 95th percentile SCC estimate

across all three models at a 3 percent discount rate, is included to represent higher-than-expected impacts from temperature change further out in the tails of the SCC distribution.

Table 2-1 presents the estimates of the social cost of carbon under these various assumptions. The table shows that if we assume a 3% discount rate and an average impact from climate change, each ton of carbon emissions prevented by a regulation in 2010 will prevent \$21.4 in future costs due to global warming.

Table 2-3: Social Cost of CO₂, 2010 – 2050 (2007 dollars)

Discount Rate	5%	3%	2.5%	3%
Year	Avg	Avg	Avg	95 th
2010	4.7	21.4	35.1	64.9
2015	5.7	23.8	38.4	72.8
2020	6.8	26.3	41.7	80.7
2025	8.2	29.6	45.9	90.4
2030	9.7	32.8	50.0	100.0
2035	11.2	36.0	54.2	109.7
2040	12.7	39.2	58.4	119.3
2045	14.2	42.1	61.7	127.8
2050	15.7	44.9	65.0	136.2

Consistent with the discussion in this chapter, the interagency working group sought (1) to promote transparency and clarity with respect to underlying assumptions and judgments and (2) to offer a clear discussion of gaps in existing information and understandings. The report of the group was preceded by an interim report, which was made public and subject to a period of comment in connection with the national policy on fuel economy and greenhouse gas emissions from DOT and EPA; public comments were carefully considered during the development of the group’s report.

As the report emphasizes, the scientific and economic understandings of the underlying questions are constantly evolving and the current judgments are subject to change as new answers emerge. On many relevant issues, the existing literature leaves significant gaps. These gaps include, (1) incorporation of the possibility of adaptation (which may reduce costs); (2) potentially significant adverse effects included either not at all or only imperfectly on existing models (e.g., species extinction); and (3) worst-case scenarios and the risk of catastrophe. Both scientific and economic thinking continue to change on these issues, and on some of them, there is significant controversy. It may also be important to acknowledge the risk of “carbon leakage”; if industry migrates to foreign nations, anticipated emissions reductions might not occur.⁹⁵ Following the views of the interagency working group, we recommend that the SCC should be revisited as more is learned about the key questions.

⁹⁵ Hanna (2010) offers some suggestive evidence.

C. Disclosure as a Regulatory Tool

Agencies often impose disclosure requirements instead of, or in addition to, mandates or bans. For example, the EPA requires automobile companies to disclose miles per gallon (MPG) ratings for new vehicles, and the FDA requires most food producers to include a standardized Nutrition Facts panel on their products. The goal of providing such information is to ensure that people have relevant information at the proper moment in time, usually when they make purchase decisions. It is important to distinguish between *summary disclosure*, often provided at the point of purchase, and *full disclosure*, typically provided on the Internet. Both forms of disclosure have important uses. We believe that disclosure policies have considerable promise (for consumers, investors, and others), and we recommend both their continued use and more systematic investigation of such policies and their likely consequences. A potential advantage of disclosure strategies is that they are often less burdensome and coercive than more intrusive approaches and can allow flexibility on the part of both producers and consumers of information. Such strategies maintain freedom of choice (not unlike default rules). In the 2009 Report, we linked the design of disclosure policies to recent empirical work in social science, including behavioral economics and psychology. The guidance issued in June 2010, and included as Appendix D here, is intended to offer relevant principles. We offer some elaboration here.

There is, of course, a large question about the circumstances in which disclosure is an adequate or valuable substitute for mandates or bans – and the circumstances in which disclosure is not sufficient. One issue is the market failure that calls for regulation in the first place. Informational remedies make most sense when the market failure involves an absence of information, and even in such cases, informational remedies may not be either appropriate or sufficient (as, for example, where its costs do not justify its benefits, or where a ban turns out to be justified). If the goal of regulation is to prevent harms to third parties (as, for example, in the case of pollution), disclosure is unlikely to be enough; the appropriate response to externalities is not merely to provide information. Here as elsewhere, it is important to “match” the regulatory failure with the tool that is best designed to remedy that failure. A large and impressive literature investigates that question.⁹⁶ Building on the June 2010 guidance, our goal here is to explore how disclosure policies should be designed, not to suggest that disclosure policies are always or generally the optimal regulatory tool. Of course it may be possible, or best, to combine disclosure with other approaches, rather than to see them as substitutes.

Several points are clear. Effective disclosure policies are empirically informed and sensitive to how people process information. Unduly complex and detailed disclosure requirements may fail to inform consumers; such information may not be read at all, and if it is read, it may not have an effect on behavior. To be effective, disclosure should be clear, simple, meaningful, timely, and salient. Agencies often simplify and display complicated information through summary measures, such as scales, five-star ratings, percentage daily allowances, and so on. In order for these approaches to be effective, agencies should ensure that users understand both what they mean and how to incorporate the information into their choices and decisions. It is also clear that when people are informed of the benefits or risks of engaging in

⁹⁶ See, e.g., Breyer (1982).

certain behavior, they are far more likely to engage in corrective action *if they are also provided with clear, explicit guidance on how to do so*. For example, those who are informed of the benefits of receiving a vaccine show a greater tendency to be vaccinated if they are simultaneously given detailed plans and maps describing where to go.⁹⁷ In many domains, the identification of a specific, unambiguous path has a decisive effect on social outcomes; complexity or vagueness can ensure inaction, even when people are informed about risks and potential improvements. It follows that a general instruction that offers abstract guidance (“drive safely”) is far less helpful than specificity (“buckle your seatbelt” or “don’t text while driving”).

Before choosing a disclosure design, agencies should study the actual effects of alternative designs. To the extent possible and warranted by a lack of sufficient current information, agencies should develop several alternative methods of disclosure and pilot test them before implementing a larger program. Agencies should also give greater weight to scientifically valid experiments than to focus group testing (which, as noted above, may well be unreliable as a guide to behavior and which should, in any case, attempt to mimic actual choices rather than simply asking participants for their preferences).

Some disclosure requirements are designed to inform consumers at the point of purchase, often with brief summaries of relevant information. Such “summary disclosures” are often complemented with more robust information, typically found on public or private websites. Consider the following examples:

- In May 2010, the Department of Health and Human Services issued an interim final rule that calls for the establishment of a web portal (healthcare.gov) that provides consumers and small businesses with information about insurance coverage options available to them in their state. It enables users to “Find Insurance Options,” “Learn About Prevention Tips,” “Compare Care Quality,” and “Understand the New Law.” Healthcare.gov is the first website to collect both public and private health insurance options across the nation in a single place. The insurance options finder automatically sorts through a large catalog of options to help identify the best options for consumers. The resulting improvements in access to information should facilitate better decisions. In many contexts, the Department itself is using transparency to inform choices and to promote accountability (see, for example, healthcompare.gov).
- The EPA offers a great deal of material on fuel economy online, going well beyond the information that is available on stickers.⁹⁸
- The Nutrition Facts label is supplemented by a great deal of nutritional information available on the FDA and USDA websites.
- The Centers for Disease Control (CDC) provide detailed online accounts of the risks associated with smoking.

Approaches of this kind provide material that can be used by private individuals and institutions, adapting the information and repackaging or presenting it in new and helpful ways. We recommend continued efforts to disclose relevant information to the public, both through

⁹⁷ H. Leventhal, et al. (1965). For a popular treatment with citations to the academic literature, see Heath and Heath (2010).

⁹⁸ See <http://www.fueleconomy.gov>.

summary disclosure and through full disclosure, in the belief that such efforts can help promote regulatory goals and improve the operation of markets. We will return to these points in the context of childhood obesity.

In addition to informing consumers, disclosure requirements can give manufacturers an incentive to reformulate their products. For example, FDA has required that saturated fat and dietary cholesterol be listed on the food label since 1993. Because adding trans fat has been added on the Nutrition Facts panel (required by January 1, 2006), consumers are now in a position to know how much of all three -- saturated fat, trans fat, and cholesterol -- are in the foods they choose. Identifying saturated fat, trans fat, and cholesterol on the food label gives consumers information to enable them to make healthy food choices that reduce the risk of coronary heart disease (CHD). Furthermore, manufacturers now have a clear way, and an incentive, to eliminate trans fat in their products and substitute healthier oils (and thus to distinguish their products as having “zero grams of trans” at the point of purchase).

The disclosure requirement, coupled with significant media attention on this issue (as well as consumer education initiatives), encouraged many manufacturers to eliminate trans fat from packaged food products. We recommend further attention to the incentive effects of disclosure requirements and to the circumstances under which those incentives are likely to have desirable effects – a point that relates directly to the next topic.

D. Childhood Obesity

Over the past three decades, childhood obesity rates in U.S. have tripled, and nearly one in three children in the U.S. is now overweight or obese. Obesity has serious, long-term consequences. The incidence of type II diabetes has increased in U.S. children in parallel with the rising prevalence of obesity, and obesity is associated with a number of chronic health problems, including hypertension, heart disease, asthma, and orthopedic disorders. Because some promising approaches to that problem –including disclosure remedies – may have a regulatory component, it is appropriate to discuss the problem here; OMB works closely with agencies on regulatory actions associated with nutritional labeling and health risks. (The FDA’s front-of-package labeling initiative can be found at <http://www.fda.gov/Food/LabelingNutrition/ucm202726.htm>.)

Obesity is a public health problem that imposes significant private and social costs.⁹⁹ When efforts are made to reduce those costs, it is important to investigate the likely effects of alternative methods of intervention, including those that involve disclosure, changes in the social environment that make healthy foods more convenient to see and to purchase, and public-private partnerships intended to affect social norms.¹⁰⁰ Obesity results in part from individual choices, including those of parents -- consuming more calories than are expended leads to weight gain -- and its incidence varies significantly over time and differs across populations. Studies on obesity consistently report a higher prevalence of obesity in African-Americans and Mexican Americans

⁹⁹ See, e.g., Elston et al. (2007), pp.172-74.

¹⁰⁰ Philipson and Posner (2008).

compared with the white, non-Hispanic population;¹⁰¹ there are also high levels of obesity among Native-Americans.

Reductions in obesity, and associated health problems, have been a priority for a number of government agencies, and some of the most prominent approaches have substantial regulatory components. On February 9, 2010, First Lady Michelle Obama launched a nationwide campaign called *Let's Move*. The campaign is focused on ending childhood obesity within a generation, with the belief that children born today should reach adulthood at a healthy weight. The campaign is expected to engage all sectors affecting the health of children to achieve this national goal, to spur private action, and to benefit from public-private partnerships; and it will provide schools, families, and communities with appropriate tools.

The *Let's Move* campaign has four central goals: (1) increasing information for parents and caregivers about nutrition and physical activity, (2) improving the quality of food in schools, (3) making healthy foods more affordable and accessible, and (4) focusing additional attention on physical activity. (The full Report of the Task Force on Childhood Obesity, with numerous recommendations designed to promote those goals, can be found at http://www.letsmove.gov/pdf/TaskForce_on_Childhood_Obesity_May2010_FullReport.pdf.) Achievement of all of these goals requires attention to relevant empirical work in social science, including behavioral economics and psychology, which emphasizes the importance of both social norms and easy accessibility of healthy foods, and which draws attention to the potentially significant effects of small interventions. For example, people are more likely to eat a great deal of unhealthy, high-calorie foods if those in their social network are eating a great deal of such foods. Moreover, people are more likely to select healthy foods if it is convenient to find them and if they are salient and visible.

In short, eating choices are partly a function of purely material incentives (including the prices of various foods); but they are also affected by prevailing social norms and importantly, by the social environment (which can make either healthy or unhealthy foods easily accessible). Of special relevance, for present purposes, is (1), and in particular the commitment of the Food and Drug Administration (FDA) to investigate new nutritionally sound and consumer-friendly front-of-package labeling.

Although reducing childhood obesity has been among the nation's health goals for some time, achieving significant progress has been challenging. The principal interventions – actual or proposed – have been diverse.¹⁰² Some of them involve the use of economic incentives. Others involve changes in either social norms or the social environment. We know, for example, that people are affected by the actions of other people, and it might be possible to move behavior in the direction of healthier eating as a result of purely private action, or public-private partnerships, that help spur better norms. We also know that apart from incentives and norms, the social environment much matters, and private and public institutions can work together to promote an environment that promotes, and does not discourage or penalize, healthier choices.

¹⁰¹ Studies on obesity consistently report a higher prevalence of obesity in African-Americans and Mexican Americans compared with the white, non-Hispanic population. See Galvez et al, (2003).

¹⁰² See, e.g., Acs, et al (2007).

Many people have suggested the potential importance of improved education and information disclosure, including labeling and advertising. A central question is how to design such approaches to promote effectiveness in improving nutritional and health outcomes. Consumer responses to labeling are likely to depend on how information is provided and in particular on three factors: (1) the clarity, simplicity, and salience of the information; (2) the substantive content of the information; and (3) whether the relevant consumers are attentive to the information provided. Consistent with behavioral findings, we would emphasize the central importance of promoting clarity, simplicity, and salience. Also consistent with those findings, and reflecting the importance of how, not merely whether, information is disclosed, the literature is not conclusive on the influence of nutrition information on food consumption.

In many domains, the Federal Government (often alongside private groups) has conveyed information to people with the goal of encouraging informed choices. This type of intervention has had significant success outside of the obesity context.¹⁰³ See the discussion above and consider, for example, the Surgeon General’s 1964 campaign to warn people of the harms of tobacco; the anti-drunk driving movement inspired by Mothers Against Drunk Driving; the efforts to encourage people to buckle their seatbelts (helping to produce substantial increases in buckling) and (more recently) not to text while driving; and information about the danger of high cholesterol.¹⁰⁴

In the domain of nutritional choices, the literature on the effects of labeling leaves many open questions, but it suggests that when information is both salient and easy to understand, consumers tend to use it.¹⁰⁵ In particular, studies have shown that a person’s food consumption can be significantly influenced by advertisements, promotions, and container size; the latter has a surprisingly large effect on how much people eat (perhaps because it establishes a kind of “default rule” with respect to eating).¹⁰⁶ More generally, studies show that even when labeling does not affect *what* people eat, it may greatly influence *how much* people eat.¹⁰⁷

Recall as well that in many domains, the identification of a specific, unambiguous path can have an important effect on social outcomes; complexity, abstraction, or vagueness might ensure ineffectiveness or inaction, even when people are properly educated and informed about current risks and potential improvements. For nutrition and control of obesity, it is extremely important to offer people a clear and specific sense of appropriate steps, rather than to offer general education or ambiguous instructions (such as “obesity creates health risks” or “eat healthy”).¹⁰⁸

¹⁰³ For discussion, see Fung et al., (2007).

¹⁰⁴ Cutler (2004) hypothesizes that national interventions may have more salient effects than individual or community interventions because of some combination of (1) permeability (people prefer not to change their behavior and inertia is strong), (2) externalities (making more obvious that people doing the activities were harming others in addition to themselves), and (3) social influences (people judge appropriate behavior in part on the basis of what others are doing).

¹⁰⁵ Moorman (1990); Moorman (1996).

¹⁰⁶ See Wansink (2007).

¹⁰⁷ Garg, Wansink, and Inman 2007.

¹⁰⁸ See Heath and Heath (2010).

We recommend that in this domain, serious efforts should be made to identifying clear, simple, easily-applied rules or guidelines that people might use to reduce the risk of childhood obesity. We also recommend that careful consideration should be given to the various points sketched here in developing the best methods of informing people, including parents, of relevant facts about the nutritional content of food, so as to promote informed choices.

E. Soliciting Public Recommendations on Regulation and Economic Growth

In the 2009 Report, OMB emphasized the importance of open government and in particular of obtaining access to “dispersed knowledge” about how to improve regulation. The Report said, “[i]f members of the public have fresh evidence or ideas about improvement of existing regulations – including expansion, redirection, modification, or repeal – it is important to learn about that evidence or those ideas. A general goal is to connect the interest in sound analysis with the focus on open government, in part by promoting public engagement and understanding of regulatory alternatives.” The Open Government Directive issued by OMB in December 2009 emphasizes the importance of transparency, participation, and collaboration, and calls for concrete steps to promote these goals.

To promote public engagement, OMB has requested public suggestions about regulatory changes that might serve to promote economic growth, with particular reference to increasing employment, innovation, and competitiveness.¹⁰⁹ OMB is particularly interested in identifying both new initiatives and current regulations that might be modified, expanded, or repealed in order to promote those goals. Consistent with Executive Order 12866, OMB sought suggestions for regulatory reforms that have significant net benefits, that might increase exports, and that might promote growth, innovation, and competitiveness for small business, perhaps through increasing flexibility. OMB will carefully consider public suggestions for achieving the relevant goals. When weighing these suggestions, OMB will consider the likely long-term costs and benefits of the changes, not just short-term economic effects.

¹⁰⁹ “Draft 2010 Report to Congress on the Benefits and Costs of Federal Regulations.” Federal Register 75: 82 (April 29, 2010) pp. 22630-1.

