2014 Draft 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

2014 DRAFT REPORT TO CONGRESS ON THE BENEFITS AND COSTS OF FEDERAL REGULATIONS AND AGENCY COMPLIANCE WITH THE UNFUNDED MANDATES REFORM ACT

EXECUTIVE SUMMARY

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);[1]
- Rules designated as meeting the analysis threshold under the Unfunded Mandates Reform Act of 1995 (UMRA);[2] or
- Rules designated as "economically significant" under section 3(f)(1) of Executive Order 12866.[3]

The principal findings are as follows.

- The estimated annual benefits of major Federal regulations reviewed by OMB from October 1, 2003, to September 30, 2013, for which agencies estimated and monetized both benefits and costs, are in the aggregate between $217 billion and $863 billion, while the estimated annual costs are in the aggregate between $57

[1]A 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).

[2]A 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).

[3]A 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."

billion and $84 billion. These ranges are reported in 2001 dollars and reflect uncertainty in the benefits and costs of each rule at the time that it was evaluated.

- Some rules are anticipated to produce far higher net benefits than others. Moreover, there is substantial variation across agencies in the total net benefits expected from rules. A significant majority of rules have net benefits, but over the last decade, a few rules have net costs, typically as a result of legal requirements.

- During fiscal year 2013 (FY 2013), executive agencies promulgated 54 major rules, of which 30 were "transfer" rules – rules that primarily caused income transfers. Most transfer rules implement Federal budgetary programs as required or authorized by Congress.

    - For the 30 transfer rules, in all but one case the issuing agencies quantified and monetized the transfer amounts. (The transfer amounts reflect the principal economic consequences of such rules.)
    - For seven rules, the issuing agencies quantified and monetized both benefits and costs. Those seven rules were estimated to result in a total of $25.6 billion to $67.3 billion in annual benefits and $2.0 billion to $2.5 billion in annual costs.
    - For two rules, the issuing agency was able to quantify and monetize only benefits. For these two rules, the agencies estimated annual benefits of $500 million to $655 million.
    - For eleven rules, the issuing agencies were able to quantify and monetize only costs, in one case only partially. For these rules, the agencies estimated total annual costs of about $1.6 billion to $2.3 billion. Some of the rules were statutorily mandated.
    - For four rules, the issuing agencies were able to quantify and monetize neither costs nor benefits.

- The independent regulatory agencies, whose regulations are not subject to OMB review under Executive Orders 12866 and 13563, issued 18 major final rules in FY 2013. The majority of rules were issued to regulate the financial sector. Notably, the Consumer Financial Protection Bureau (CFPB) issued four rules and the Securities and Exchange Commission issued five rules, in the same period.

- The estimated annual net benefits of major Federal regulations reviewed by OMB from January 21, 2009, to September 30, 2013 (this Administration), for which agencies estimated and monetized both benefits and costs, is approximately $200 billion.

It is important to emphasize that the estimates used here have significant limitations. In some cases, quantification or monetization is not feasible. When agencies have not quantified or monetized the benefits or costs of regulations, or have not quantified or monetized important

effects, it is generally because of conceptual and empirical challenges, including an absence of relevant information. Many rules have benefits or costs that cannot be quantified or monetized with existing information, and the aggregate estimates presented here do not capture those non-monetized benefits and costs. In some cases, quantification of various effects is highly speculative. For example, it may not be possible to quantify the benefits of certain disclosure requirements, even if those benefits are likely to be large, simply because the impact of some such requirements cannot be specified in advance. In other cases, monetization of particular categories of benefits (such as protection of homeland security or personal privacy) can present significant challenges. As Executive Order 13563 recognizes, some rules produce benefits that cannot be adequately captured in monetary equivalents. In fulfilling their statutory mandates, agencies must sometimes act in the face of substantial uncertainty about the likely consequences.

In addition, prospective estimates necessarily contain assumptions about the future that may not turn out to be accurate. Retrospective analysis, required by Executive Order 13563 and institutionalized by Executive Order 13610, 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. The increasing interest in retrospective analysis, inside and outside of government and fueled by Executive Orders 13563 and 13610, should produce improvements on this count, above all by ensuring careful evaluation of the estimated *ex post* effects of rules. (Note that section 6 of Executive Order 13563, "Retrospective Analysis of Existing Rules," calls for such analysis.) This process should improve understanding not only of those effects, but also of the accuracy of prospective analyses, in a way that can be brought to bear on such analyses when they are originally written. In short, retrospective analysis can and should inform prospective analysis. Consistent with the Regulatory Right-to-Know Act, this draft Report's section on regulatory reform focuses in more detail on the Administration's efforts on the retrospective review of regulation.

OMB emphasizes that careful consideration of costs and benefits is best understood as a pragmatic way of helping to ensure that regulations will improve social welfare, above all by informing the design and consideration of various options so as (1) to help in the assessment whether it is worth proceeding at all and (2) to identify the opportunities for minimizing the costs of achieving a social goal (cost-effectiveness) and maximizing net social benefits (efficiency). Executive Order 13563 states that to the extent permitted by law, each agency must "propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs (recognizing that some benefits and costs are difficult to quantify)" and that agencies "select, in choosing among alternative regulatory approaches, those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity)." These requirements, like all others in the Executive Order, apply only to the extent permitted by law; many regulations are issued as a result of statutory requirements or court order, which may sharply limit agency discretion.