CHAPTER III: UPDATE ON THE IMPLEMENTATION OF OMB'S INFORMATION QUALITY INITIATIVES

Objective and high-quality analysis can produce better regulatory decisions. OMB and the regulatory agencies have taken a number of steps to improve the rigor and transparency of analysis supporting public policy. Of particular importance in the context of regulatory analysis is OMB's Circular A-4, "Regulatory Analysis," which was issued in 2003 after public comment, interagency review, and peer review. Circular A-4 defines good regulatory analysis and standardizes how benefits and costs of Federal regulatory actions are measured and reported. This guidance is available at: <http://www.whitehouse.gov/omb/circulars/a004/a-4.pdf>.

In this chapter of the Report, we provide a brief update on the 2009 Agency reporting under the 2002 Information Quality Guidelines and the 2004 Information Quality Bulletin for Peer Review.

A. Government-Wide Information Quality Guidelines

Section 515 of the Treasury and General Government Appropriations Act, 2001 (Pub. L. No. 106-554, 44 U.S.C. § 3516 note), commonly known as the "Information Quality Act" (IQA), requires OMB to develop government-wide standards "for ensuring and maximizing" the quality of information disseminated by Federal agencies.

To implement the IQA, OMB issued final government-wide guidelines on February 22, 2002 (67 FR 8452), and each Federal agency is charged with promulgating its own Information Quality Guidelines. OMB has facilitated the development of these agency guidelines, working with the agencies to ensure consistency with the principles set forth in the government-wide guidelines. By October 1, 2002, almost all agencies released their final guidelines, which became effective immediately. The OMB government-wide guidelines require agencies to report annually to OMB providing information on the number and nature of complaints received by the agency and how such complaints were resolved.

In August 2004, the OIRA Administrator issued a memorandum to the President's Management Council requesting that agencies post all Information Quality correspondence on agency web pages to increase the transparency of the process.¹¹⁰ In their FY 2004 Information Quality Reports to OMB, agencies provided OMB with the specific links to these web pages and OMB began providing this information to the public in our 2005 update on Information Quality.¹¹¹ This increase in transparency allows the public to view all correction requests, appeal requests, and agency responses to these requests. The web pages also allow the public to track the status of correction requests that may be of interest. An updated list of agency web pages is provided in Appendix F of this Report.

¹¹⁰See OMB, *Memorandum for the President's Management Council (2004)* http://www.whitehouse.gov/omb/info/foreg/info_quality_posting_083004.pdf.

¹¹¹See OMB, *Validating Regulatory Analysis: 2005 Report to Congress on the Costs and Benefits of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities (2005)*, http://www.whitehouse.gov/omb/info/foreg/2005_cb/final_2005_cb_report.pdf.

In our 2003 Report, OMB presented a detailed discussion of the IQA and its implementation, including a discussion of perceptions and realities, legal developments, methods for improving transparency, suggestions for improving correction requests, and the release of the OMB Information Quality Bulletin for Peer Review.¹¹²

This section of the chapter provides a summary of the current status of correction requests received in FY 2009, as well as an update on the status of requests received in FY 2004, FY 2005, FY 2006, FY 2007, and FY 2008. An update on legal developments is also provided. Our discussion of the individual correction requests and agency responses is minimal because all correspondence between the public and agencies regarding these requests is publicly available on the agencies' Information Quality web pages.

1. Request for Correction Process

a. New Correction Requests and Appeal Requests Received by the Agencies in FY 2009

Table 4-1 below lists the departments and agencies that received requests for correction FY 2009. In FY 2009, a total of 17 requests for correction were sent to nine different departments and agencies. FY 2009 was the first year correction requests were sent to the Department of Veterans Affairs and the Office of National Drug Control Policy (ONDPC). In addition, three appeals associated with these 17 requests were filed in FY 2009. Two appeals were sent to the Forest Service, within USDA, and one appeal was sent to ONDPC. As some of the agency's 17 responses were sent at the end of FY 2009, or were still pending at the end of FY 2009, there is a possibility that additional appeals may be filed.

Table 4-1: Departments and Agencies that Received Information Quality Correction Requests in FY 2009

Agency	Number of FY09 Correction Requests
Department of Agriculture (USDA)	3
Department of Commerce	1
Department of Health and Human Services	2
Department of the Interior	5
Department of Treasury	1
National Aeronautics and Space Administration	1

¹¹²See OMB, *Information Quality, a Report to Congress FY 2003*, (2003), http://www.whitehouse.gov/omb/inforeg/fy03_info_quality_rpt.pdf, and OMB, *Validating Regulatory Analysis: 2005 Report to Congress on the Costs and Benefits of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities*, (2005) http://www.whitehouse.gov/omb/inforeg/2005_cb/final_2005_cb_report.pdf.

Agency	Number of FY09 Correction Requests
Environmental Protection Agency	2
Department of Veterans Affairs	1
Office of National Drug Control Policy	1
Total	17

Further, as shown below in Table 4-2, four additional appeals have been filed in FY 2009. These appeal requests were sent to the agencies following receipt of responses to correction requests that were responded to in FY 2008. One appeal was sent to the Bureau of Reclamation within the Department of Interior regarding a request relating to a biological assessment on the Central Valley Project and State Water Project Operations Criteria and Plan and the three other appeals were sent to the Environmental Protection Agency following responses related to asbestos fibers, the ozone air quality standards, and groundwater cleanup maps.

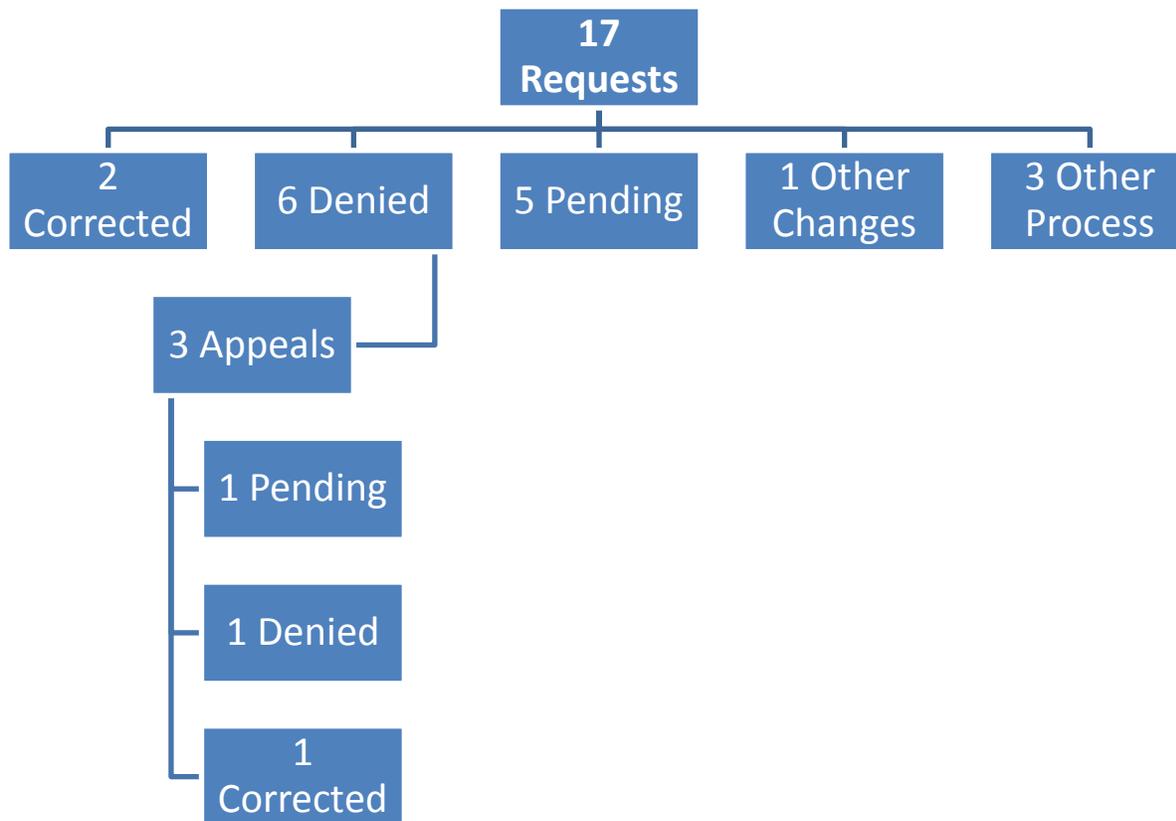
Table 4-2: Departments and Agencies that Received Information Quality Appeals Requests in FY 2009, Following Responses to Requests Initiated in FY 2008

Agency	Number of FY09 Appeals
Department of Interior	1
Environmental Protection Agency	3
Total	4

The correction requests received in FY 2009 were quite diverse. For instance, the Colorado Wool Growers Association requested that the Forest Service retract a report related to the disease related conflicts between domestic sheep and goats and Bighorn Sheep; the Centers for Disease Control, within the Department of Health and Human Services, was asked by the International Hyperbaric Medical Association to correct information relating to webpage information discussing influenza deaths; and the Bureau of Land Management, within the Department of Interior was asked by the Questar Exploration and Production Company to correct information in a report relating to the leasing of parcels in Utah. For further details, links to all the correction requests, and the complete agency responses, can be found on the agencies IQ web pages.

Figure 4-1 shows the status of the 17 FY 2009 correction requests and three appeals. As mentioned above, for details relating to the specific requests, including agency responses, we encourage readers to visit agency Information Quality websites.¹¹³

Figure 4-1: Status of IQ Correction Requests Received in FY 2009



As noted in the 2007 Report,¹¹⁴ OMB cautions readers against drawing any conclusions about trends or year-to-year comparisons because agency procedures for classifying correction requests are still evolving. However, we note that in FY 2003 there were 48 correction requests, in FY 2004 there were 37 correction requests, in FY 2005 there were 24 correction requests, in FY 2006 there were 22 correction requests, in FY 2007 there were 21 correction requests and in FY 2008 there were 14 correction requests.

¹¹³ A listing of webpages for Agency IQ correspondence is available in Appendix D of OMB, *2008 Report to Congress on the Benefits and Costs of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities*. (2008). This report can be found at: http://www.whitehouse.gov/omb/assets/information_and_regulatory_affairs/2008_cb_final.pdf.

¹¹⁴ See OMB, *2007 Report to Congress on the Costs and Benefits of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities* (2007), http://www.whitehouse.gov/omb/infoereg/2007_cb/2007_cb_final_report.pdf.

b. Status of Outstanding Correction Requests Received by the Agencies in FY 2003-2008

At the close of FY 2008, 12 Information Quality correction request responses and 4 appeal responses remained pending from the agencies. The pending correction requests were initiated in FY 2004, FY 2005, FY 2006, FY 2007, and FY 2008. Figure 4-2 shows the status of those outstanding correction request responses at the close of FY 2009. Agencies responded to six of these correction requests and continued to work on responses to the remaining six at the end of FY 2009. All the pending requests are request to the Army Corps of Engineers, within the Department of Defense. As is shown below, there were two appeals that were sent after the agencies responded. One appeal was sent to the Bureau of Reclamation and a response was still pending at the end of FY 2009. One appeal was sent to EPA regarding the characterization of asbestos fibers and this appeal was denied.

Figure 4-2: FY 2008 Status of Pending Correction Requests from FY 2004, FY 2005, FY 2006, FY 2007, and FY 2008

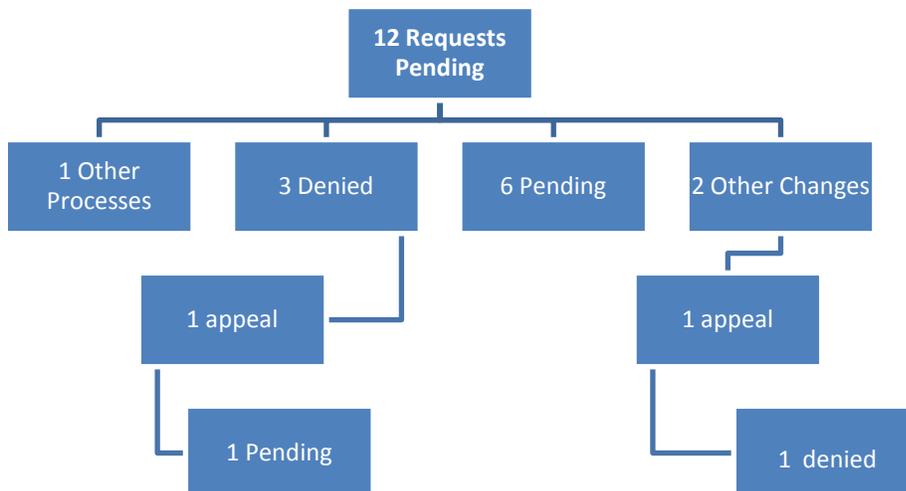
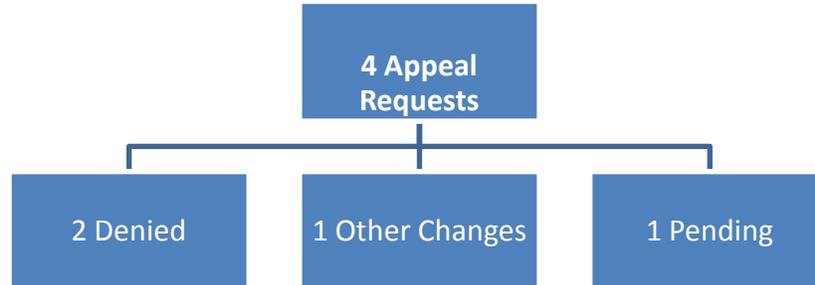


Figure 4-3 below gives the status of the four appeal requests pending at the close of FY 2008. The National Institute of Standards and Technology, within the Department of Commerce denied an outstanding appeal regarding a World Trade Center fire report, and the U.S. Geological Survey, within the Department of Interior denied an appeal regarding pythons. In responding to an outstanding appeal regarding sampling at a lead smelter, in lieu of correcting data, the EPA committed to revisions of a soil sampling standard operating procedure in order to enhance the documentation and consistency of sampling procedures. Correspondence showing the agencies responses to these requests is publicly available on the agencies' Information Quality web pages. In addition, the Federal Communications Commission continued to work on the appeal they received in FY 2007.

Figure 4-3: FY 2009 Status of Pending Appeal Requests from FY 2008



2. Legal update

As discussed in the final 2009 Report, litigation has arisen regarding the legal issue of whether agency responses to IQA requests for correction are subject to judicial review under the IQA and the Administrative Procedure Act (APA). In this litigation, the courts concluded that the agency responses in those cases were not subject to judicial review under the IQA and the APA. *See Salt Institute v. Leavitt*, 440 F.3d 156, 159 (4th Cir. 2006); *Americans for Safe Access v. United States Dep't of Health and Human Servs.*, No. C 07-01049 WHA, 2007 U.S. Dist. LEXIS 89257, at *11 (N.D. Cal. Nov. 20, 2007); *Americans for Safe Access v. United States Dep't of Health and Human Servs.*, No. C 07-01049 WHA, 2007 U.S. Dist. LEXIS 55597, at *14 (N.D. Cal. July 24, 2007); *In re Operation of the Missouri River System Litigation*, 363 F. Supp. 2d 1145, 1174-75 (D. Minn. 2004), *vacated in part and aff'd in part on other grounds*, 421 F.3d 618 (8th Cir. 2005). The district court's ruling in *Americans for Safe Access* is currently pending on appeal. *Americans for Safe Access v. United States Dep't of Health and Human Servs.*, No. 07-17388 (9th Cir.). In addition, the United States Court of Appeals for the District of Columbia Circuit recently determined that OMB's interpretation regarding "dissemination" (and, in particular, the exclusion from the definition of dissemination of documents "prepared and distributed in the context of adjudicative proceedings") was a reasonable interpretation of the statute. *Prime Time v. Vilsack*, 599 F.3d 678 (D.C. Cir. 2010).

B. Information Quality Bulletin for Peer Review

In keeping with the goal of improving the quality of government information, on December 16, 2004, OMB issued the Final Information Quality Bulletin for Peer Review (the

Peer Review Bulletin).¹¹⁵ The Peer Review Bulletin requires executive agencies to ensure that all “influential scientific information” they disseminate after June 16, 2005 is peer reviewed.

“Influential scientific information” is defined as “scientific information the agency reasonably can determine will have or does have a clear and substantial impact on important public policies or private sector decisions.”¹¹⁶ The term “influential” is to be interpreted consistently with OMB’s government-wide Information Quality Guidelines and the information quality guidelines of each agency.