Chapter I summarizes the benefits and costs of major regulations issued between October 1, 2002 and September 30, 2013 and examines in more detail the benefits and costs of major Federal regulations issued in fiscal year 2013. 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.

This Report is being issued along with OMB's Seventeenth 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: 2014 REPORT TO CONGRESS ON THE BENEFITS AND COSTS OF FEDERAL REGULATIONS

Chapter I: The Benefits and Costs of Federal Regulations

This chapter consists of two parts: (A) the accounting statement and (B) 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 FY 2013 (September 30, 2013). As in previous Reports, this chapter uses a ten-year lookback. Estimates are based on the major regulations (for which the regulatory agency monetized both benefits and costs) that were reviewed by OMB from October 1, 2003 to September 30, 2013.[4] For this reason, six rules reviewed from October 1, 2002 to September 30, 2003 (fiscal year 2003) were included in the totals for the 2013 Report but are not included in this Report. A list of these fiscal year 2003 (FY 2003) rules can be found in Appendix B (see Table B-1). The removal of the six FY 2003 rules from the ten-year window is accompanied by the addition of seven FY 2013 rules.

As has been the practice for many years, all estimates presented in this chapter are agency estimates of benefits and costs, or transparent modifications of agency information performed by OMB.[5] This chapter also includes a discussion of major rules issued by independent regulatory agencies, although OMB does not review these rules under Executive Orders 13563 and 12866.[6] This discussion is based solely on data provided by these agencies to the Government Accountability Office (GAO) under the Congressional Review Act.

In the past, we have adjusted estimates to 2001 dollars, the requested format in OMB Circular A-4. This year, we are reporting most of the numbers in this chapter in both 2010 and 2001 dollars, in order to provide estimates that are close to current year dollars.

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

1. Individual regulatory impact analyses vary in rigor and may rely on different assumptions, including baseline scenarios, methods, and data. Summing across estimates involves the aggregation of analytical results that are not strictly

[4]All previous Reports are available at: http://www.whitehouse.gov/omb/inforeg_regpol_reports_congress/.

[5] OMB used agency estimates where available. We note that those estimates were typically subject to internal review (through the process required by Executive Order 12866) and external review (through the public comment process). The benefit and cost ranges represent lowest and highest agency estimates among all the estimates using both 3 and 7 percent discount rates. When agencies do not provide central estimates but do provide ranges for benefit and cost estimates, we take the mean of the lowest and the highest values irrespective of the discount rates. If an agency quantified but did not monetize estimates, we used standard assumptions to monetize them, as explained in Appendix A. All amortizations are performed using discount rates of 3 and 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. The estimates presented here rely on the state of the science at the time the Regulatory Impact Analyses (RIAs) were published. We do not update or recalculate benefit and cost numbers based on current understanding of science and economics.

[6]Section 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.

comparable. While important inconsistencies across agencies have been reduced over time, OMB continues to investigate possible inconsistencies and seeks to identify and to promote best practices. Executive Order 13563 emphasizes the importance of such practices and of quantification, directing agencies to "use the best available techniques to quantify anticipated present and future benefits and costs as accurately as possible." To take just one example, all agencies draw on the existing economic literature for valuation of reductions in mortality and morbidity, but the technical literature has not converged on uniform figures, and consistent with the lack of uniformity in that literature, such valuations vary somewhat (though not dramatically) across agencies. Later in this document we provide additional discussion of the uncertainty inherent in quantifying the value of a statistical life.

2. 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. In addition to unquantified benefits and costs, agency estimates reflect the uncertainties associated with the agency's assumptions and other analytic choices.

3. As we have noted, it is not always possible to quantify or to monetize relevant benefits or costs of rules in light of limits in existing information. For purposes of policy, non-monetized benefits and costs may be important. Some regulations have significant non-quantified or non-monetized benefits (such as protection of privacy, human dignity, and equity) and costs that are relevant under governing statutes and that may serve as a key factor in an agency's decision to promulgate a particular rule.

4. Prospective analyses may turn out to overestimate or underestimate both benefits and costs; retrospective analysis can be important as a corrective mechanism.[7] Executive Orders 13563 and 13610 specifically call for such analysis, with the goal of improving relevant regulations through modification, streamlining, expansion, or repeal. The result should be a greatly improved understanding of the accuracy of prospective analyses, as well as corrections to rules as a result of ex post evaluations. A large priority is the development of methods (perhaps including not merely before-and-after accounts but also randomized trials, to the extent feasible and consistent with law) to obtain a clear sense of the effects of rules. In addition, and importantly, *rules should be written and designed, in advance, so as to facilitate retrospective analysis of their effects, including consideration of the data that will be needed for future evaluation of the rule's ex post costs and benefits*.

5. While emphasizing the importance of quantification, Executive Order 13563 also refers to "values that are difficult or impossible to quantify, including equity, human dignity, fairness, and distributive impacts." As Executive Order 13563 recognizes, such values may be appropriately considered under relevant law. Using examples from the recent past, if a rule would reduce the incidence of rape, prevent the denial of health insurance to children with preexisting conditions, or allow wheelchair-bound workers to have access to bathrooms, a consideration of dignity is involved, and relevant law may require or authorize agencies to take that consideration into

[7] See Greenstone (2009).

account. If a regulation would disproportionately 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, relevant law may require or authorize agencies to take that fact into account. So far as we are aware, there is only limited analysis of the distributional effects of regulation in general or in significant domains;[8] 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

From fiscal year 2004 (FY 2004) through FY 2013, Federal agencies published 37,022 final rules in the *Federal Register*.[9] OMB reviewed 3,040 of these final rules under Executive Orders 12866 and 13563.[10] Of these OMB-reviewed rules, 569 are considered major rules, primarily as a result of their anticipated impact on the economy (i.e., an impact of $100 million in at least one year). It is important to emphasize that many major rules are budgetary transfer rules, and may not impose significant regulatory costs on the private sector.

The class of "economically significant" rules is broader than the class of rules that impose $100 million or more in costs on the private sector. We include in our 10-year aggregate of annualized benefits and costs of regulations rules that meet two conditions:[11] (1) each rule was estimated to generate benefits or costs of approximately $100 million, or more, in at least 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.[12] Table 1-1 presents estimates of the total annualized benefits and costs of

[8] See, e.g., Kahn (2001); Adler (2011) offers relevant theoretical discussion.
[9] This count includes all final and interim final rules from all Federal agencies (including independent agencies).
[10] Counts of OMB reviewed rules are available through the "review counts" and "search" tools on OIRA's regulatory information website (www.reginfo.gov). In addition, the underlying data for these counts are available for download in XML format on the website.
[11] 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 for quantification and monetization as well as for addressing uncertainty. 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, which 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 recommended best practices, the benefits and costs we present in future reports will become more comparable across agencies and programs. OMB continues to work with the agencies in applying this guidance to their impact analyses.
[12] In many instances, agencies were unable to quantify all benefits and costs. We have included information about these unquantified effects on a rule-by-rule basis in the columns titled "Other Information" in Appendix A of this report. The monetized estimates we present necessarily exclude these unquantified effects.

116 regulations reviewed by OMB over the ten-year period from October 1, 2003, to September 30, 2013, broken down by issuing agency.

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, 2003, to September 30, 2013, are based on agency analyses conducted prior to issuance of the regulation and subjected to public notice, comments, and OMB review under Executive Orders 12866 and 13563.

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 B of our 2006 Report.[13]

Table 1-1: Estimates of the Total Annual Benefits and Costs of Major Federal Rules by Agency, October 1, 2003 - September 30, 2013 (billions of 2001 or 2010 dollars)

Agency	Number of Rules	Benefits		Costs	
		2001$	2010$	2001$	2010$
Department of Agriculture	4	$0.9 to $1.2	$1.0 to $1.4	$0.8 to $1.2	$1.0 to $1.4
Department of Energy	14	$9.1 to $16.6	$11.0 to $20.1	$3.9 to $5.8	$4.7 to $7.0
Department of Health and Human Services	18	$16.2 to $37.4	$19.6 to $45.2	$2.4 to $5.1	$2.9 to $6.2
Department of Homeland Security	2	$0 to $0.5	$0 to $0.6	$0.1 to $0.3	$0.1 to $0.3
Department of Housing and Urban Development	1	$2.3	$2.8	$0.9	$1.1
Department of Justice	4	$1.8 to $4.0	$2.1 to $4.8	$0.8 to $1.0	$1.0 to $1.3
Department of Labor	8	$7.3 to $21.4	$8.9 to $25.8	$2.3 to $5.1	$2.7 to $6.2

[13] 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	
		2001$	2010$	2001$	2010$
Department of Transportation (DOT)[14]	28	$15.2 to $26.7	$18.5 to $32.2	$6.5 to $12.7	$7.9 to $15.3
Environmental Protection Agency (EPA)[15]	34	$136.4 to $703.1	$164.8 to $849.5	$31.6 to $38.2	$38.2 to $46.1

[14] This total excludes FMCSA's 2010 Electronic On-Board Recorders for Hours-of-Service Compliance rule. The rule was vacated on Aug. 26, 2011, by the U.S Court of Appeals for the Seventh Circuit. To avoid double counting, this total also excludes FMCSA's 2009 Hours of Service rule, which finalized the provisions of the 2005 final rule included in the final count of rules.

[15] This total includes the impacts of EPA's 2005 Clean Air Interstate Rule (CAIR). CAIR was initially vacated by the U.S. Court of Appeals for the District of Columbia Circuit, see *North Carolina* v. *EPA*, 531 F.3d 896 (D.C. Cir. 2008) (per curiam), but in a later decision on rehearing the court modified the remedy to remand without vacatur, thus allowing EPA to continue to administer CAIR pending further rulemaking, see *North Carolina* v. *EPA*, 550 F.3d 1176 (D.C. Cir. 2008) (per curiam). On July 6, 2011, EPA finalized the Cross-State Air Pollution Rule (CSAPR), which responded to the remand in *North Carolina* and was designed to replace CAIR. On August 21, 2012, a divided panel of the D.C. Circuit vacated CSAPR while again keeping CAIR in place pending further EPA action. See *EME Homer City Generation, L.P.* v. *EPA*, 696 F.3d 7 (D.C. Cir. 2012). On April 29, 2014, however, the Supreme Court reversed and remanded the D.C. Circuit decision. Once the status of the final CSAPR has been resolved, OMB will consider changes to our method of attributing and accounting for the benefits and costs of the two rulemakings.