One type of scientific information is a scientific assessment. For the purposes of the Peer Review Bulletin, the term “scientific assessment” means an evaluation of a body of scientific or technical knowledge, which typically synthesizes multiple factual inputs, data, models, assumptions, and/or applies best professional judgment to bridge uncertainties in the available information.¹¹⁷

The Peer Review Bulletin describes the factors that should be considered in choosing an appropriate peer review mechanism and stresses that the rigor of the review should be commensurate with how the information will be used. It directs agencies to choose a peer review mechanism that is adequate, giving due consideration to the novelty and complexity of the science to be reviewed, the relevance of the information to decision making, the extent of prior peer reviews, and the expected benefits and costs of additional review. When deciding what type of peer review mechanism is appropriate for a specific information product, agencies should consider at least the following issues: individual versus panel review; timing; scope of the review; selection of reviewers; disclosure and attribution; public participation; disposition of reviewer comments; and adequacy of prior peer review.

The Peer Review Bulletin specifies the most rigorous peer review requirements for “highly influential scientific assessments,” which are a subset of “influential scientific information.” To ensure that implementation of the Peer Review Bulletin is not too costly, these requirements for more intensive peer review apply only to the more important scientific assessments disseminated by the Federal Government – those that could have a potential impact of more than \$500 million in any one year on either the public or private sector or are novel, controversial, or precedent-setting, or have significant interagency interest.

Under the Peer Review Bulletin, agencies are granted broad discretion to weigh the benefits and costs of using a particular peer review mechanism for a specific information product. In addition to the factors noted above, agencies also have the option of employing “alternative processes” for meeting the peer review requirement (e.g., commissioning a National

¹¹⁵ See OMB, *Memorandum for the Heads of Departments and Agencies*, (2004), M-05-03, <http://www.whitehouse.gov/omb/memoranda/fy2005/m05-03.pdf>.

¹¹⁶ The Bulletin notes that information dissemination can have a significant economic impact even if it is not part of a rulemaking. For instance, the economic viability of a technology can be influenced by the government’s characterization of its attributes. Alternatively, the Federal Government’s assessment of risk can directly or indirectly influence the response actions of state and local agencies or international bodies.

¹¹⁷ These assessments include, but are not limited to, state-of-science reports; technology assessments; weight-of-evidence analyses; meta-analyses; health, safety, or ecological risk assessments; toxicological characterizations of substances; integrated assessment models; hazard determinations; or exposure assessments.

Academy of Sciences' panel). Moreover, to ensure that peer review does not unduly delay the release of urgent findings, time-sensitive health and safety determinations are exempted from the requirements of the Peer Review Bulletin. There are also specific exemptions for national security, individual agency adjudication or permit proceedings, routine statistical information, and financial information. The Peer Review Bulletin does not cover information disseminated in connection with routine rules that materially alter entitlements, grants, user fees, or loan programs, or the rights and obligations of recipients thereof.

The Peer Review Bulletin provides two mechanisms for monitoring the progress of the agencies in meeting these peer review requirements: a transparent peer review planning process and annual reporting, described below.

The good science and good government requirements of the Peer Review Bulletin should assist in improving the accuracy and transparency of agency science. Additionally, the peer review planning process described in the Peer Review Bulletin, which includes posting of plans on agency websites, enhances the ability of the government and the public to track influential scientific disseminations made by agencies.

On June 16, 2005, the Peer Review Bulletin became effective for all influential scientific information, including highly influential scientific assessments. The peer review planning component of the Bulletin, discussed below, became fully effective on December 16, 2005. By the end of FY 2009, we had four full years of implementation.

1. Peer Review Planning

The Peer Review Planning component of the Peer Review Bulletin (Section V) requires agencies to begin a systematic process of peer review planning for influential scientific information (including highly influential scientific assessments) that the agency plans to disseminate in the foreseeable future.

A key feature of the agency's peer review plan is a web-accessible listing (agenda) of forthcoming influential scientific disseminations that is updated on a regular basis. These postings are designed to allow the public to participate in the peer review process by providing data and comments to the sponsoring agencies, as well as to external peer reviewers. By making these agendas publicly available, agencies increase the level of transparency in their peer review processes, and also have a mechanism to gauge the extent of public interest in their proposed peer reviews.

The agenda is designed to encourage planning for peer review early in the information generation process. Thus, the agenda should cover all information subject to the Peer Review Bulletin that the agency plans to disseminate *in the foreseeable future*. For instance, once an agency has established a time line for the generation of a scientific report, the agency should include that report in its agenda. Thus, although the Peer Review Bulletin specifies that agencies should update their peer review agendas every six months, the agenda is not a six-month forecast

(i.e., it should not be limited to information (documents) that the agency plans to peer review in the next six months).

Readers are encouraged to visit the agendas for agencies of interest. OMB asks agencies to ensure that there is an easily identifiable hyperlink to the peer review agenda from the agency's information quality home page. For cabinet-level departments that have a central information quality page but do not have a central peer review agenda, OMB requests that a hyperlink to each agency agenda be provided. Section B in the Appendix F provides the URLs for most agencies' peer review agendas.

Cabinet-level departments and agencies with processes in place for proactively identifying documents subject to the Bulletin include the Departments of Agriculture,¹¹⁸ Commerce,¹¹⁹ Health and Human Services,¹²⁰ Housing and Urban Development, Justice, Interior,¹²¹ Labor, State, and Transportation, and the Environmental Protection Agency. Other agencies with processes in place for proactively identifying documents subject to the Peer Review Bulletin include the Consumer Product Safety Commission and the Federal Communications Commission.

From time to time, other agencies produce or sponsor influential scientific information, but do not identify forthcoming information products subject to the Peer Review Bulletin. OMB is currently working with these agencies to ensure that they develop rigorous processes for determining which documents are subject to the Bulletin, and to ensure that the peer review plans for those documents are listed on the agency's agenda in a timely manner. These agencies include the Departments of Defense, Education, Energy, Homeland Security, and Veterans Affairs, as well as the National Aeronautics and Space Administration, the Nuclear Regulatory Commission, the Small Business Administration, the Federal Trade Commission, and the Tennessee Valley Authority.

Several agencies do not think that they currently produce or sponsor information subject to the Peer Review Bulletin. Most of these agencies primarily produce financial information or routine statistical information for which the Bulletin provides specific exemptions. Others primarily engage in management, oversight, or granting activities. A list of these agencies can be found in Section C in the Appendix F.

Although the Peer Review Planning section of the Bulletin lays out the specific items that should be included in each peer review plan, OMB does not specify the format that agencies should use, thereby giving agencies the flexibility to incorporate their agendas into existing e-

¹¹⁸ The Animal and Plant Health Inspection Service and the Food Safety and Inspection Service have strong peer review programs, as do the Economic Research Service and the Agricultural Research Service. Other agencies have come into compliance this year.

¹¹⁹ The National Oceanographic and Atmospheric Administration is the only agency within Commerce that has identified documents subject to the Bulletin; NOAA's peer review process is strong.

¹²⁰ The Food and Drug Administration, the Center for Disease Control and Prevention, and the National Toxicology Program are compliant with the Bulletin.

¹²¹ The Fish and Wildlife Service has an exemplary peer review process. The US Geological Survey and the Mineral Management Service, and the National Park Service are also compliant with the Bulletin. The DOI is working to incorporate peer review planning in the rest of its Bureaus.

government and science planning initiatives.¹²² As such, some agencies house their peer review agendas within a research arm of the agency, whereas others operate out of the office of the chief information officer or the policy and planning office. Some departments provide an integrated agenda across the agencies,¹²³ while other departments have chosen to have individual agencies host their own agendas.¹²⁴ Furthermore, some agencies have chosen to provide a single agenda for both influential scientific information and highly influential scientific assessments,¹²⁵ while others provide two separate agendas.¹²⁶ The Peer Review Bulletin specifically requires that agencies provide a link from the agenda to each document made public pursuant to the Bulletin, including the completed peer review report. Although some agencies routinely provide such links,¹²⁷ agendas at other agencies do not yet have this capability. Agencies have advised us that provision of these links is not always straightforward when the peer review is nested within a more complicated preexisting public process.¹²⁸ OMB is currently working with the agencies to ensure that the required information is posted, and that the web sites are easy to locate and navigate.

Table 4-3: Peer Reviews Conducted Subject to the Bulletin in FY 2009

Department/ Agency	Total Peer Reviews Completed	Reviews of Highly Influential Scientific Assessments	Waivers, Deferrals, or Exemptions	Potential Reviewer Conflicts
Department of Agriculture ¹²⁹	62	15	None	None
Department of Commerce ¹³⁰	20	1	None	None
Department of Energy ¹³¹	2	0	None	None
Department of Health and Human Services ¹³²	32	0	None	None

¹²² An example is the Environmental Protection Agency’s incorporation with its science inventory project.

¹²³ An example is the agenda for the Department of Transportation.

¹²⁴ An example is the agendas for the Department of Health and Human Services and the Department of the Interior.

¹²⁵ For instance, the agenda for the Department of Commerce.

¹²⁶ For instance, the agenda for the Department of Transportation.

¹²⁷ For instance, agendas for the Department of Agriculture’s Animal and Plant Health Inspection Service, the Department of Health and Human Services’ Center for Disease Control, and the Environmental Protection Agency (See Appendix for URLs for these agencies’ agendas.).

¹²⁸ For instance, some National Oceanographic and Atmospheric Administration documents that are part of the Endangered Species Act process (e.g., <http://www.fakr.noaa.gov/protectedresources/stellers/section7.htm>).

¹²⁹ The Department of Agriculture agencies reporting peer reviews in FY 2009 were the Animal and Plant Health Inspection Service, the Food Safety Inspection Service, the Agricultural Research Service, the Economic Research Service, the Forest Service, and the Office of the Chief Economist.

¹³⁰ The Department of Commerce agency reporting peer reviews in FY 2009 was the National Oceanic and Atmospheric Administration.

¹³¹ The only Department of Energy peer reviews reported in FY 2009 were associated with its climate change science program.

Department/ Agency	Total Peer Reviews Completed	Reviews of Highly Influential Scientific Assessments	Waivers, Deferrals, or Exemptions	Potential Reviewer Conflicts
Department of the Interior ¹³³	32	0	7 (Waiver)	None
Department of Labor ¹³⁴	6	2	None	None
Department of Transportation ¹³⁵	8	6	None	None
Environmental Protection Agency	22	8	None	None
Total	184	32	7	None

C. Improving Access to Information Quality Information

As part of government-wide efforts to improve the availability to information, OMB is considering creating a new webpage which would provide links to all the interagency correspondence related to information quality requests for corrections and appeals. This one-stop-shopping portal would make it easier for interested stakeholders to learn about and follow any correspondence that may be of interest. As this information would be readily accessible to the public, this access to information could replace the need for this chapter in our annual report. OMB requests comment on this proposal and welcomes other ideas that may improve the availability and access to this information.

¹³² The Department of Health and Human Services agencies reporting peer reviews in FY 2009 were the Centers for Disease Control and Prevention, the Food and Drug Administration, and the National Toxicology Program at the National Institute for Environmental Health Sciences, and the Office of Public Health Science.

¹³³ The Department of the Interior agency reporting peer reviews in FY 2009 was the Fish and Wildlife Service and the National Park Service.

¹³⁴ The Department of Labor agency reporting peer reviews in FY 2009 was the Occupational Health and Safety Administration.

¹³⁵ The Department of Transportation agencies reporting peer reviews in FY 2009 were the Federal Aviation Administration, National Highway Traffic Safety Administration.

**PART II: FIFTEENTH ANNUAL REPORT TO CONGRESS ON
AGENCY COMPLIANCE WITH THE UNFUNDED MANDATES REFORM ACT**

INTRODUCTION

This report represents OMB's fifteenth annual submission to Congress on agency compliance with the Unfunded Mandates Reform Act of 1995 (UMRA). This report on agency compliance with the Act covers the period of October 2008 through September 2009; the rules published before October 2008 are described in last year's report.

In recent years, this report has been included along with our final Report to Congress on the Benefits and Costs of Federal Regulations. This is done because the two reports together address many of the same issues, and both highlight the need for regulating in a responsible manner that accounts for the benefits and costs of rules and takes into consideration the interests of our intergovernmental partners. This year, OMB is again publishing the UMRA report with the Report to Congress on the Benefits and Costs of Federal Regulations.

State and local governments have a vital constitutional role in providing government services. They have the major role in providing domestic public services, such as public education, law enforcement, road building and maintenance, water supply, and sewage treatment. The Federal Government contributes to that role by promoting a healthy economy and by providing grants, loans, and tax subsidies to State and local governments. However, over the past two decades, State, local, and tribal governments increasingly have expressed concerns about the difficulty of complying with Federal mandates without additional Federal resources. In response, Congress passed the Unfunded Mandates Reform Act of 1995 (the Act).

Title I of the Act focuses on the Legislative Branch, addressing the processes Congress should follow before enactment of any statutory unfunded mandates. Title II addresses the Executive Branch. It begins with a general directive for agencies to assess, unless otherwise prohibited by law, the effects of their rules on the other levels of government and on the private sector (Section 201). Title II also describes specific analyses and consultations that agencies must undertake for rules that may result in expenditures of over \$100 million (adjusted annually for inflation) in any year by State, local, and tribal governments in the aggregate, or by the private sector. Specifically, Section 202 requires an agency to prepare a written statement for intergovernmental mandates that describes in detail the required analyses and consultations on the unfunded mandate. Section 205 requires that for all rules subject to Section 202, agencies must identify and consider a reasonable number of regulatory alternatives, and then generally select from among them the least costly, most cost-effective, or least burdensome option that achieves the objectives of the rule. Exceptions require the agency head to explain in the final rule why such a selection was not made or why such a selection would be inconsistent with law.

Title II requires agencies to "develop an effective process" for obtaining "meaningful and timely input" from State, local and tribal governments in developing rules that contain significant intergovernmental mandates (Section 204). Title II also singles out small governments for particular attention (Section 203). OMB's guidelines assist Federal agencies in complying with the Act and are based upon the following general principles:

- Intergovernmental consultations should take place as early as possible, beginning before issuance of a proposed rule and continuing through the final rule stage, and be integrated explicitly into the rulemaking process;
- Agencies should consult with a wide variety of State, local, and tribal officials;
- Agencies should estimate direct benefits and costs to assist with these consultations;
- The scope of consultation should reflect the cost and significance of the mandate being considered;
- Effective consultation requires trust and significant and sustained attention so that all who participate can enjoy frank discussion and focus on key priorities; and
- Agencies should seek out State, local, and tribal views on costs, benefits, risks, and alternative methods of compliance, and whether the Federal rule will harmonize with and not duplicate similar laws in other levels of government.

Federal agencies have been actively consulting with States, localities, and tribal governments in order to ensure that regulatory activities were conducted consistent with the requirements of the Act.

The remainder of this report lists and briefly discusses the regulations meeting the Title II threshold and the specific requirements of Sections 202 and 205 of the Act from October 1, 2008 to September 30th, 2009.

CHAPTER IV: REVIEW OF SIGNIFICANT REGULATORY MANDATES

In FY 2009, Federal agencies issued twelve final rules that were subject to Sections 202 and 205 of the Unfunded Mandate Reform Act of 1995 (UMRA), as they require expenditures by State, local or tribal governments, in the aggregate, or by the private sector, of at least \$100 million in any one year (adjusted annually for inflation). The Department of Health and Human Services has five rules, Department of Transportation has three, Departments of Homeland Security, Agriculture, Labor, and Energy each issued one rule.

OMB worked with the agencies to ensure that the selection of the regulatory options for these rules fully complied with the requirements of Title II of the Act. Descriptions of the rules in addition to agency statements regarding compliance with the Act are included in the following section.

A. Department of Homeland Security

1. Secure Flight Program

This final rule allows TSA to begin implementation of the Secure Flight program, under which TSA will receive passenger and certain non-traveler information, conduct watch list matching against the No Fly and Selectee portions of the Federal Government's consolidated terrorist watch list, and transmit a boarding pass printing result back to aircraft operators. TSA aims do so in a consistent and accurate manner while minimizing false matches and protecting personally identifiable information.

DHS estimates \$327 million in annual costs. This final rule does not contain mandates under UMRA on State, local, and tribal governments. The overall impact on the private sector does exceed the \$100 million threshold in the aggregate. Consequently, the provisions of this rule constitute a private sector mandate under the UMRA.

B. Department of Transportation

1. Passenger Car and Light Truck Corporate Average Fuel Economy Model Year 2011.

NHTSA has been issuing Corporate Average Fuel Economy (CAFE) standards since the late 1970's under the Energy Policy and Conservation Act (EPCA) to reduce the motor vehicle tailpipe emissions of carbon dioxide (CO₂). NHTSA estimates that the Model Year 2011 standards, adopted in this final rule, will raise the industry-wide combined average to 27.3 mpg, save 887 million gallons of fuel over the lifetime of the MY 2011 cars and light trucks, and reduce CO₂ emissions by 8.3 million metric tons during that period.

NHTSA estimated \$1,145 million in costs annually. This final rule will not result in the expenditure by State, local, or tribal governments, in the aggregate, of more than \$126 million annually, but it will result in the expenditure of that magnitude by vehicle manufacturers and/or their suppliers. Consequently, the provisions of this rule constitute a private sector mandate under the UMRA.