We recognize that the attribution and accounting raises some complex questions, and that on one view, not taken here, our approach greatly understates the net benefits of CSAPR – on that view, it does so by tens of billions of dollars. For the purposes of this Report, we have attributed the benefits and costs of the two rules on an incremental basis. A certain amount of equipment has been installed under CAIR, and we assigned both the costs and benefits due to those controls to CAIR, since it is a rule still on the books. For CSAPR, which is about 30% more stringent than CAIR, we assigned its costs and benefits only due to the additional equipment required over and above the requirements of CAIR. Once the status of the upheld CSAPR rule and CAIR is resolved, another method we may consider is to assign to CSAPR all of the costs and benefits originally due to both rules. Until then, we have chosen to maintain the distinction between the two rules.

This total also excludes EPA's 2004 "National Emission Standards for Hazardous Air Pollutants: Industrial/Commercial/Institutional Boilers and Process Heaters." On June 19, 2007, the United States Court of Appeals for the District of Columbia Circuit vacated and remanded this rule to EPA. EPA finalized the 2011 National Emission Standards for Hazardous Air Pollutants for Major and Area Sources of Industrial, Commercial, and Institutional Boilers and Process Heaters and the Commercial and Industrial Solid Waste Incineration Units, but announced a delay notice, staying the effective date of these rules. In January 9, 2012, the United States District Court for the District of Columbia vacated the delay notice and remanded the notice for further proceedings. EPA subsequently published the final versions of these rules, on January 31 and February 1, 2013. The 2013 versions of these rules are therefore included in this draft Report.

This total also excludes EPA's 2005 "Clean Air Mercury Rule." On February 8, 2008, the D.C. Circuit vacated EPA's rule removing power plants from the Clean Air Act list of sources of hazardous air pollutants. At the same time, the court vacated the Clean Air Mercury Rule.

Finally, this total also excludes EPA's 2004 rule—"Establishing Location, Design, Construction, and Capacity Standards for Cooling Water Intake Structures at Large Existing Power Plants." On January 25, 2007, the Second Circuit remanded this rule back to EPA for revisions and EPA suspended the provisions of the rule. On April 1, 2009 the Supreme Court reversed one part of the Second Circuit ruling related to the use of cost-benefit analysis and

Agency	Number of Rules	Benefits		Costs	
		2001$	2010$	2001$	2010$
Joint DOT and EPA	3	$27.3 to $49.6	$33.0 to $59.9	$7.3 to $14.0	$8.9 to $16.9
Total	**116**	**$216.6 to $862.5**	**$261.7 to $1,042.1**	**$56.7 to $84.2**	**$68.5 to $101.8**

The estimated aggregate benefits and costs reported in Table 1-1 are about the same as those presented in last year's final Report. As with previous Reports, the reported monetized benefits continue to be significantly higher than the monetized costs. Two agencies (the Department of Transportation and the Environmental Protection Agency) issued a majority of total rules — 65 of 116. In addition, the Environmental Protection Agency and the Department of Transportation are responsible for a majority of both total benefits and total costs.

Table 1-2 provides additional information on estimated aggregate benefits and costs for specific agency program offices. In order for a program to be included in Table 1-2, the program office must have finalized three or more major rules in the last ten years with monetized benefits and costs. Two of the program offices included--Department of Transportation's National Highway Traffic Safety Administration and the Environmental Protection Agency's Office of Air-- finalized three overlapping sets of rules pertaining to vehicle fuel economy, and these are listed separately.

Table 1-2: Estimates of Annual Benefits and Costs of Major Federal Rules: Selected Program Offices and Agencies, October 1, 2003 - September 30, 2013 (billions of 2001 or 2010 dollars)

Agency	Number of Rules	Benefits		Costs	
		2001$	2010$	2001$	2010$
Department of Agriculture					
Animal and Plant Health Inspection Service	3	$0.9 to $1.2	$1.0 to $1.4	$0.7 to $0.9	$0.9 to $1.1
Department of Energy					
Energy Efficiency and Renewable Energy	14	$9.1 to $16.6	$11.0 to $20.1	$3.9 to $5.8	$4.7 to $7.0
Department of Health and Human Services					
Food and Drug Administration	7	$1.7 to $19.1	$2.0 to $23.0	$0.8 to $1.2	$1.0 to $1.4
Center for Medicare and Medicaid	10	$14.4 to	$17.4 to	$1.5 to	$1.8 to

remanded the rule to the lower court, which returned the rule to EPA for further consideration at the agency's request. As of the production of this Report, EPA is working on a revised version of this rulemaking.