2. Roof Crush Resistance

As part of a comprehensive plan for reducing the risk of rollover crashes and the risk of death and serious injury in those crashes, this final rule upgrades the agency's safety standard on roof crush resistance in several ways. First, for the vehicles currently subject to the standard, i.e., passenger cars and multipurpose passenger vehicles, trucks and buses with a Gross Vehicle Weight Rating (GVWR) of 2,722 kilograms (6,000 pounds) or less, the rule doubles the amount of force the vehicle's roof structure must withstand in the specified test, from 1.5 times the vehicle's unloaded weight to 3.0 times the vehicle's unloaded weight. Second, the rule extends the applicability of the standard so that it will also apply to vehicles with a GVWR greater than 2,722 kilograms (6,000 pounds), but not greater than 4,536 kilograms (10,000 pounds). The rule establishes a force requirement of 1.5 times the vehicle's unloaded weight for these newly included vehicles. Third, the rule requires all of the above vehicles to meet the specified force requirements in a two-sided test, instead of a single-sided test, i.e., the same vehicle must meet the force requirements when tested first on one side and then on the other side of the vehicle. Fourth, the rule establishes a new requirement for maintenance of headroom, i.e., survival space, during testing in addition to the existing limit on the amount of roof crush.

DOT estimates annual costs between \$1,048 million and \$1,167 million. This final rule is not estimated to result in expenditures by State, local or tribal governments of more than \$130 million annually. However, it will result in the expenditure by the automobile manufacturers and/or their suppliers of more than \$130 million annually. Consequently, the provisions of this rule constitute a private sector mandate under the UMRA.

3. Washington, DC, Metropolitan Area Special Flight Rules Area

This final rule codifies special flight rules and airspace and flight restrictions for certain aircraft operations in the Washington, DC Metropolitan Area. The FAA takes this action in the interest of national security. This action is necessary to enable the Department of Homeland Security (DHS) and the Department of Defense (DOD) to effectively execute their respective constitutional and Congressionally-mandated duties to secure, protect, and defend the United States.

DHS estimates \$107 million in annual costs. The overall impact on the private sector does exceed the \$100 million threshold in the aggregate. Consequently, the provisions of this rule constitute a private sector mandate under the UMRA.

C. Department of Agriculture

Mandatory Country of Origin Labeling of Beef, Pork, Lamb, Fish, Perishable Agricultural Commodities, and Peanuts (LS-07-0081)

This final rule implements The Farm Security and Rural Investment Act of 2002 (Farm Bill) and the 2002 Supplemental Appropriations Act to require retailers to notify their customers of the country of origin of covered commodities beginning September 30, 2004. Covered commodities include muscle cuts of beef (including veal), lamb, and pork; ground beef, ground lamb, and ground pork; farm-raised fish and shellfish; wild fish and shellfish; perishable agricultural commodities; and peanuts. The FY 2004 Consolidated Appropriations bill (2004 Appropriations) delayed implementation of mandatory Country of Origin Labeling (COOL) for all covered commodities except wild and farm-raised fish and shellfish until September 30, 2006. The FY 2006 Agriculture Appropriations Bill further delayed the implementation date for other covered commodities until September 30, 2008.

The overall impact on the private sector does exceed the \$100 million threshold in the aggregate. Consequently, the provisions of this rule constitute a private sector mandate under the UMRA.

D. Department of Health and Human Services

1. HIPAA Administrative Simplification: Modifications to Medical Data Code Set Standards to Adopt ICD-10-CM and ICD-10-PCS

This final rule modifies the standard medical data code sets for coding diagnoses and inpatient hospital procedures by concurrently adopting the International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM) for diagnosis coding, including the Official ICD-10-CM Guidelines for Coding and Reporting, as maintained and distributed by the U.S.

HHS estimated \$253 million in annual costs. This final rule would not impose any cost on small governments or significantly or uniquely affect small governments. However, HHS has determined that the rule would result in the expenditure by the private sector significantly greater than \$100 million in any one year. Consequently, the provisions of this rule constitute a private sector mandate under the UMRA.

2. Health Insurance Reform; Modifications to the Health Insurance Portability and Accountability Act (HIPAA) Electronic Transaction Standards

This final rule adopts updated versions of the standards for electronic transactions originally adopted under the Administrative Simplification subtitle of the Health Insurance Portability and Accountability Act of 1996 (HIPAA). This final rule also adopts the transaction

standard for Medicaid pharmacy subrogation. In addition, this final rule adopts two standards for billing retail pharmacy supplies and professional services, and clarifies who the “senders” and “receivers” are in the descriptions of certain transactions.

HHS estimates \$1,173 million in costs per year. This final rule contains mandates that will impose spending costs on State, local, or tribal governments in the aggregate, or by the private sector, in excess of the current threshold. In general, each State Medicaid Agency and other government entity that is considered a covered entity will be required to invest in software, testing and training to accommodate the adoption of the updated versions of the standards, and Version 3.0. Consequently, the provisions of this rule constitute mandates under the UMRA.

3. Prevention of Salmonella Enteritidis in Shell Eggs

In this final rule, the Food and Drug Administration (FDA) requires shell egg producers to implement measures to prevent Salmonella Enteritidis (SE) from contaminating eggs on the farm and from further growth during storage and transportation, and requires these producers to maintain records concerning their compliance with the rule and to register with FDA. FDA is taking this action because SE is among the leading bacterial causes of food-borne illness in the United States, and shell eggs are a primary source of human SE infections. The final rule will reduce SE-associated illnesses and deaths by reducing the risk that shell eggs are contaminated with SE.

FDA expects this final rule to result in 1-year expenditures that would meet or exceed this amount. Consequently, the provisions of this rule constitute a private sector mandate under the UMRA.

4. Use of Ozone-Depleting Substances; Removal of Essential Use Designations [Epinephrine]

The FDA, after consultation with the Environmental Protection Agency (EPA), is amending FDA’s regulation on the use of ozone-depleting substances (ODSs) in self-pressurized containers to remove the essential-use designation for epinephrine used in oral pressurized metered-dose inhalers (MDIs). The Clean Air Act requires FDA, in consultation with the EPA, to determine whether an FDA-regulated product that releases an ODS is an essential use of the ODS. FDA has concluded that there are no substantial technical barriers to formulating epinephrine as a product that does not release ODSs, and therefore epinephrine would no longer be an essential use of ODSs as of December 31, 2011. Epinephrine MDIs containing an ODS cannot be marketed after this date.

FDA estimates \$350 million in annual costs. This final rule may result in a 1-year expenditure that would meet or exceed this amount. Consequently, the provisions of this rule constitute a private sector mandate under the UMRA.

5. Medicare Program; Revisions to the Medicare Advantage and Prescription Drug Benefit Programs (CMS-4131-Q)

This rule contains final regulations governing the Medicare Advantage (MA) program (Part C) and prescription drug benefit program (Part D), and interim final regulations (1) governing certain aspects of the Retiree Drug Subsidy (RDS) Program; and (2) reflecting new statutory definitions relating to Special Needs Plans under Part C. The final regulations revising the Part C and Part D regulations include provisions regarding medical savings account (MSA) plans, cost-sharing for dual eligible enrollees in the MA program, the prescription drug payment and novation processes in the Part D program, and the enrollment and appeals processes for both programs.

The overall impact on the private sector does exceed the \$100 million threshold in the aggregate. Consequently, the provisions of this rule constitute a private sector mandate under the UMRA.

E. Department of Energy

Energy Efficiency Standards for General Service Fluorescent Lamps and Incandescent Lamps

Pursuant to the Energy Policy and Conservation Act (EPCA), DOE is amending the energy conservation standards for certain general service fluorescent lamps and incandescent reflector lamps. DOE is also adopting new energy conservation standards and amendments to its test procedures for certain general service fluorescent lamps not currently covered by standards. Additionally, DOE is amending the definitions of certain terms found in the general provisions. It has determined that energy conservation standards for these products would result in significant conservation of energy, and are technologically feasible and economically justified.

DOE anticipates annual costs between \$425 million and \$582 million. DOE concluded that, although this rule would not contain an intergovernmental mandate, it may result in expenditure of \$100 million or more in one year by the private sector.

APPENDIX A: CALCULATION OF BENEFITS AND COSTS

Chapter I presents estimates of the annual benefits and costs of selected major final regulations reviewed by OMB between October 1, 1999 and September 30, 2009. OMB presents more detailed explanation of these regulations in several documents.

- Rules from October 1, 1997 to September 30, 1998 appear in Table B-1 in Appendix B of this Report.
- Rules from October 1, 1996 to September 30, 1997 appear in Table B-1 in Appendix B of the 2008 Report.
- Rules from October 1, 1995 to September 30, 1996 appear in Table B-1 in Appendix B of the 2007 Report.
- Rules from October 1, 1992 to September 30, 1995: Tables C-1 through C-3 in Appendix C of our 2006 Report.
- Rules from October 1, 1995 to March 31, 1999 can be found in Chapter IV of the 2000 Report.
- Rules from April 1, 1999 to September 30, 2001: Table 19 of the 2002 Report.
- Rules from October 1, 2001 to September 30, 2002: Table 19 of the 2003 Report.
- Rules from October 1, 2002 to September 30, 2003: Table 12 of the 2004 Report.
- Rules from October 1, 2003 to September 30, 2004: Tables 1-4 and A-1 of the 2005 Report.
- Rules from October 1, 2004 to September 30, 2005: Tables 1-4 and A-1 of the 2006 Report
- Rules from October 1, 2005 to September 30, 2006: Tables 1-4 and A-1 of the 2007 Report.
- Rules from October 1, 2006 to September 30, 2007: Tables 1-4 and A-1 of the 2008 Report.
- Rules from October 1, 2007 to September 30, 2008: Tables 1-4 and A-1 of this Report.
- Rules from October 1, 2008 to September 30, 2009: Tables 1-4 and A-1 of this Report.

In assembling estimates of benefits and costs presented in Table 1-4, OMB has:

- (1) Applied a uniform format for the presentation of benefit and cost estimates in order to make agency estimates more closely comparable with each other (for example, annualizing benefit and cost estimates); and
- (2) Monetized quantitative estimates where the agency has not done so (for example, converting agency projections of quantified benefits, such as estimated injuries avoided per year or tons of pollutant reductions per year, to dollars using the valuation estimates discussed below).

All benefit and cost estimates are adjusted to 2001 dollars using the latest Gross Domestic Product (GDP) deflator, available from the Bureau of Economic Analysis at the

Department of Commerce.¹³⁶ In instances where the nominal dollar values the agencies use for their benefits and costs is unclear, we assume the benefits and costs are presented in nominal dollar values of the year before the rule is finalized. In periods of low inflation such as the past few years, this assumption does not affect the overall totals. All amortizations are performed using a discount rate of 7 percent unless the agency has already presented annualized, monetized results using a different explicit discount rate.

OMB discusses, in this Report and in previous Reports, the difficulty of estimating and aggregating the benefits and costs of different regulations over long time periods and across many agencies. In addition, where OMB has monetized quantitative estimates where the agency has not done so, we have attempted to be faithful to the respective agency approaches. The adoption of a uniform format for annualizing agency estimates allows, at least for purposes of illustration, the aggregation of benefit and cost estimates across rules; however, agencies have used different methodologies and valuations in quantifying and monetizing effects. Thus, an aggregation involves the assemblage of benefit and cost estimates that are not strictly comparable.

To address this issue in part, the 2003 Report included OMB's new regulatory analysis guidance, also released as OMB Circular A-4, which took effect on January 1, 2004 for proposed rules and January 1, 2005 for final rules. The guidance recommends what OMB considers to be "best practices" in regulatory analysis, with a goal of strengthening the role of science, engineering, and economics in rulemaking. The overall goal of this guidance is a more competent and credible regulatory process, and a more consistent regulatory environment. OMB expects that as more agencies adopt these recommended best practices, the benefits and costs presented in future Reports will become more comparable across agencies and programs. The 2006 Report was the first report that included final rules subject to OMB Circular A-4. OMB will continue to work with the agencies to ensure that their impact analyses follow the new guidance.

Table A-1 below presents the unmodified information on the impacts of 66 major rules reviewed by OMB from October 1, 2008 through September 30, 2009, and includes additional explanatory text on how agencies calculated the impacts for these rulemakings. Unless otherwise stated, the totals presented in Table A-1 are annualized impacts in 2001 dollars, which is the requested format in OMB Circular A-4. Table 1-4 in Chapter I of this Report presents the adjusted impact estimates for the 18 rules finalized in 2008-2009 that were added to the Chapter I accounting statement totals.

¹³⁶See *National Income and Product Accounts*, <http://www.bea.gov>.

**Table A-1: Summary of Agency Estimates for Final Rules
October 1, 2008 - September 30, 2009 (As of Date of Completion of OMB Review)**

Rule [FR Cite]	Agency	Benefits	Costs	Other Information
Mandatory Country of Origin Labeling of Beef, Pork, Lamb, Fish, Perishable Agricultural Commodities, and Peanuts (LS-07-0081) [74 FR 2657]	USDA/AMS	Not estimated	Not estimated	This rule is the final rule to the interim final promulgated in 2004. See 10 th Annual Report to Congress on Agency Compliance with the Unfunded Mandates Reform Act.
Direct and Counter-Cyclical Program (DCP) [73 FR 79284]	USDA/FSA	Not estimated	Not estimated	Transfer between \$3,236 million to \$3,381 million from Federal Government to farmers
Emergency Loss Assistance Program (ELAP) and Livestock Forage Disaster Program (LFP) [74 FR 46665]	USDA/FSA	Not estimated	Not estimated	Transfer of \$441 million from Federal government to farmers
Marketing Assistance Loans and Loan Deficiency Payments [74 FR 15644]	USDA/FSA	Not estimated	Not estimated	Transfer amount not estimated
Sugar Program [74 FR 15359]	USDA/FSA	Not estimated	Not estimated	Transfer between \$118 million to \$134 million from Federal Government to farmers
Conservation Reserve Program [74 FR 30907]	USDA/FSA	Not estimated	Not estimated	Transfer between \$15 billion to \$16 billion from Federal Government to farmers from 2009 through 2014.

Rule [FR Cite]	Agency	Benefits	Costs	Other Information
Conservation Stewardship Program [74 FR 37499]	USDA/ NRCS	Not estimated	Not estimated	Interim Final Rule Transfer between \$826 million to \$889 million from Federal Government to farmers
Environmental Quality Incentives Program [74 FR 2293]	USDA/ NRCS	Not estimated	Not estimated	Interim Final Rule Transfer between \$9,381 million to \$10,141 million from Federal Government to farmers
Wetlands Reserve Program [74 FR 2317]	USDA/ NRCS	Not estimated	Not estimated	Interim Final Rule Transfer amount not estimated Agency used case study approaches
Regulations to Implement the DTV Delay Act [74 FR 10686]	DOC/NTIA	Not estimated	Not estimated	Transfer amount not estimated
State Broadband Data and Development Grant Program [74 FR 32545]	DOC/NTIA	Not estimated	Not estimated	Transfer of \$223 million from Federal Government to State governments
CHAMPUS/TRICARE: Inclusion of TRICARE Retail Pharmacy Program in Federal Procurement of Pharmaceuticals [74 FR 11279]	DOD/ DODOASHA	Not estimated	Not estimated	Transfer of \$1,832 million (range between \$1,447 million to \$2,229 million) from Federal Government to pharmaceutical industry
TRICARE; Outpatient Hospital Prospective Payment System (OPPS) [73 FR 74945, 74 FR 6228]	DOD/ DODOASHA	Not estimated	Not estimated	Transfer of \$383 million of cost savings to Federal Government from hospitals

Rule [FR Cite]	Agency	Benefits	Costs	Other Information
Federal Perkins Loan, Federal Family Education Loan (FFEL), and William D. Ford Federal Direct Loan (DL) Programs [73 FR 63232]	ED/OPE	Not estimated	Not estimated	Transfer of \$1,609 million from Federal Government to students
Student Assistance General Provisions; TEACH Grant, Federal Pell Grant, and Academic Competitiveness Grant, and National Science and Mathematics Access to Retain Talent Grant Programs [74 FR 20210]	ED/OPE	Not estimated	Not estimated	Interim Final
Energy Efficiency Standards for Commercial Refrigeration Equipment [74 FR 1092]	DOE/EE	\$196 million Range: \$186 million to \$224 million	\$81 million Range: \$69 million to \$81 million	

Rule [FR Cite]	Agency	Benefits	Costs	Other Information
Energy Efficiency Standards for General Service Fluorescent Lamps and Incandescent Lamps [74 FR 43080]	DOE/EE	\$1,924 million Range: \$1,111 to \$2,886 million	\$487 million Range: \$192 million to \$657 million	
Production Incentives for Cellulosic Biofuels [74 FR 52867]	DOE/EE	Not estimated	Not estimated	Transfer of \$5 million (range between \$0 to \$93 million) from Federal Government to Renewable fuel producers
Advanced Technology Vehicles Manufacturing Incentive Program [73 FR 66721]	DOE/ENDEP	Not estimated	Not estimated	Interim Final Transfer amount not estimated
Energy Efficiency and Conservation Block Grants; Notice of Allocation Formulas [74 FR 17461]	DOE/ENDEP	Not estimated	Not estimated	Transfer amount not estimated
Child Support Provisions of the Deficit Reduction Act [73 FR 74897]	HHS/ACF	Not estimated	Not estimated	Transfer of \$81 million from non-custodial parents to Federal and State governments in collecting overdue child support payment

Rule [FR Cite]	Agency	Benefits	Costs	Other Information
Patient Safety and Quality Improvement Act of 2005 Rules [73 FR 70731]	HHS/AHRQ	\$93 million Range: \$69 million to \$136 million	\$97 million Range: \$87 million to \$121 million	
Changes to the Hospital Inpatient and Long-Term Care Prospective Payment System for FY 2010 (CMS-1406-P) [74 FR 43753]	HHS/CMS	Not estimated	Not estimated	Transfer amount not estimated
Changes to the Hospital Outpatient Prospective Payment System and Ambulatory Surgical Center Payment System for CY 2009 (CMS-1404-F) [73 FR 68501]	HHS/CMS	Not estimated	Not estimated	Transfer of \$669 million from Federal Government to outpatient hospitals
Medicare Program; Medicare Advantage and Prescription Drug Programs MIPPA Drug Formulary and Protected Classes Policies (CMS-4138-IFC-4) [74 FR 1494]	HHS/CMS	Not estimated	Not estimated	This interim final rule revises a final rule that is included in the 2009 Report.

Rule [FR Cite]	Agency	Benefits	Costs	Other Information
Medicare Program; Revisions to the Medicare Advantage and Prescription Drug Benefit Programs (CMS-4131-Q) [74 FR 1494]	HHS/CMS	Not estimated	Not estimated	Transfer of \$394 million to \$417 million from Federal Government to Medicare recipients
Premiums and Cost Sharing (CMS-2244-F) [73 FR 71827]	HHS/CMS	Not estimated	Not estimated	Transfer of \$407 million of cost savings from beneficiaries to Federal Government and State governments
Prospective Payment System and Consolidated Billing for Skilled Nursing Facilities— Update for FY 2010 (CMS-1410-P) [74 FR 40287]	HHS/CMS	Not estimated	Not estimated	Transfer of \$335 million from Skilled Nursing Facility Medicare providers to Federal Government
Prospective Payment System for Inpatient Rehabilitation Facilities for FY 2010 (CMS-1538-P) [74 FR 40947]	HHS/CMS	Not estimated	Not estimated	Transfer of \$135 million from Federal Government to Inpatient Rehabilitation Facility Medicare providers
Revisions to HIPAA Code Sets (CMS-00-13-F) [74 FR 3328]	HHS/CMS	\$209 million Range: \$77 million to \$261 million	\$217 million Range: \$44 million to \$238 million	

Rule [FR Cite]	Agency	Benefits	Costs	Other Information
Revisions to Payment Policies Under the Physician Fee Schedule for CY 2009 (CMS-1403-FC) [73 FR 69725]	HHS/CMS	Not estimated	Not estimated	Transfer of \$2,508 million from Federal Government to physicians
State Flexibility for Medicaid Benefit Packages (CMS-2232-F) [73 FR 73693]	HHS/CMS	Not estimated	Not estimated	Transfer of \$664 million of cost savings to Federal Government and State governments
Surety Bond Requirement for Suppliers of Durable Medical Equipment, Prosthetics, Orthotics, and Supplies (DMEPOS) (CMS-6006-F) [74 FR 166]	HHS/CMS	Not estimated	\$86 million	Transfer of \$153 million from medical equipment suppliers to medical equipment suppliers
Updates to Electronic Transactions (Version 5010) (CMS-00090F) [74 FR 3296]	HHS/CMS	\$1,988 million Range: \$1,114 million to \$3,194 million	\$1,090 million Range: \$661 million to \$1,449 million	
Prevention of Salmonella Enteritidis in Shell Eggs [74 FR 33029]	HHS/FDA	\$1,284 million Range: \$206 million to \$8,583 million	\$74 million Range: \$48 million to \$106 million	

Rule [FR Cite]	Agency	Benefits	Costs	Other Information
Use of Ozone-Depleting Substances; Removal of Essential Use Designations [Epinephrine] [73 FR 69532]	HHS/FDA	Not estimated	\$300 million Range: \$154 million to \$940 million	Qualitative Benefit: Reduction of CFC emissions by 70 tons Qualitative Cost: Depending on consumer willingness to self-medicate, potential increase in annual emergency department visits for asthma of 0 to 440,000 and hospitalizations for asthma of 40,000 to 120,000. Transfer of \$47 million to \$470 million from Federal Government to health care providers and drug manufacturers
Air Cargo Screening [74 FR 47672]	DHS/TSA	Not estimated	\$231 million Range: \$191 million to \$273 million	Interim Final
Secure Flight Program [73 FR 64018]	DHS/TSA	Not estimated	\$297 million Range: \$262 million to \$348 million	
Importer Security Filing and Additional Carrier Requirements [73 FR 71729]	DHS/USCBP	Not estimated	\$1,923 million Range: \$744 million to \$3,009 million	
Documents and Receipts Acceptable for Employment Eligibility Verification [73 FR 76505]	DHS/USCIS	Not estimated	\$118 million	
Refinement of Income and Rent Determinations in Public and Assisted Housing Programs (FR-4998) [74 FR 4832]	HUD/ HUDSEC	Not estimated	Not estimated	Transfer between \$0 to \$1,594 million from tenants to tenants

Rule [FR Cite]	Agency	Benefits	Costs	Other Information
Real Estate Settlement Procedures Act (RESPA); To Simplify and Improve the Process of Obtaining Mortgages and Reduce Consumer Costs (FR-5180) [73 FR 68203, 74 FR 22822]	HUD/OH	\$2,303 million	\$884 million	The agency promulgated two rules to promulgate this rulemaking: a final rulemaking in November 2008, and another final rulemaking to withdraw the revised definition of “required use” in May 2009. The estimates presented in this table reflect the agency analysis for the November rulemaking. Transfer of \$6,980.
Oil Shale Leasing and Operations [73 FR 69413]	DOI/BLM	Not estimated	Not estimated	Transfer amount not estimated from Federal Government to petroleum industry
Migratory Bird Hunting; 2008 to 2009 Migratory Game Bird Hunting Regulations [73 FR 55601]	DOI/FWS	\$870 million Range: \$711 million to \$1,001 million	Not estimated	Late season regulation
Migratory Bird Hunting; 2009 to 2010 Migratory Game Bird Hunting Regulations [74 FR 45032]	DOI/FWS	\$272 million Range: \$234 million to \$309 million	Not estimated	Early season regulation
Migratory Bird Hunting; 2009 to 2010 Migratory Game Bird Hunting Regulations [74 FR 49244]	DOI/FWS	\$272 million Range: \$234 million to \$309 million	Not estimated	Late season regulation

Rule [FR Cite]	Agency	Benefits	Costs	Other Information
Alternative Energy and Alternate Uses of Existing Facilities on the Outer Continental Shelf [74 FR 19638]	DOI/MMS	Not estimated	Not estimated	Transfer amount not estimated from Federal Government to electricity generating industry
Abandoned Mine Land Program [73 FR 67575]	DOI/OSMRE	Not estimated	Not estimated	Benefit: 210,257 acres of land reclaimed (using both 3% and 7% discount rates, over 14 years)
Family and Medical Leave Act of 1993; Conform to the Supreme Court's Ragsdale Decision [73 FR 67934]	DOL/ESA	Not estimated	\$226 million Range: \$224 million to \$226 million	Transfer of \$8 million from employers to employees
Refuge Alternatives for Underground Coal Mines [73 FR 80656]	DOL/MSHA	Not estimated	\$45 million Range: \$41 million to \$45 million	Benefits are qualitative
Part 121 Pilot Age Limit [74 FR 34229]	DOT/FAA	\$35 million Range: \$30 million to \$35 million	\$4 million Range: approximately \$4 million	Transfer of \$197 million (range of approximately \$197 million) from Consumers to Pilots
Washington, DC, Metropolitan Area Special Flight Rules Area [73 FR 76195]	DOT/FAA	\$239 million Range: \$10 million to \$839 million	\$92 million Range: \$89 million to \$382 million	
Hours of Service of Drivers [72 FR 71247]	DOT/FMCSA	\$0 to \$1,760 million	\$0-105 million	This rule is the final rule to the interim final rule included in the 2009 Report. Although included in this table and Table 1-4, this rule is not included in the 10-year aggregation (Tables 1-1 and 1-2).

Rule [FR Cite]	Agency	Benefits	Costs	Other Information
New Entrant Safety Assurance Process [73 FR 76472]	DOT/FMCSA	\$472 million to \$602 million	\$60 million to \$72 million	This rule is the final rule to the interim final rule promulgated in 2002. The Department published a notice to revise the interim standards in December 2006.
Passenger Car and Light Truck Corporate Average Fuel Economy Model Year 2011 [74 FR 14195]	DOT/NHTSA	\$1,665 million Range: \$857 million to \$1,905 million	\$979 million Range: \$650 million to \$1910 million	
Reduced Stopping Distance Requirements for Truck Tractors [74 FR 37121]	DOT/NHTSA	\$1,250 million Range: \$1,250 million to \$1,520 million	\$46 million Range: \$23 million to \$164 million	
Requirements for Temporary Vehicle Trade-In Program [74 FR 37877]	DOT/NHTSA	Not estimated	\$46 million	Transfer of \$883 million from Federal Government to consumers
Roof Crush Resistance [74 FR 22347]	DOT/NHTSA	\$652 million Range: \$374 million to \$1,160 million	\$896 million Range: \$748 million to \$1,189 million	
Pipeline Safety: Standards for Increasing the Maximum Allowable Operating Pressure for Gas Transmission Pipelines [73 FR 62147]	DOT/PHMSA	\$85 million Range: \$85 million to \$89 million	\$13 million Range: \$13 million to \$14 million	

Rule [FR Cite]	Agency	Benefits	Costs	Other Information
Prohibition on Funding of Unlawful Internet Gambling [74 FR 62687]	Treas/DO	Not estimated	\$75 million	
TARP Limits on Compensation [74 FR 28393]	Treas/DO	Not estimated	Not estimated	Interim Final
Post-9/11 GI Bill [74 FR 14654]	VA	Not estimated	Not estimated	Transfer
HOPE for Homeowners Program: Program Regulation [73 FR 58417]	BDHHP	Not estimated	Not estimated	
Greenhouse Gas Mandatory Reporting Rule [74 FR 56259]	EPA/AR	Not estimated	\$64 million Range: \$64 million to \$86 million	
Review of the National Ambient Air Quality Standards for Lead [73 FR 66963]	EPA/AR	Range: \$455 million to \$5,203 million	Range: \$113 million to \$2,241 million	
FAR Case 2007-013, Employment Eligibility Verification [73 FR 67651]	FAR	Not estimated	\$134 million Range \$127 million to \$141 million	Benefits qualitative

APPENDIX B: THE BENEFITS AND COSTS OF 1998-1999 MAJOR RULES

Table B-1 lists the rules that were omitted from the ten-year running totals presented in Chapter I of our Report to Congress. It consists of the annualized and monetized benefits and costs of rules for which OMB concluded review between October 1, 1998 and September 30, 1999. These rules were included in Chapter I of the 2009 Report as part of the ten-year totals, but are not included in the 2010 Report.

While we limit the Chapter I accounting statement to regulations issued over the previous ten years, we have included in this Appendix the benefits and cost estimates provided for the economically significant rulemakings that have been covered in previous Reports in order to provide transparency.

**Table B-1: Estimates of Annual Benefits and Costs of Eight Major Federal Rules
October 1, 1998 - September 30, 1999
(millions of 2001 dollars)**

REGULATION	AGENCY	BENEFITS	COSTS	EXPLANATION
Education of Children with disabilities and early intervention programs	Education	633-786	349-589	No adjustment to agency estimate
Over-the-Counter Drug Labeling	HHS/FDA	65-85	20	No adjustment to agency estimate
Safety and Effectiveness of New Drugs in Pediatric Patients	HHS/FDA	81	49	No adjustment to agency estimate
Lead-based Paint Hazards	HUD	190	150	No adjustment to agency estimate
Powered Industrial Truck Operator Training	DOL/OSHA	229	20	No adjustment to agency estimate
Child Restraint Anchorage Systems/Child Restraint Systems	DOT/NHTSA	120-207	163	No adjustment to agency estimate
Lighting Devices, Reflectors, and Electrical Equipment	DOT/NHTSA	58	37	No adjustment to agency estimate
Control of Emissions of Air Pollution from New CI Marine Engines At or Above 37 Kilowatts	EPA/Air	174-783	295	No adjustment to agency estimate
Final Regional Haze Rule	EPA/Air	300-7,000	300-1,600	No adjustment to agency estimate
Phase 2 Emission Standards for New Nonroad Small Spark Ignition Handheld Engines At or Below 19 Kilowatts	EPA/Air	136-871	142	No adjustment to agency estimate
Review of the National Ambient Air Quality Standards for Particulate Matter ¹³⁷	EPA/Air	3,837-39,879	2,590-2,833	No adjustment to agency estimate
Pulp and Paper: National Emission Standard for Hazardous Air Pollutants ¹³⁸	EPA/Air	(982)-1,200	131	
Onboard ¹³⁹	EPA/Air	161-734	33	
Enhanced Surface Water Treatment (Interim Rule)	EPA/Water	36-1,636	305-327	No adjustment to agency estimate
PCB Disposal ¹⁴⁰	EPA/Water	175-862	15	No adjustment to agency estimate

¹³⁷ Although promulgated in 2006, this rule was removed from the 10-year aggregate estimates to avoid double-counting benefits and costs with implementing regulations.

¹³⁸ Due to an oversight, this rule was not removed from the 10-year aggregate estimates in the 2009 Report. This rule appears in the 1998 Report.

¹³⁹ Due to an oversight, this rule was not removed from the 10-year aggregate estimates in the 2009 Report.

¹⁴⁰ Due to an oversight, this rule was not removed from the 10-year aggregate estimates in the 2009 Report.

REGULATION	AGENCY	BENEFITS	COSTS	EXPLANATION
Stage 1 Disinfectants/Disinfection Byproducts Rule	EPA/Water	0-4,037	655-731	No adjustment to agency estimate

**APPENDIX C: INFORMATION ON THE REGULATORY ANALYSES FOR MAJOR RULES BY
INDEPENDENT AGENCIES**

**Table C-1: Total Number of Rules Promulgated by Independent Agencies
October 1, 1999 - September 30, 2009**

Agency	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Consumer Product Safety Commission (CPSC)	0	0	0	0	0	0	1	0	0	--
Federal Communications Commission (FCC)	8	2	4	0	1	4	2	2	4	--
Federal Energy Regulatory Commission (FERC)	2	0	0	0	0	0	0	0	1	--
Federal Reserve System	1	0	0	1	1	0	0	0	0	3
Federal Trade Commission (FTC)	1	0	0	0	0	1	0	0	0	--
National Credit Union Administration (NCUA)	0	0	0	0	0	0	0	0	0	--
Nuclear Regulatory Commission (NRC)	2	1	1	1	1	1	1	1	2	2
Pension Benefit Guaranty Corporation (PBGC)	0	0	0	0	0	0	0	0	0	--
Securities and Exchange Commission (SEC)	6	3	3	5	1	5	0	7	4	8
Total	20	6	8	7	4	11	4	10	11	13

**Table C-2: Total Number of Rules with Some Information on Benefits or Costs¹⁴¹
Promulgated by Independent Agencies
October 1, 1999- September 30, 2009**

Agency	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Consumer Product Safety Commission (CPSC)	--	--	--	--	--	--	1	--	--	--
Federal Communications Commission (FCC)	1	0	0	0	1	0	0	0	0	--
Federal Energy Regulatory Commission (FERC)	2	--	--	--	--	--	--	--	1	--
Federal Reserve System	0	--	--	0	1	--	--	--	--	0
Federal Trade Commission (FTC)	1	--	--	--	--	0	--	--	--	--
National Credit Union Administration (NCUA)	--	--	--	--	--	--	--	--	--	--
Nuclear Regulatory Commission (NRC)	1	--	--	--	--	--	--	--	1	1
Pension Benefit Guaranty Corporation (PBGC)	--	--	--	--	--	--	--	--	--	--
Securities and Exchange Commission (SEC)	6	3	3	5	1	5	--	7	4	8
Total	11	3	3	5	3	5	1	7	6	8

¹⁴¹ Table C-2 excludes all fee assessment rules promulgated by independent agencies. FCC promulgated six fee assessment rules from 1997 through 2002. NRC promulgated 12 statutorily mandated fee assessment rules from 1997 through 2009.