Agency	Number of Rules	Benefits		Costs	
		2001$	2010$	2001$	2010$
Services		$18.2	$22.0	$3.8	$4.6
Department of Labor					
Occupational Safety and Health Administration	4	$0.8 to $3.0	$0.9 to $3.6	$0.5 to $0.6	$0.6 to $0.7
Employee Benefits Security Administration	3	$6.6 to $18.4	$7.9 to $22.2	$1.7 to $4.5	$2.1 to $5.4
Department of Transportation					
National Highway Traffic Safety Administration	10	$12.9 to $22.0	$15.5 to $26.6	$5.0 to $9.9	$6.0 to $12.0
Federal Aviation Administration	7	$0.3 to $1.3	$0.4 to $1.5	$0.1 to $0.6	$0.1 to $0.7
Federal Motor Carriers Safety Administration	4	$0.7 to $1.8	$0.9 to $2.2	$0.2 to $0.3	$0.3
Federal Railroad Administration	3	$0.9 to $1.0	$1.1 to $1.2	$0.7 to $1.4	$0.7 to $1.7
Environmental Protection Agency					
Office of Air	24	$134.1 to $694.9	$162.0 to $839.6	$31.0 to $37.3	$37.5 to $45.1
Office of Water	4	$0.9 to $3.3	$1.1 to $4.0	$0.3 to $0.4	$0.4 to $0.5
Office of Solid Waste and Emergency Response	4	$0 to $0.3	0 to $0.3	-$0.3	-$0.3 to -$0.4
Department of Transportation/Environmental Protection Agency					
National Highway Traffic Safety Administration/Office of Air	3	$27.3 to $49.6	$33.0 to $60.0	$7.3 to $14.0	$8.9 to $16.9

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.[16] The range reported by the agency for each rule reflects a portion of the agency's uncertainty about the likely impact of the rule. In some cases, this range is a confidence interval based on a formal integration of the statistical uncertainty. Such analyses, however, rarely provide an integrated estimate that includes model and parameter uncertainty. Rather, when agencies do attempt to quantify such sources of uncertainty, they often conduct a component-by-component exploration of the impact of alternative assumptions and parameters. In generating this table, most entries are ranges, based on agency analyses in which input parameters were varied across a plausible range.

[16] To the extent that the estimates quantitatively incorporated uncertainty, this approach of adding ranges may overstate the uncertainty in the total benefits and costs for each agency.

More generally, the ranges of benefits and costs presented in Tables 1-1 and 1-2 should be treated with some caution. Because different rules treat uncertainties differently, if at all, the ranges above should not be understood to embody significant underlying uncertainties. If the reasons for uncertainty differ across individual rules, aggregating high and low-end estimates can result in totals that may be misleading. 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. It is possible that the true benefits are at the higher bound and that the true costs are at the lower bound, as well as vice-versa. Thus, for example, it is possible that the net benefits of Department of Labor rules taken together could range from about $2.2 billion to $19.1 billion per year (in 2001$).

2. EPA Air Rules

It should be clear that across the Federal government, the rules with the highest estimated benefits as well as the highest estimated costs, by far, come from the Environmental Protection Agency and in particular its Office of Air and Radiation. Specifically, EPA rules account for 63 to 82 percent of the monetized benefits and 46 to 56 percent of the monetized costs.[17] Of these, rules that have as either a primary or significant aim to improve air quality account for 98 to 99 percent of the benefits of EPA rules. As such, we provide additional information on the estimates associated with these rules.

Of the EPA's 24 air rules, the highest estimated benefits are for the Clean Air Fine Particle Implementation Rule issued in 2007, with benefits estimates ranging from $19 billion to $167 billion per year; the Clean Air Interstate Rule issued in 2005, with benefits estimates ranging from $12 to $152 billion; and the National Emission Standards for Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units ("Utility MACT") issued in 2011, with benefits estimates ranging from $28 billion to $77 billion (2001$). While the benefits of these rules far exceed the costs, they are also among the costliest rules. The Utility MACT rule, which is estimated to be the costliest of the EPA rules, has annualized costs of about $8.2 billion (2001$).

Importantly, the large estimated benefits of EPA rules issued pursuant to the Clean Air Act are mostly attributable to the reduction in public exposure to a single air pollutant: fine particulate matter (referred to henceforth as PM). While some of these rules monetize the estimated benefits of emissions controls designed specifically to limit particulate matter or its precursors, other rules monetize the benefits associated with the ancillary reductions in PM that come from reducing emission of hazardous air pollutants. For example, in the case of the Utility MACT, PM "co-benefits," make up the majority of the monetized benefits, even though the regulation is primarily designed to limit mercury emissions. The consideration of co-benefits,

[17]These estimates do not include the joint EPA/DOT CAFE rules as "EPA" rules.

including the co-benefits associated with reduction of particulate matter, is consistent with standard accounting practices and has long been required under OMB Circular A-4. We will continue to work with agencies to ensure that they clearly communicate when such co-benefits constitute a significant share of the monetized benefits of a rule. We note also that EPA's 2006 National Ambient Air Quality Standards (NAAQS) for PM, with estimated benefits ranging from $4 billion to $40 billion per year and estimated costs of $3 billion per year (2001$), is excluded from the 10-year aggregate estimates or the year-by-year estimates. The reason for the exclusion is to prevent double-counting: EPA finalized implementing rules, such as the Cross-State Air Pollution Rule, that will achieve emission reductions and impose costs that account for a major portion of the benefit and cost estimates associated with this NAAQS rule. The benefit and cost estimates for lead NAAQS, SO2 NAAQS, and 2008 Ozone NAAQS may also be dropped in the future reports to avoid double counting to the extent that EPA publishes implementing regulations that would be designed to achieve the emissions reductions required by these NAAQS.