**Table C-3: Percent of Rules with Monetized Benefits¹⁴²
Promulgated by Independent Agencies
October 1, 1999 - September 30, 2009**

Agency	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Consumer Product Safety Commission (CPSC)	--	--	--	--	--	--	100	--	--	--
Federal Communications Commission (FCC)	0	0	0	--	0	0	0	0	0	--
Federal Energy Regulatory Commission (FERC)	50	--	--	--	--	--	--	--	0	--
Federal Reserve System	0	--	--	0	0	--	--	--	--	0
Federal Trade Commission (FTC)	0	--	--	--	--	0	--	--	--	--
National Credit Union Administration (NCUA)	--	--	--	--	--	--	--	--	--	--
Nuclear Regulatory Commission (NRC)	100	--	--	--	--	--	--	--	100	100
Pension Benefit Guaranty Corporation (PBGC)	--	--	--	--	--	--	--	--	--	--
Securities and Exchange Commission (SEC)	0	66	33	20	100	40	--	43	0	13

**Table C-4: Percent of Rules with Monetized Costs¹⁴³
Promulgated by Independent Agencies
October 1, 1999 - September 30, 2009**

Agency	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Consumer Product Safety Commission (CPSC)	--	--	--	--	--	--	100	--	--	--
Federal Communications Commission (FCC)	0	0	0	--	100	0	0	0	0	--
Federal Energy Regulatory Commission (FERC)	0	--	--	--	--	--	--	--	100	--
Federal Reserve System	0	--	--	0	0	--	--	--	--	0
Federal Trade Commission (FTC)	0	--	--	--	--	0	--	--	--	--
National Credit Union Administration (NCUA)	--	--	--	--	--	--	--	--	--	--
Nuclear Regulatory Commission (NRC)	100	--	--	--	--	--	--	--	100	100
Pension Benefit Guaranty Corporation (PBGC)	--	--	--	--	--	--	--	--	--	--
Securities and Exchange Commission (SEC)	33	100	100	80	100	100	--	43	0	50

¹⁴² Table C-3 excludes all fee assessment rules promulgated by independent agencies. FCC promulgated six fee assessment rules from 1997 through 2002. NRC promulgated 12 statutorily mandated fee assessment rules from 1997 through 2009.

¹⁴³ Table C-4 excludes all fee assessment rules promulgated by independent agencies. FCC promulgated six fee assessment rules from 1997 through 2002. NRC promulgated 12 statutorily mandated fee assessment rules from 1997 through 2009.

APPENDIX D: DISCLOSURE AND SIMPLIFICATION AS REGULATORY TOOLS

Disclosure as a Regulatory Tool

PURPOSE. In many statutes, Congress requires or permits agencies to use disclosure as a regulatory tool. Executive Order 12866 provides, “Each agency shall identify and assess available alternatives to direct regulation, including . . . providing information upon which choices can be made by the public.” The Open Government Directive of the Office of Management and Budget calls for disclosures that will “further the core mission of the agency.” The purpose of this guidance is to set forth principles designed to assist agencies in their efforts to use information disclosure to achieve their regulatory objectives. Agencies should follow the principles outlined here in accordance with their own authorities, judgments, and goals, to the extent permitted by law.

DISCLOSURE AS A REGULATORY TOOL. Sometimes Congress requires or authorizes agencies to impose disclosure requirements instead of, or in addition to, mandates, subsidies, or bans. For example, automobile companies are required by law to disclose miles per gallon (MPG) ratings for new vehicles, and a standardized Nutrition Facts panel must be included on most food packages. The goal of disclosing such information is to provide members of the public with relevant information at the right moment in time, usually when a decision is made. Often that decision is whether to purchase a particular product.

Well-designed disclosure policies attempt to convey information clearly and at the time when it is needed. People have limited time, attention, and resources for seeking out new information, and it is important to ensure that relevant information is salient and easy to find and to understand. There is a difference between making a merely technical disclosure — that is, making information available somewhere and in some form, regardless of its usefulness — and actually informing choices. Well-designed disclosure policies are preceded by a careful analysis of their likely effects.

There are two general types of release that Congress may require or permit: summary disclosure and full disclosure. With summary disclosure, often required at the point of purchase, agencies highlight the most relevant information in order to increase the likelihood that people will see it, understand it, and act in accordance with what they have learned. Full disclosure is more comprehensive; it occurs when agencies release, or require others to release, all relevant information (often including underlying data).

SUMMARY DISCLOSURE. With summary disclosure, agencies attempt to provide people with clear, salient information at or near the time that relevant decisions are made. Examples include nutritional labeling, energy efficiency labeling, tobacco warnings, and government provision of information (e.g., fact sheets, telephone hotlines, and public interest announcements).

Principle One: In order to select which information to highlight and how to present that information, agencies should explicitly identify their goals.

Explicit identification of goals will have important implications for the nature of disclosure. If the goal is to discourage behavior by informing people that certain activities or products impose certain risks (for example, tobacco smoking), agencies should decide whether they seek to use vivid descriptions and persuasive images or merely to disclose relevant facts. If the goal is to present a warning, then graphic messages might be justified; the same is not true when the aim is simply to inform. And if the goal is to present a warning, it will often be useful to inform users of the precise steps that they might take, or the plans that they might formulate, to avoid the risk in question. Warnings (and disclosures in general) are most effective when people have a clear and specific sense of an appropriate course of action. They are likely to be less effective when the appropriate course of action is abstract, vague, or ambiguous.

Principle Two: Summary disclosure should generally be simple and specific, and should avoid undue detail or excessive complexity.

Summary disclosure should focus on the central issues and should be presented in a manner that is straightforward and easy to understand. Simple, specific disclosure is generally preferable. People have limited time and attention, and their reactions to new information are not always predictable. If information is unduly complex and detailed, there is a risk that it will not be carefully read or processed, especially if the relevant area is technical or new and unfamiliar. Agencies should be aware of the importance of how information is presented; if a potential outcome is presented as a loss, for example, people may pay more attention than if it is presented as a gain. Effective disclosure also avoids abstraction and ambiguity. Summary disclosure should be designed so as to be relevant to the affected population, enabling people to know why and how the information is pertinent to their own choices.

Principle Three: Summary disclosure should be accurate and in plain language.

By its very nature, summary disclosure can be misleading; a summary of complex material might give undue prominence to isolated aspects of a product or a context, and might divert attention from what most matters. Summary disclosure should be designed to be as fair and accurate as possible. Summary disclosure should also avoid jargon, technical language, or extraneous information. Each of these is distracting and threatens to turn away or to confuse users.

Principle Four: Disclosed information should be properly placed and timed.

Careful thought should be given to the time and location of summary disclosure. Agencies should attempt to offer the information that users need when they need it. To this end, they should take steps to provide people with relevant information when they are actually making the decision or taking the action in question. For example, information about fuel economy is most useful if it is present and visible when people are shopping for motor vehicles. Similarly, summary disclosure should be provided in a prominent place, so that it will actually come to people's attention.

Principle Five: Summary disclosure through ratings or scales should be meaningful.

Summary disclosure may involve numerical ratings or scales, because these are convenient ways to simplify and display complicated information. For nutrition, percent daily values are a common example of this sort of summary disclosure. When users understand what such scales mean, they can be among the most effective ways to communicate information. But if the scales are unclear or poorly designed, people may have a difficult time knowing what to make of the information; they might fail to incorporate it into their choices or draw the wrong conclusions. Agencies should select numbers and scales that are meaningful to users. For example, the Energy Guide label provides an estimate of annual operating cost, along with a cost range for similar models. Annual savings or benefits, measured in terms of dollars, provide a metric that is both meaningful and easy to understand. When monetary values are at stake, agencies should give careful consideration to disclosure of savings or benefits in terms of dollars.

Principle Six: To the extent feasible, agencies should test, in advance, the likely effects of summary disclosure, and should also monitor the effects of such disclosure over time.

For all significant summary disclosure, it is important to observe whether and how people react to a given piece of information. To the extent feasible, and when existing knowledge is inadequate, agencies should consider several alternative methods of disclosure and test them before imposing a disclosure requirement. Scientifically valid experiments are generally preferable to focus group testing, and randomized experiments can be especially valuable. When focus groups are used, they should attempt to elicit information about actual choices and behavior (rather than simply reactions to or preferences for labels and formats). Consultation with experts can also be a valuable supplement to focus group testing.

Consistent with available resources, an agency requiring or making a disclosure should also consider performing market surveys or research to determine whether the desired effect is being achieved. These studies should determine whether users are aware of the disclosure, whether they understand the disclosure, whether they remember the relevant information when they need it, whether they have changed their behavior because of the disclosure, and, if so, how. Agencies should be aware that users might not report their behavior accurately; self-reports may be misleading. To the extent possible, agencies should attempt to verify whether reported changes are actually occurring (for example, through empirical study of practices or through surveys that reliably measure behavior).

With respect to summary disclosure, agencies will often be able to learn more over time. A disclosure requirement that seems promising at one stage may turn out to be less effective than anticipated. A disclosure requirement that was effective at an early stage may turn out to have less or little impact as time passes. New strategies will often emerge as experience accumulates and circumstances change. Agencies should be open to fresh evidence and consider new approaches to the extent feasible and as the evidence warrants.

Principle Seven: Where feasible and appropriate, agencies should identify and consider the likely costs and benefits of disclosure requirements.

Executive Order 12866 requires agencies, to the extent permitted by law, “to assess both the costs and the benefits of the intended regulation” and “recognizing that some costs and benefits are difficult to quantify,” to proceed only “upon a reasoned determination that the benefits of the intended regulation justify the costs.” In accordance with this requirement, and where feasible and appropriate in the circumstances, agencies should adopt disclosure requirements only after considering both qualitative and quantitative benefits and costs. That assessment should, in turn, help agencies to decide which requirements to select.

It is important to acknowledge that in some contexts, the costs and benefits of disclosure may be difficult or even impossible to specify, and a formal analysis may not be feasible or appropriate. Quantitative assessment of benefits may involve a high degree of speculation, and a qualitative discussion, based on available evidence, may be all that is feasible. In assessing benefits, agencies should consider the fact that improvements in welfare are a central goal of disclosure requirements, but should also note that informed choice is a value in itself (even if it is difficult to quantify that value).

It is also important to recognize that people may react differently to disclosure requirements. While some consumers might use calorie information to reduce their overall calorie intake, others might not. Heterogeneity can have potentially significant effects; those who have the most to gain or to lose may or may not be benefiting from the relevant disclosure. Agencies should attempt to take divergent behavior and preferences into account when formulating disclosure policies and assessing their likely consequences.

FULL DISCLOSURE. Sometimes Congress requires or authorizes agencies to promote regulatory goals by disclosing, or by requiring others to disclose, a wide range of information about existing practices and their effects. Full disclosure will include far more detail than is available in a summary. It may well include multiple variables, supporting data, and materials that extend over long periods of time. For example, agencies use the Internet to provide detailed information about fuel economy and nutrition; such information is far more comprehensive than what is provided through summary disclosure.

Full disclosure can often promote the purposes of open government, including transparency, participation, and collaboration. The central goals of full disclosure are to allow individuals and organizations to view the data and to analyze, use, and repackage it in multiple ways, typically taking advantage of emerging technological capacities (perhaps including social media). To promote those goals, agencies should consider the following principles.

Principle One: Disclosed information should be as accessible as possible. For that reason, the Internet should ordinarily be used as a means of disclosing information, to the extent feasible and consistent with law.

Transparency is generally good practice, and agencies cannot always know which information will be most useful and in what format it will prove most valuable. Engaging in full disclosure (to the extent feasible, subject to valid restrictions, and to the extent permitted by law) is often both desirable and important.

Full disclosure will frequently involve large amounts of complicated data, and most people may not find it worth their time to seek out and analyze all or most of it. In such cases, the data may be most directly useful to groups and organizations with technical capabilities and with an interest in obtaining, analyzing, and repackaging relevant information. Such groups and organizations may reorganize and disseminate the information in ways that turn out to be highly beneficial to the general public (sometimes by improving the operation of markets). At the same time, agencies should strive to make full disclosure as useful as possible, and should therefore promote clarity and accessibility.

Principle Two: Disclosed information should be as usable as possible. For that reason, information should usually be released in an electronic format that does not require specialized software.

Consistent with the goals of open government, it is important to make information not merely available but also usable. If information is made available electronically, it will be easier for people to sift through it and to analyze or repackage it in various ways. Agencies should select an electronic format that is suitable to achieving that goal. The best method should be chosen in light of existing technology. At the present time, a structured XML format is conducive to this purpose.

Principle Three: Agencies should consider making periodic assessments of whether full disclosure is as accurate and useful as possible.

Where feasible and to the extent consistent with relevant laws, regulations, and policies (including protection of privacy), agencies should consider steps to investigate whether current disclosure policies are fulfilling their intended purposes. They might explore, for example, what information is being frequently used by the public and how those in the private sector are adapting and presenting information. By so doing, agencies can improve their disclosure policies and practices after learning about the value of particular information to the public. Similar forms of continuing assessment might prove useful for summary disclosure as well.

Agencies should also consider whether it might be useful to seek public comment on significant disclosures. As appropriate, agencies might use the Federal Register to obtain such comment. The public comment period associated with the Paperwork Reduction Act of 1995, 44 U.S.C. 3501 et seq., might also be used for this purpose. Agencies might consider requesting public comment on the following:

- 1) The quality of the information;
- 2) The usefulness of the information;
- 3) Other related information the agency should collect and/or disclose; and
- 4) Means of improving disclosure, such as more effective methods for collecting, organizing, analyzing, and disseminating information.

Principle Four: Where feasible and appropriate, agencies should consider the costs and benefits of full disclosure.

As noted above, Executive Order 12866 requires agencies, to the extent permitted by law, “to assess both the costs and the benefits of the intended regulation” and to proceed only upon “a reasoned determination that the benefits of the intended regulation justify the costs.” In addition, the Paperwork Reduction Act of 1995 imposes a series of requirements on efforts to collect information; these requirements are designed (among other things) to increase the practical utility of information collections and to minimize burdens on the private sector. In accordance with these requirements, and to the extent feasible and appropriate, agencies should evaluate full disclosure in terms of both qualitative and quantitative benefits and costs.

Here, as with summary disclosure, quantitative assessment of benefits may involve a degree of speculation, and a qualitative discussion, based on available evidence, may be all that is feasible. In assessing benefits, agencies should consider the fact that improvements in welfare are a central goal of disclosure requirements, that informed choice is also a value in itself (even if it is difficult to quantify that value), and that full disclosure may effectively complement and improve on summary disclosure. It is also important to recognize that significant benefits may be associated with recombining information in new and different ways, even if quantification of those benefits is difficult.

SUMMARY DISCLOSURE AND FULL DISCLOSURE. Congress may require or authorize agencies to require summary disclosure but not full disclosure; alternatively, Congress may require or authorize agencies to require full disclosure but not summary disclosure. When Congress grants agencies discretion, and to the extent feasible, they should consider the likely effects — including the qualitative and quantitative costs and benefits — of both approaches.

Summary disclosure is the best method for informing consumers at the point of decision. Full disclosure is the best method of allowing groups and individuals access to a broad range of information, allowing them to analyze and disseminate that information in creative ways, and to use it to inform private and public decisions or otherwise to promote statutory goals. The two approaches may well be complementary. For example, it may be desirable to use summary disclosure at the point of purchase while also making full information available on the Internet.

Simplification As A Regulatory Tool

PURPOSE. In some statutes, Congress requires or permits agencies to simplify regulatory requirements. In other statutes, Congress requires or permits agencies to use default rules, such as automatic enrollment, to simplify people’s decisions and to promote regulatory objectives. Executive Order 12866 provides, “Each agency shall identify and assess available alternatives to direct regulation.” It also provides, “Each agency shall draft its regulations to be simple and easy to understand, with the goal of minimizing the potential for uncertainty and litigation arising from such uncertainty.” It adds, “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.”

The purpose of this guidance is to set forth principles designed to assist agencies in using simplification to achieve their regulatory goals. Agencies should follow the principles outlined here in accordance with their own authorities, judgments, and goals, to the extent permitted by law.

SIMPLIFICATION AND DEFAULT RULES. In recent years, significant attention has been given to the possibility of improving outcomes by easing and simplifying people’s choices. Sometimes this goal can be achieved by reducing complexity, ambiguity, and paperwork burdens; sometimes it can be achieved by selecting appropriate starting points or “default rules.” A default rule (such as automatic enrollment) specifies the outcome in a given situation if people make no choice at all.

In the domain of savings for retirement, for example, private and public employers might create an “opt in” system, in which employees do not reserve any of their salary for savings unless they affirmatively elect to do so (and hence opt in). Alternatively, employers might create an “opt out” system, in which a certain amount of salary is placed in a retirement plan unless employees affirmatively elect not to participate in the plan. Default rules play a large role in many domains. Both private and public institutions make numerous choices between opt-in and opt-out design.

Considerable evidence suggests that the choice of the default rule can have a significant effect on behavior and outcomes, even if it is simple and essentially costless to opt in or opt out. A typical finding is that under an opt-in system, fewer people are likely to participate than in an opt-out system. One reason is that inertia can be a powerful force; people may procrastinate or decline to make the effort to rethink the default option. Another reason is that the default rule might be taken to carry an implied endorsement by those who have chosen it; people may not depart from the default rule on the ground that it might have been selected because it is helpful or appropriate. Whatever the reason, it is clear that in some contexts, the chosen default rule can have significant effects, perhaps more significant than alternative possibilities, including disclosure of relevant information and even monetary incentives. It follows that if, for example, the relevant goal is to enable people to increase savings, an opt-out regime could be helpful for achieving that goal (as many private employers have found).

Instead of choosing opt in or opt out, private or public institutions might select a distinctive approach, which is to require “active choosing.” Under this approach, no default rule is put in place. People are asked to make an explicit statement of their preference among the alternatives. Compared to opt in, active choosing has been found to increase participation rates substantially. Agencies may wish to consider whether active choosing is preferable to a default rule as a means of promoting their objectives. If, for example, agencies are uncertain about which default rule will be best for the public, or if any default rule creates risks, requiring active choices may be an attractive alternative.

More generally, people may not participate in important programs simply because the required steps for participation are complex and daunting; agencies can often improve outcomes by reducing unnecessary paperwork burdens and by simplifying choices. For example, many agencies have taken active steps to dispense with paper and to allow people to use electronic forms (“fillable fileable,” including electronic signatures). Others have reduced burdens by eliminating unnecessary questions, using skip patterns, allowing “prepopulation” of forms, authorizing less frequent reporting, and eliminating redundancy. In making choices among possible approaches, agencies should consider the following principles, to the extent permitted by law.

Principle One: To promote regulatory goals, agencies should consider whether it is appropriate to use default rules (such as automatic enrollment) as a substitute for, or as a supplement to, mandates or bans.

In some contexts, appropriate default rules have advantages over mandates and bans, because they preserve freedom of choice. Sometimes people’s situations are diverse and a mandate is poorly suited to individual circumstances; a default rule has the virtue of permitting people to adjust as they see fit. And when the statutory goal is to improve outcomes without imposing firm mandates, a default rule may be simpler, more effective, and less costly than other possibilities.

Sometimes, of course, the law requires certain behavior (often to prevent harms to third parties), and in such cases, a default rule may not be sufficient. But in such contexts, default rules may be useful and complementary. If, for example, people are required by law to engage in certain behavior, it may be both useful and appropriate to select the default rule that promotes compliance and best achieves the regulatory objective. Such an approach can increase ease and simplicity for those who are asked to comply with the law.

Principle Two: When choosing among potential default rules, agencies should attempt to specify their likely effects, and should identify the rule that would most benefit the relevant population.

According to standard economic theory, a default rule should generally have little or no effect, at least if it is not burdensome or costly for people to depart from it. But empirical evidence suggests that in many contexts, outcomes are significantly affected by the choice of default rules. Many people will not opt in to a certain program or situation, even if they would also not opt out.

When choosing the appropriate default rule, agencies should attempt to specify and assess the likely effects of the alternative possibilities (including, to the extent feasible and permitted by law, both qualitative and quantitative costs and benefits, in accordance with Executive Order 12866). An important question is whether most people in the relevant population would benefit from participation in the pertinent program or activity. This question will not always be easy. It should ordinarily be answered by asking what most people would choose if they had adequate information. And if one set of outcomes is required by law, agencies should consider selecting a default rule that would simplify and promote compliance.

One approach to the choice of default rule is to choose a general rule that will apply to all of the relevant population, subject of course to opt in or opt out. An alternative approach is more personalized, in the sense that it attempts to distinguish among, and to suit the diverse situations of, members of the affected group. For example, geographic or demographic information (such as age) might be taken into account if it helps to increase the likelihood that the default rule will be suited to the situations of those to whom it applies. Agencies might consider a personalized approach if they have good reason to believe that such an approach would more accurately reflect the informed judgments of members of the affected population. On the other hand, agencies should avoid a personalized approach if the underlying categories would be too crude or inconsistent with relevant laws, regulations, or policies, such as those involving privacy.

Principle Three: Agencies should consider active choosing as an alternative to a specified default rule, especially when the relevant group is diverse and appropriately informed.

In some cases, it may be difficult for agencies to be confident about which default rule will be best for the public or the relevant population; they may lack adequate information. In such cases, active choosing might well be preferable. This approach avoids a specified default rule. Instead, active choosing asks people to make an explicit selection of the option that they prefer.

Active choosing has particular advantages over a default rule when preferences and situations are diverse and heterogeneous, so that a single approach does not fit all. To that extent, active choosing can be preferable to either an opt-in or an opt-out regime. And when preferences and circumstances are diverse, a default rule may have the disadvantage of giving uniform treatment to differently situated people. More personalized default rules may avoid some of the problems of a uniform default rule, but when agencies lack full information, active choosing might well be the best approach.

These points also suggest the circumstances in which a default rule might be preferred to active choosing. Where agencies have reason to be confident about the appropriate default rule, and when preferences and situations are not relevantly diverse, active choosing may not be the best approach; a default rule might be best. Where the situation is unfamiliar, highly technical, and complex, a default rule might be preferred to active choosing, to the extent that the latter approach requires people to make decisions for which they lack experience and expertise. Provision of information might, of course, help to reduce the latter problem. Agencies should consider whether existing evidence provides a basis for deciding between a specified default rule and active choosing, or whether it is appropriate to attempt to obtain such evidence. Assessment

of likely effects, including both qualitative and quantitative costs and benefits, will prove useful in making that decision.

Principle Four: Agencies should consider how best to eliminate unnecessary complexity and to simplify people's choices.

In some cases, a default rule will not fit with the relevant law or help solve the problem with which agencies are concerned. In such cases, agencies should nonetheless take steps to eliminate undue complexity and should attempt, where appropriate and consistent with law, to simplify and ease people's decisions.

For example, burdensome paperwork requirements can impose large costs on the private and public sectors, have unintended adverse effects, reduce compliance, and prevent significant numbers of people from participating in relevant programs. Consistent with the Paperwork Reduction Act of 1995, 44 U.S.C. 3501 et seq., and the Government Paperwork Elimination Act, 44 U.S.C. 3504, and to the extent permitted by law, agencies should attempt to reduce such requirements by eliminating unnecessary, ambiguous, excessive, and redundant questions; by permitting electronic filing (including electronic signatures); by allowing "prepopulation" of forms, where appropriate and feasible by sharing information across offices or agencies; and by promoting administrative simplification by coordinating and reducing requirements from multiple offices and agencies.

**APPENDIX E: DEPARTMENT OF TRANSPORTATION’S TABLE OF COSTS AND BENEFITS FOR
ENHANCED PASSENGER PROTECTIONS, PART 2**

The Department of Transportation recently included the following table of costs and benefits in its Notice of Proposed Rulemaking, “Enhanced Passenger Protections—Part 2”

Table E-1: Comparison of Requirement-Specific Benefits and Costs, 2010-2020
(discounted at 7%/year to 2010 \$ millions)

Requirement 1: Expand tarmac delay contingency plan requirements to smaller airports and require that foreign carriers have a tarmac delay contingency plan	Total
Estimated Quantified Benefits	\$1.99
Estimated Quantified Costs	\$3.24
Net Benefits	-\$1.25
<u>Unquantified Benefits:</u> <ul style="list-style-type: none"> • Improved Management of Flight Delays • Decreased Anxiety with Regard to Flying • Reduced Stress among Delayed Passengers and Crew • Improved Overall Carrier Operations • Improved Customer Good Will towards Carriers 	
<u>Unquantified Costs:</u> <ul style="list-style-type: none"> • Increased Flight Cancellations • Increased Passenger Anxiety Associated with Potential Flight Cancellations 	
Requirement 2: Expand carriers’ reporting tarmac delay info to DOT and require reporting by foreign carriers	Total
Estimated Quantified Benefits	not estimated
Estimated Quantified Costs	\$2.31
Net Benefits	not estimated
<u>Unquantified Benefits:</u> <ul style="list-style-type: none"> • Increased Efficiency of US DOT Oversight and Enforcement Office Operations • Improved Planning by Passengers • Improved Management of Flight Delays • Improved Market Competition 	
Requirement 3: Establish of minimum standards for carriers’ customer service plans and extend the customer service plan requirements to cover foreign carriers	Total
Estimated Quantified Benefits	\$6.25
Estimated Quantified Costs	\$8.58
Net Benefits	-\$2.33
<u>Unquantified Benefits:</u> <ul style="list-style-type: none"> • Decreased Confusion and Uncertainty Regarding Department’s Requirements • Value of Improved Customer Service Based on Self-Auditing of Adherence to Customer Service Plans for Foreign Carriers • Improved Customer Good Will towards Carriers 	

Requirement 4: Require Incorporation of tarmac delay contingency plans and customer service plans into carrier contracts of carriage	Total
Estimated Quantified Benefits	not estimated
Estimated Quantified Costs	not estimated
Net Benefits	not estimated
<u>Unquantified Benefits:</u>	
<ul style="list-style-type: none"> • Decreased Occurrence of Customer Complaints • Improved Resolution of Customer Complaints 	
Requirement 5: Extend requirements for carriers to respond to consumer complaints to cover foreign carriers	Total
Estimated Quantified Benefits	\$0.00
Estimated Quantified Costs	\$1.82
Net Benefits	-\$1.82
<u>Unquantified Benefits:</u>	
<ul style="list-style-type: none"> • Decreased Occurrence of Conduct that Would Produce Complaints • Improved Resolution of Customer Complaints • Decreased Anger toward Carriers During Resolution of Complaints 	
Requirement 6: Changes in denied boarding compensation (involuntary bumping) policy: increase minimum compensation, add inflation adjustment, greater passenger information about policies	Total
Estimated Quantified Benefits	not estimated
Estimated Quantified Costs	\$0.66
Net Benefits	not estimated
<u>Unquantified Benefits:</u>	
<ul style="list-style-type: none"> • Decrease in Confusion Regarding Denied Boarding Compensation Provisions • More Accurate Compensation for those Denied Boarding • Decreased Resentment among Some Passengers Regarding Different Compensation Received 	
Requirement 7: Require that carriers include taxes and fees in advertising (“full-fare advertising”) and prohibit use of sales provisions that require purchasers to opt out of add-ons such as trip insurance	Total
Estimated Quantified Benefits	\$73.50
Estimated Quantified Costs	\$6.86
Net Benefits	\$66.64
<u>Unquantified Benefits:</u>	
<ul style="list-style-type: none"> • Travelers Less Likely to Mistakenly Purchase Unwanted Services and Amenities • Improved Market Competition • Improved Customer Good Will Towards Carriers 	
Requirement 8: Require carriers to disclose baggage and other optional fees on their websites	Total
Estimated Quantified Benefits	not estimated
Estimated Quantified Costs	\$2.51
Net Benefits	not estimated
<u>Unquantified Benefits:</u>	
<ul style="list-style-type: none"> • Decrease in Time at Check-in • Avoidance of Unfair Surprise 	

<ul style="list-style-type: none"> Improved Customer Good Will towards Carriers Improved Market Competition 	
Requirement 9: Ban the practice of post-purchase price increases.	Total
Estimated Quantified Benefits	\$5.83
Estimated Quantified Costs	not estimated
Net Benefits	not estimated
<u>Unquantified Benefits:</u> <ul style="list-style-type: none"> Improved Customer Good Will towards Carriers Avoidance of Unfair Surprise 	
<u>Unquantified Costs:</u> <ul style="list-style-type: none"> Inability to Increase Prices Based on Unanticipated or Changed Circumstances 	
Requirement 10: Require prompt passenger notification of flight status changes (cancellations, delays, etc.) at the boarding gate area, on website and on telephone reservation systems.	Total
Estimated Quantified Benefits	not estimated
Estimated Quantified Costs	not estimated
Net Benefits	not estimated
<u>Unquantified Benefits:</u> <ul style="list-style-type: none"> Reduced Passenger Anxiety Greater Comfort and Certainty from Knowing that Information Will Be Available In Timely Manner 	
<u>Unquantified Costs:</u> <ul style="list-style-type: none"> Expense of Providing Notification 	
Requirement 11: Permit consumers to file suit wherever a carrier does business	Total
Estimated Quantified Benefits	not estimated
Estimated Quantified Costs	not estimated
Net Benefits	not estimated
<u>Unquantified Benefits:</u> <ul style="list-style-type: none"> Greater compliance with DOT regulations Improved Customer Good Will towards Carriers 	
<u>Unquantified Costs:</u> <ul style="list-style-type: none"> Need to Defend Suit in Location of Consumer's Choice 	
Requirements 1 -11: TOTAL	Total
Estimated Quantified Benefits	\$87.6
Estimated Quantified Costs	\$26.0
Net Benefits	\$61.6

APPENDIX F: INFORMATION QUALITY AND PEER REVIEW

A. Links for Agency Information Quality Correspondence

Links to Agencies that Received Correction Requests in FY 2007:

Department of Commerce:

http://ocio.os.doc.gov/ITPolicyandPrograms/Information_Quality/index.htm

Department of Defense, Army Corps of Engineers:

<http://www.hq.usace.army.mil/ceci/informationqualityact>

Department of Energy:

<http://www.cio.energy.gov/infoquality.htm>

Department of Health and Human Services:

<http://aspe.hhs.gov/infoquality/requests.shtml>

Department of the Interior, Fish and Wildlife Service:

<http://www.fws.gov/informationquality>

Department of the Interior, National Park Service:

<http://www.nps.gov/policy/infoqualcorrect.htm>

Department of the Interior, US Geological Survey:

http://www.usgs.gov/info_qual

Department of Labor:

<http://www.dol.gov/cio/programs/InfoGuidelines/IQCR.htm>

Environmental Protection Agency:

<http://epa.gov/quality/informationguidelines/iqg-list.html>

Federal Communications Commission:

<http://www.fcc.gov/omd/dataquality/welcome.html>

Links to All Agencies' IQ Correspondence Web Pages:

Access Board:

<http://www.access-board.gov/about/policies/infoquality.htm>

Chemical Safety and Hazard Investigation Board:

http://www.csb.gov/index.cfm?folder=legal_affairs&page=index

Commodity Futures Trading Commission:

<http://www.cftc.gov/webpolicy/index.htm#information>

Consumer Product Safety Commission:

<http://www.cpsc.gov/library/correction/correction.html>

Corporation for National and Community Service:

http://www.nationalservice.gov/home/site_information/quality.asp

Defense Nuclear Facilities Safety Board:

http://www.dnfsb.gov/about/information_quality.html

Department of Agriculture:

http://www.ocio.usda.gov/qi_guide

Department of Agriculture, Forest Service:

<http://www.fs.fed.us/qoi>

Department of Commerce:

http://ocio.os.doc.gov/ITPolicyandPrograms/Information_Quality/index.htm

Department of Defense:

<http://www.defenselink.mil/pubs/dodiqguidelines.html>

Department of Defense, Army Corps of Engineers:

<http://www.hq.usace.army.mil/ceci/informationqualityact>

Department of Education:

<http://www.ed.gov/policy/gen/guid/infoqualguide.html>

Department of Energy:

<http://www.cio.energy.gov/infoquality.htm>

Department of Health and Human Services:

<http://aspe.hhs.gov/infoquality/requests.shtml>

Department of Housing and Urban Development:

<http://www.hud.gov/offices/adm/grants/qualityinfo/qualityinfo.cfm>

Department of Justice:

http://www.usdoj.gov/iqpr/iqpr_disclaimer.html

Department of Labor:

<http://www.dol.gov/cio/programs/InfoGuidelines/IQCR.htm>

Department of State:

<http://www.state.gov/misc/49492.htm>

Department of the Interior:

<http://www.doi.gov/ocio/iq>

Department of the Interior, Bureau of Land Management:

http://www.blm.gov/wo/st/en/national_page/Notices_used_in_Footer/data_quality.html

Department of the Interior, Fish and Wildlife Service:

<http://www.fws.gov/informationquality>

Department of the Interior, National Park Service:

<http://www.nps.gov/policy/infoqualcorrect.htm>

Department of Transportation, Surface Transportation Board:

<http://www.stb.dot.gov/stb/InformationQualityGuidelines.htm>

Department of Transportation:

<http://docketsinfo.dot.gov/Dataquality.cfm>

Department of Veteran Affairs:

http://www.rms.oit.va.gov/Information_Quality.asp

Environmental Protection Agency:

<http://epa.gov/quality/informationguidelines/iqg-list.html>

Equal Employment Opportunity Commission:

<http://www.eeoc.gov/policy/guidelines/index.html>

Farm Credit Administration:

http://www.fca.gov/FCA-Web/fca%20new%20site/home/info_quality.html

Federal Communications Commission:

<http://www.fcc.gov/omd/dataquality/welcome.html>

Federal Deposit Insurance Corporation:

<http://www.fdic.gov/about/policies/#information>

Federal Energy Regulatory Commission:

<http://www.ferc.gov/help/filing-guide/file-correct.asp>

Federal Maritime Commission:

<http://www.fmc.gov/reading/IntroInformationQualityGuidelines.asp?PRINT=Y>

Federal Reserve Board:

http://www.federalreserve.gov/iq_correction.htm

Federal Trade Commission:

<http://www.ftc.gov/ogc/sec515/index.htm>

General Services Administration:

http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentId=12667&contentType=GSA_OVERVIEW

Institute of Museum and Library Services:

<http://www.imls.gov/about/guidelines.shtm>

Internal Revenue Service:

<http://www.irs.gov/irs/article/0,,id=131585,00.html>

Merit Systems Protection Board:

<http://www.mspb.gov/netsearch/viewdocs.aspx?docnumber=251846&version=252119&application=ACROBAT>

National Aeronautics and Space Administration:

<http://www.sti.nasa.gov/qualinfo.html>

National Archives:

<http://www.archives.gov/about/info-qual/requests/index.html>

National Credit Union Administration:

<http://www.ncua.gov/data/InfoQuality/InfoQuality.htm>

National Endowment for the Arts:

<http://www.arts.gov/about/infoquality.html>

National Endowment for the Humanities:

<http://www.neh.gov/whoweare/dissemination.html>

National Labor Relations Board:

http://www.nlr.gov/about_us/public_notices/information_on_quality_guidelines.aspx

National Science Foundation:

<http://www.nsf.gov/policies/infoqual.jsp>

National Transportation Safety Board:

<http://www.nts.gov/info/quality.htm>

Nuclear Regulatory Commission:

<http://www.nrc.gov/public-involve/info-quality.html>

Nuclear Waste Technical Review Board:

<http://www.nwtrb.gov/plans/plans.html>

Occupational Safety & Health Review Commission:

<http://www.oshrc.gov/infoquality/infoquality.html>

Office of Federal Housing Enterprise Oversight:

<http://www.ofheo.gov/PublicInformation.aspx?Nav=105>

Office of Government Ethics:

http://www.usoge.gov/pages/about_oge/info_quality.html

Office of Management and Budget:

http://www.whitehouse.gov/omb/inforeg/info_quality/information_quality.html

Office of Personnel Management:

<http://www.opm.gov/policy/webpolicy/index.asp>

Office of Special Counsel:

<http://www.osc.gov/InfoQuality.htm>

Overseas Private Investment Corporation:

<http://www.opic.gov/pubs/qualityguidelines/index.asp>

Peace Corps:

<http://www.peacecorps.gov/index.cfm?shell=pchq.policies.docs>

Pension Benefit Guaranty Corporation:

<http://www.pbgc.gov/media/key-resources-for-the-press/content/page5274.html>

Small Business Administration:

<http://www.sba.gov/information/index.html>

Social Security Administration:

<http://www.ssa.gov/515/requests.htm>

Tennessee Valley Authority:

<http://www.tva.gov/infoquality/>

US International Trade Commission:

http://www.usitc.gov/policies/info_quality.htm

USAID:

http://www.usaid.gov/policy/info_quality/

B. Links for Agency Peer Review Agendas

Cabinet-Level Departments

Department of Agriculture:

http://www.ocio.usda.gov/qi_guide/qoi_officer_lst.html

http://www.ocio.usda.gov/qi_guide/scientific_research.html

Agricultural Research Service:

<http://www.ars.usda.gov//docs.htm?docid=19203&dropcache=true&mode=preview>

Animal and Plant Health Inspection Service:

http://www.aphis.usda.gov/peer_review/peer_review_agenda.shtml

Economic Research Service:

<http://www.ers.usda.gov/AboutERS/peerreview.htm>

Food Safety Inspection Service:

http://www.fsis.usda.gov/Information_Quality/Peer_Review/index.asp

Forest Service:

<http://www.fs.fed.us/qoi/peerreview.shtml>

Grain Inspection, Packers, and Stockyard Inspection Administration:

<http://www.gipsa.usda.gov/GIPSA/webapp?area=home&subject=iq&topic=pr>

Office of the Chief Economist:

http://www.usda.gov/oce/peer_review

Department of Commerce:

http://ocio.os.doc.gov/ITPolicyandPrograms/Information_Quality/index.htm

National Oceanic and Atmospheric Administration:

http://www.cio.noaa.gov/Policy_Programs/prplans/PRsummaries.html

Department of Defense:

<http://www.defenselink.mil/pubs/dodiqguidelines.html>

Army Corps of Engineers:

<http://www.hq.usace.army.mil/ceci/informationqualityact>

Department of Education:

<http://www.ed.gov/policy/gen/guid/iq/peerreview.html>

Department of Energy:

<http://cio.energy.gov/infoquality.htm>

Department of Health and Human Services:

<http://aspe.hhs.gov/infoquality/peer.shtml>

Center for Disease Control:

<http://www2a.cdc.gov/od/peer/peer.asp>

Food and Drug Administration:

<http://www.fda.gov/ScienceResearch/SpecialTopics/PeerReviewofScientificInformationandAssessments/default.htm>

National Toxicology Program:

<http://fmp-8.cit.nih.gov/sif/agenda.php>

Office of Public Health and Science:

<http://aspe.hhs.gov/infoquality/guidelines/ophspeer.html>

Department of Homeland Security:

http://www.dhs.gov/xabout/compliance/editorial_0633.shtm

Department of Housing and Urban Development:

http://www.huduser.org/about/pdr_peer_review.html

Department of the Interior:

http://www.doi.gov/ocio/iq_1.html

Bureau of Land Management:

http://www.blm.gov/wo/st/en/national_page/Notices_used_in_Footer/data_quality.print.html

Bureau of Reclamation:

<http://www.usbr.gov/main/qoi/peeragenda.html>

Fish and Wildlife Service:

http://www.fws.gov/informationquality/peer_review/index.html

Mineral Management Service:

<http://www.mms.gov/qualityinfo/PeerReviewAgenda.htm>

National Park Service:

<http://www.nps.gov/policy/peerreview.htm>

Office of Surface Mining:

http://www.osmre.gov/guidance/osm_info_quality.shtm

US Geological Society:

http://www.usgs.gov/peer_review

Department of Justice:

http://www.usdoj.gov/iqpr/iqpr_disclaimer.html

Department of Labor:

<http://www.dol.gov/asp/peer-review/index.htm>

Employee Benefits Security Administration:

<http://www.dol.gov/ebsa/regs/peerreview.html>

Occupational Safety and Health Administration:

http://www.osha.gov/dsg/peer_review/peer_agenda.html

Mine Safety and Health Administration
<http://www.msha.gov/REGS/PEERReview/PEERreview.asp>

Department of State:
<http://www.state.gov/misc/49492.htm>

Department of Transportation:
<http://www.dot.gov/peerreviewagenda.html>

Department of Veterans Affairs:
http://www.rms.oit.va.gov/Peer_Review.asp

Other Agencies

Consumer Product Safety Commission:
<http://www.cpsc.gov/library/peer.html>

Environmental Protection Agency:
http://cfpub.epa.gov/si/si_public_pr_agenda.cfm

Federal Communications Commission:
<http://www.fcc.gov/omd/dataquality/peer-agenda.html>

Federal Energy Regulatory Commission:
<http://www.ferc.gov/help/filing-guide/file-correct.asp>

Federal Trade Commission:
<http://www.ftc.gov/ogc/sec515/>

National Aeronautics and Space Administration:
http://www.sti.nasa.gov/peer_review.html

Nuclear Regulatory Commission:
<http://www.nrc.gov/public-involve/info-quality/peer-review.html>

Office of Management and Budget:
http://www.whitehouse.gov/omb/inforeg/info_quality/information_quality.html

Small Business Administration:
http://www.sba.gov/information/SBA_IQ_PEER-REVIEW_AGENDA.html

Tennessee Valley Authority:
<http://www.tva.gov/infoquality>

C. Agencies that Do Not Produce or Sponsor Information Subject to the Bulletin

See website links in section A of this Appendix.

Agency for International Development
Corporation for National and Community Service
Council on Environmental Quality
Defense Nuclear Facilities Safety Board
Department of the Treasury
Equal Employment Opportunity Commission
Farm Credit Association
Federal Maritime Commission

Federal Reserve
General Services Administration
Institute of Museum and Library Services
International Trade Commission
Merit Systems Protection Board
National Archives
National Credit Union Administration
National Endowment for the Arts
National Endowment for the Humanities
National Labor Relations Board
National Science Foundation
Nuclear Waste Technical Review Board
Office of Federal Housing Enterprise Oversight
Office of Government Ethics
Office of Personnel Management
Overseas Private Investment Corporation
Patent and Trade Office
Peace Corps
Pension Benefit Guaranty Corporation
Railroad Board
Securities and Exchange Commission
Selective Services System
Social Security Administration
Surface Transportation Board
US Occupational Safety and Health Review Commission

APPENDIX G: RESPONSE TO PEER REVIEWS AND PUBLIC COMMENTS

We would like to express our sincere thanks and appreciation for the extremely helpful peer review and public comments that we received on the draft 2010 report. In particular, we would like to thank our invited peer reviewers, James Hammitt (Harvard Center for Risk Analysis), Eric Posner (University of Chicago Law School), and Jeffrey Rachlinski (Cornell Law School). We are grateful for the time and effort they devoted to providing us with useful comments. We have made numerous changes in response to these comments.

We have read all comments carefully; we summarize here only a few of the major comments received and our responses. Full texts of the comments are available at OMB's website at http://whitehouse.gov/omb/inforeg_reports_congress/.

Peer reviewers Posner and Rachlinski commented that the draft discussion of the social cost of carbon was difficult to interpret. OMB has added detail to this section of the report to clarify the discussion. It is best to consult the report itself for a full discussion, but we offer more background and material here. Posner also suggested that we refer to the problem of leakage; we have done so.

Rachlinski suggested clarifying that the relevant social science draws from research not merely in behavioral economics but also in psychology. OMB has made additions to the report to make this more apparent.

Rachlinski commented that the draft report suggested using disclosure as a regulatory tool, but did not provide enough discussion of the difficulties with this method of regulation. OMB agrees that disclosure is not always an adequate substitute for other forms of regulation. The report has been revised to illuminate this issue.

Rachlinski stated that OMB's methodology of adding ranges of benefits and costs across all of the rules for an agency likely overstates the uncertainty of estimates. Unless there is perfect correlation across rules, this procedure will estimate a range that is too large. OMB has made note of this point.

Rachlinski commented that the draft report did not explain the reason for including a discussion of childhood obesity. OMB has edited the report to clarify that childhood obesity is a problem that may call for actions with a regulatory component (such as disclosure). The Center for Regulatory Integrity comments that "the suggestion for new regulatory action in the area of childhood obesity is an important step," but suggests that the report make specific recommendations for regulatory changes in this area. OMB participates in the Task Force on Childhood Obesity, whose extensive report offers numerous recommendations.¹⁴⁴

The Institute for Policy Integrity suggested adding a discussion of the steps that agencies and OIRA have taken in the past year to implement the recommendations in the 2009 report. Rachlinski suggested adding examples of behavioral interventions by agencies. OMB has added information relevant activities throughout the report, particularly in Chapter II.

¹⁴⁴ The Task Force's report is available at <http://www.letsmove.gov/obesitytaskforce.php>

Rachlinski commented that the report would be “more accessible” if the costs and benefits of rules were delineated in 2010 dollars, instead of 2001 dollars. OMB will consider making this change in the next report.

Peer reviewer Posner commented that annual benefit and cost figures are missing for many of the rules in the report and suggests that OMB supply the missing figures. OMB agrees that it would be extremely useful to have complete data for all of the rules. However, many of the missing figures involve benefits and costs that are difficult to quantify or monetize in light of the absence of existing formation. Before rules are finalized, OMB works with agencies to promote quantification where possible. Consistent with Circular A-4, OMB agrees with Posner that quantification and monetization are highly desirable and continues to work with agencies to generate the relevant information.

Posner suggested that it would be interesting to compare discount rates, value of statistical life figures, and valuations of other hard-to-measure goods across different regulatory evaluations in different agencies to find out whether they are consistent. OMB agrees that this would be a useful exercise and has added a footnote with relevant information; it will consider doing more in the future.

Posner asked why the report does not discuss the measured impact of the regulations in the report on wages and employment. However, the regulations examined in this report have only recently been promulgated and not been in place long enough for us to gauge these impacts.

Peer reviewer Hammitt suggested clarifying the criteria for including rules in the report. OMB has added new language in response to this comment. Hammitt commented that Table 1-4 could be improved by listing the rules in logical order. George Washington University’s Regulatory Studies Center (RSC) commented that it was difficult to discern the order of the same table. The format and headings of the table has been changed to clarify the categories of rules included.

Hammitt asked whether it is reasonable to devote several pages of the report accounting for the status of the small number of requests for correction under the information quality guidelines and suggested providing some qualitative information about the significance of these requests. Public reviewer, James W. Conrad, Jr. on the other hand, commented on the value of the statistical summaries included in Chapter III. OMB appreciates these reviewers’ comments about the utility of this chapter and will take this into consideration for future reports. All the agency correspondence and requests for corrections are posted on the public web pages of the respective changes (and thus all the details are available). This chapter is designed to provide only a brief accounting of the requests. Discussion of the significance of any changes made to agency documents is beyond the current scope of the chapter, but will be considered for the future.

The Institute for Policy Integrity recommended that in its annual report OMB should review any petitions for rulemakings that have been received by agencies in the past year which

are still pending. OMB agrees that it would be valuable to compile information about such petitions and is considering the appropriate vehicle for doing so.

The Institute for Policy Integrity expressed concern that ideas submitted in response to OMB's request for regulatory suggestions that might help economic growth might not maximize net benefits. OMB agrees that the goal of maximizing net benefits is not the same as the goal of increasing economic growth (and offers a brief discussion of that point). OMB has revised the report to clarify that its primary goal is to maximize long-term net benefits. However, growth is an important goal, and we are interested in regulatory changes, such as simplification, that may contribute to growth while improving net benefits.

In response to OMB's request for suggestions about regulatory changes that might increase employment, innovation, and competitiveness, the HR Policy Association submitted a proposal for reform of the Fair Labor Standards Act. Continental Grain Co., Textron, Inc., General Electric Co., United Technologies Corp., PPG Industries, Inc., IBM, Verizon, AT&T, United Parcel Service, Inc., Caterpillar Inc., and Johnson Controls, Inc. each filed comments supporting the HR Policy Association comments. OMB appreciates the time and thought put into this proposal and will consider the the recommended reforms.

America's Health Insurance Plans (AHIP) filed comments urging OMB to ensure that federal agencies give the public the opportunity to participate in the regulatory review process through comments on proposed rules whenever possible. OMB is strongly committed to the important goal of allowing public participation on regulations, and chapter II offers specific recommendations designed to promote that important goal. AHIP also suggested that transparency would be served if OMB placed more information on its website and perhaps sent automatic notifications to interested parties about the status of OMB review of proposed regulatory changes. OMB has taken several recent steps, through guidance documents and the new OIRA dashboard, designed to promote the goal of transparency. It will consider these suggestions to determine whether transparency can be increased.

RSC submitted comments recommending estimating the social cost of transfer regulations. RSC acknowledges that there are difficulties with such estimates, but recommends using an estimate of 25 cents per dollar of revenue raised. OMB agrees that there are costs to such regulations and continues to encourage agencies to include estimates of such costs when analyzing the effects of regulations. However, agencies have not made such estimates, so none have been included in this report. OMB will consider including estimates in future reports.

RSC commented that the draft report did not identify the transfer rules in the report. Table 1-4 has been revised to identify these rules.

The Mercatus Center at George Mason University submitted comments suggesting that OMB require agencies to make plans for retrospective review when they issue economically significant regulations. The text of the report has been edited to emphasize that OMB continues to encourage agencies to engage in retrospective review to identify regulations that should be changed or removed.

The Center for Progressive Reform suggested, among other things, that the report's presentation of aggregated costs and benefits is "fundamentally counterproductive." However, OMB is required under the Regulatory Right-to-Know Act to report aggregated monetized cost and benefits in its report to Congress.

RSC suggested that OMB encourage agencies to experiment with collaborative "wikis" to allow greater exchange of ideas and information with the public. OMB finds this idea interesting and will consider it for the future.

The Center for Regulatory Effectiveness provided observations on how some Executive Branch agencies are implementing Section V of the Peer Review Bulletin and made a variety of suggestions for improving implementation. We will take CRE's suggestions into consideration as we continue to work with agencies.

APPENDIX H: REFERENCES

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