3. Assumptions and Uncertainties

The largest benefits are associated with regulations that reduce risks to life, as such this section provides additional information on the assumptions underlying such quantification and valuation. While agency practice is rooted in empirical research and is not widely variable, agencies have adopted somewhat different methodologies—for example, different monetized values for effects (such as mortality and morbidity), different baselines in terms of the regulations and controls already in 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, and those estimates have generally been subject both to public and to interagency review, 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.

An important source of uncertainty in the case of health and safety regulations is how to value the regulations' expected reduction in risks to life. Agencies vary in how they estimate the value of a statistical life (VSL), which is best understood not as the "valuation of life," but as the valuation of *statistical mortality risks*. For example, the average person in a population of 50,000 may value a reduction in mortality risk of 1/50,000 at $150. The value of reducing the risk of 1 *statistical* (as opposed to a known or identified) fatality in this population would be $7.5 million, representing the aggregation of the willingness to pay values held by everyone in the population. 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." Circular A-4 generally reports values in 2001 dollars; if we update these values to 2010 dollars the range would be $1.2-$12.2 million. In practice, agencies have tended to use a value above the mid-point of this range (i.e., greater than $6.7 million in 2010 dollars).[18] To account for the uncertainty in the appropriate value for the reduction of risk

[18] Two agencies, EPA and DOT, have developed official guidance on VSL. In its 2013 update, DOT adopted a value of $9.1 million ($2012), and requires all the components of the Department to use that value in their RIAs.

to life, agencies often use a range of plausible VSL values to construct a range of estimated benefits for rules.

A second source of uncertainty is the assumptions used in projecting the health impact of reducing PM. These projections are based on a series of models that take into account emissions changes, resulting distributions of changes in ambient air quality, the estimated reductions in health effects from changes in exposure, and the composition of the population that will benefit from the reduced exposure. Each component includes assumptions, each with a significant level of uncertainty. A 2002 study by the National Research Council/National Academy of Sciences entitled *Estimating the Public Health Benefits of Proposed Air Pollution Regulations* (2002) highlighted the uncertainty in the reduction of premature deaths associated with reduction in PM.

The six key assumptions underpinning the PM 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.

> EPA, with the endorsement of its Clean Air Scientific Advisory Board, has determined that the weight of available epidemiological evidence supports a determination of causality. The agency further concludes that potential biological mechanisms for this effect, while not completely understood, are also supportive of a causal determination. Although discussed qualitatively in EPA's regulatory impact analyses, this assumption carries with it uncertainty that is not accounted for in the analysis presented in EPA's benefits estimates.

See Department of Transportation (2013). EPA uses a VSL of $6.3 million ($2000) and adjusts this value for real income growth to later years. In its final rule reviewing the National Ambient Air Quality Standards for particulate matter, for example, EPA adjusted this VSL to account for a different currency year ($2010) and for income growth to 2020, which yields a VSL of $9.6 million. EPA stated in this RIA, however, that it is continuing its efforts to update this guidance, and that it anticipated preparing draft guidelines in response to recommendations received from its Science Advisory Board.

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 Hazard Communication final rule, OSHA used a VSL of $8.7 million ($2010). 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.)

2. The concentration-response function for fine particles and premature mortality is approximately linear, even for concentrations below the public-health protective exposure levels established by the National Ambient Air Quality Standard (NAAQS).

> Although CASAC[19] concluded that the evidence supports the use of a no-threshold log-linear model, they specifically recognize the uncertainty about the exact shape of the concentration-response function. EPA's *Policy Assessment* [20]for the most recent fine PM NAAQS concludes that the range from the 25th to the 10th percentile is a reasonable range of the air quality distribution below which we start to have appreciably less confidence in the magnitude of the associations observed in the epidemiological studies. This is consistent with the toxicological perspective on fine PM concentration-response functions. Two of the particulate matter science experts who were included in an expert elicitation in 2005 specifically highlighted the uncertainty associated with the fine PM – premature mortality relationship at low levels.
>
> The possibility of a de-minims population effect at concentrations lower than the NAAQS is also consistent with the criteria for setting the NAAQS, which reflect the level determined by the Administrator to be protective of public health with an adequate margin of safety, taking into consideration effects on susceptible subpopulations. This becomes important for understanding the extent of the uncertainty in the PM benefits estimates because a significant portion of the benefits associated with more recent rules are from projected exposure reductions in regions that are already in attainment with both the 24-hour and annual NAAQS for fine particles. For example, in the Utility MACT, a majority of the benefits accrue to populations who live in areas that are projected meet the annual fine particulate standards.
>
> In assessing the comparability of estimates over time, it is worth noting that between FY 2001 and midway through FY 2009, all EPA's primary benefits estimates explicitly included an assumption of a threshold for pre-mature mortality effects at lower levels—that is, health benefits were not assumed for exposure reductions below a hypothetical threshold of 10µg/m^3 (although

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[19] U.S. Environmental Protection Agency - Science Advisory Board (U.S. EPA-SAB). 2009. Consultation on EPA's Particulate Matter National Ambient Air Quality Standards: Scope and Methods Plan for Health Risk and Exposure Assessment. EPA-COUNCIL-09-009. May. Available on the Internet at <http://yosemite.epa.gov/sab/SABPRODUCT.NSF/81e39f4c09954fcb85256ead006be86e/723FE644C5D758DF852575BD00763A32/$File/EPA-CASAC-09-009-unsigned.pdf> and U.S. Environmental Protection Agency - Science Advisory Board (U.S. EPA-SAB). 2009. Review of EPA's Integrated Science Assessment for Particulate Matter (First External Review Draft, December 2008). EPA-COUNCIL-09-008. May. Available on the Internet at <http://yosemite.epa.gov/sab/SABPRODUCT.NSF/81e39f4c09954fcb85256ead006be86e/73ACCA834AB44A10852575BD0064346B/$File/EPA-CASAC-09-008-unsigned.pdf>.

[20] U.S. Environmental Protection Agency (U.S. EPA). 2011. Policy Assessment for the Review of the Particulate Matter National Ambient Air Quality Standards. EPA-452/D-11-003. April. Available on the Internet at <http://www.epa.gov/ttnnaaqs/standards/pm/s_pm_2007_pa.html>.

sensitivity analyses explored alternative models. Since mid-2009, EPA's primary benefits estimates reflect a no-threshold assumption.

3. All fine particles, regardless of their chemical composition, are equally potent in causing premature mortality.

   Although some scientific experiments have found differential toxicity among species of PM, EPA, with CASAC's endorsement, has concluded that the scientific evidence is not yet sufficient to allow differentiation of benefits estimates by particle type[21]. However, some agencies and stakeholders have suggested that the research provides important insight. This assumption contributes significantly to the uncertainty associated with PM benefits estimates because fine particles vary considerably in composition across sources. For instance, PM indirectly produced via transported precursors emitted from electrical generating utilities (EGUs) may differ significantly from direct PM released by other industrial sources. Similarly, gasoline and diesel engine emissions differ. As such, when a given rule controls a broad range of sources, there is likely less uncertainty in the benefits estimate that if the rule controls a single type of source.

4. The forecasts for future emissions and associated air quality modeling accurately predict both the baseline (state of the world absent a rule) and the air quality impacts of the rule being analyzed.

   The models used are based on up-to-date assessment tools and scientific literature that has been peer-reviewed; however, as in all models the results are driven by a series of assumptions. Inherent uncertainties in the overall enterprise must be recognized, even if the results are critical to projecting the benefits of air quality regulations.

5. National dollar benefit-per-ton estimates of the benefits of reducing directly emitted fine particulates are applied, as a less modeling intensive estimation technique, in some rules that control emissions from specific source categories.

   Because these benefit-per-ton estimates are based on national-level analysis that may not reflect local variability in population density, meteorology, exposure, baseline health incidence rates, or other local factors, depending on the analysis and the location, they may not provide an accurate representation of the geographic distribution of benefits, and thus either over-estimate or under-

[21] "many constituents of $PM_{2.5}$ can be linked with multiple health effects, and the evidence is not yet sufficient to allow differentiation of those constituents or sources that are more closely related to specific outcomes". U.S. Environmental Protection Agency (U.S. EPA). 2009. Integrated Science Assessment for Particulate Matter (Final Report). EPA-600-R-08-139F. National Center for Environmental Assessment—RTP Division. December. Available on the Internet at <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=216546>.

estimate the aggregate benefits of controlling directly emitted fine particulates.

6. The value of mortality risk reduction, which is taken largely from studies of the willingness to accept risk in the labor market is an accurate reflection of what people would be willing to pay for incremental reductions in mortality risk from air pollution exposure and these values are uniform for people in different stages of life or with differing health status.

> As discussed above, there is considerable uncertainty about how to value reductions in risk to life. Agencies generally assume a uniform VSL; however, some studies indicate that willingness to pay for reductions in risk may change with age. (See Krupnick (2007) for a survey of the literature.) If VSLs do change with age, it would have an important impact on the size of the benefits associated with premature mortality because EPA's analysis shows that the median age of individuals experiencing reduced mortality is around 75 years old. However it is also worth noting that slightly more than half of the avoided life years occur in populations age <65 due to the fact that the younger populations would lose more life years per death than older population.[22]

To the extent that any of these assumptions are incorrect, the benefit ranges in the tables above might be significantly different. We understand that significant additional research is currently being conducted that should help to improve our understanding in each of these areas. In addition, we continue to work with EPA to consider recommendations from the 2002 NRC report, as well as subsequent reports (i.e., Miller, et al (2006), National Research Council (2008), and Environmental Protection Agency (2010)).

4. Quantification

We have also 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, 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 current estimates of total benefits and costs for all agencies and programs, though some agencies have developed valuable comprehensive assessments of the benefits and costs of their programs. And as noted, it is important to consider

[22] Regulatory Impact Analysis for the Final Revisions to the National Ambient Air Quality Standards for Particulate Matter , U.S. Environmental Protection Agency, 2012. [Pages 5-75 and 5-76, Chapter 5,Benefits]. http://www.epa.gov/ttnecas1/regdata/RIAs/finalria.pdf.

retrospective, as opposed to *ex ante*, estimates of both benefits and costs; this topic is a continuing theme of this report.

5. Other Safety and Health Rules

Although rules that reduce public exposure to fine particulate matter, as well as other environmental regulations from EPA dominate the monetized benefits and costs of federal regulation over the last ten years, other agencies have contributed to safety, health and financial well-being in the U.S. Table 1-3 identifies the number of rules, areas of impact, and associated estimated benefits and costs.

International trade-related environmental and safety regulation attempts to reduce risks associated with pests and disease (e.g., mad cow disease) that may be carried by goods imported to the U.S. USDA and FDA have also issued non-trade rules that reduce foodborne illnesses and encourage better health, resulting in estimated net benefits of $109 million to $11,413 million (2001$). Patient safety rules have dealt with: good manufacturing practices and adulteration in producing dietary supplements, reducing medical errors, and safety requirements for long term care facilities. Consumer protection rules govern the residential mortgage process and fees associated with retirement funds. Transportation related safety rules attempt to reduce the risk of injury and death associated with transiting using vehicles, airplanes, and trains.

Table 1-3: Estimates of Annual Benefits and Costs of Non-Environmental Related Health and Safety Rules: October 1, 2003 - September 30, 2013 (billions of 2001 and 2010 dollars)

Area of Safety and Health Regulation	Number of Rules	Estimated Benefits		Estimated Costs	
		2001$	2010$	2001$	2010$
Safety rules to govern international trade	3	$0.9 to $1.2	$1.0 to $1.4	$0.7 to $0.9	$0.9 to $1.1
Food safety	5	$0.2 to $9.0	$0.3 to $10.9	$0.2 to $0.7	$0.3 to $0.9
Patient safety	7	$12.8 to $21.9	$12.8 to $21.9	$0.9 to $1.1	$1.1 to $1.4
Consumer protection	3	$8.9 to $20.7	$10.7 to $25.0	$2.7 to $5.5	$3.2 to $6.6
Worker safety	5	$0.7 to $3.0	$0.9 to $3.6	$0.6	$0.7 to $0.8
Transportation safety	24	$13.4 to $22.7	$15.4 to $26.4	$5.0 to $9.5	$1.1 to $1.4

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

Table 1-4 reports the total benefits and costs of rules issued from October 1, 2003 to September 30, 2013 by fiscal year for which reasonably complete monetized estimates of both

benefits and costs are available.[23] Figures 1-1 and 1-2 provide similar information to Table 1-4 in graphical form. The bars in these figures present the annual sums of primary estimates (or midpoints of ranges if primary estimates are not available) for costs and benefits. The accompanying error bars represent the ranges in values between low and high estimates for costs and benefits. As the figures show, the monetized additional costs of private mandates tend to be around or below $10 billion per year. The costs for FY2013 are well below this level.

Table 1-4: Total Annual Benefits and Costs of Major Rules by Fiscal Year (billions of 2001 and 2010 dollars)

Fiscal Year	Number of Rules	Benefits		Costs	
		2001$	2010$	2001$	2010$
2004	9[24]	$8.8 to $69.7	$10.6 to $84.2	$2.6 to $2.8	$3.1 to $3.4
2005	12[25]	$27.9 to $178.1	$33.7 to $215.1	$3.8 to $6.1	$4.6 to $7.4
2006	6[26]	$2.5 to $5.0	$3.0 to $6.0	$1.1 to $1.4	$1.4 to $1.7
2007	12	$28.6 to $184.2	$34.5 to $222.5	$9.4 to $10.7	$11.4 to $12.9
2008	12	$8.6 to $39.4	$10.3 to $47.6	$7.9 to $9.2	$9.5 to $11.1
2009	15[27]	$8.5 to	$10.4 to	$3.7 to $9.5	$4.5 to $11.5

[23] This table includes all rules reported in Table 1-1. The ranges will not necessarily match previously reported estimates for a fiscal year in past reports as rules have been dropped over time as described in this and past reports. See Appendix A for a complete list of rules included in these totals. In addition, and unlike previous years, the costs attributable to rules that did not have monetized benefits are relatively large when compared to the costs of rules that had both benefits and costs monetized. In order to maintain the convention we have used over many years of presenting in this table and accompanying chart only estimates of rules for which both costs and benefits were monetized, we have not included the costs here, but we do expressly request comment on this convention. There are also rules that only had benefits monetized; however, their inclusion in this year's totals would have only a small impact on the overall benefits estimate. The executive summary of this report includes a discussion of all of these additional rules, and they are listed and summarized in more detail in Table 1-6(b) below.

[24] This total excludes the impacts of EPA's 2004 "National Emission Standards for Hazardous Air Pollutants: Industrial/Commercial/Institutional Boilers and Process Heaters," included in our 10-year aggregate until last year's report. On June 19, 2007, the United States Court of Appeals for the District of Columbia Circuit vacated and remanded the national emission standards for hazardous air pollutants for industrial/commercial/institutional boilers and process heaters. It also excludes EPA's 2004 "Establishing Location, Design, Construction, and Capacity Standards for Cooling Water Intake Structures at Large Existing Power Plants" rule. On January 25, 2007 the Second Circuit remanded this rule back to EPA for revisions and EPA suspended the provisions of the rule. On April 1, 2009, the Supreme Court reversed one part of the Second Circuit ruling related to the use of cost-benefit analysis and remanded the rule to the lower court, which returned the rule to EPA for further consideration at the agency's request.

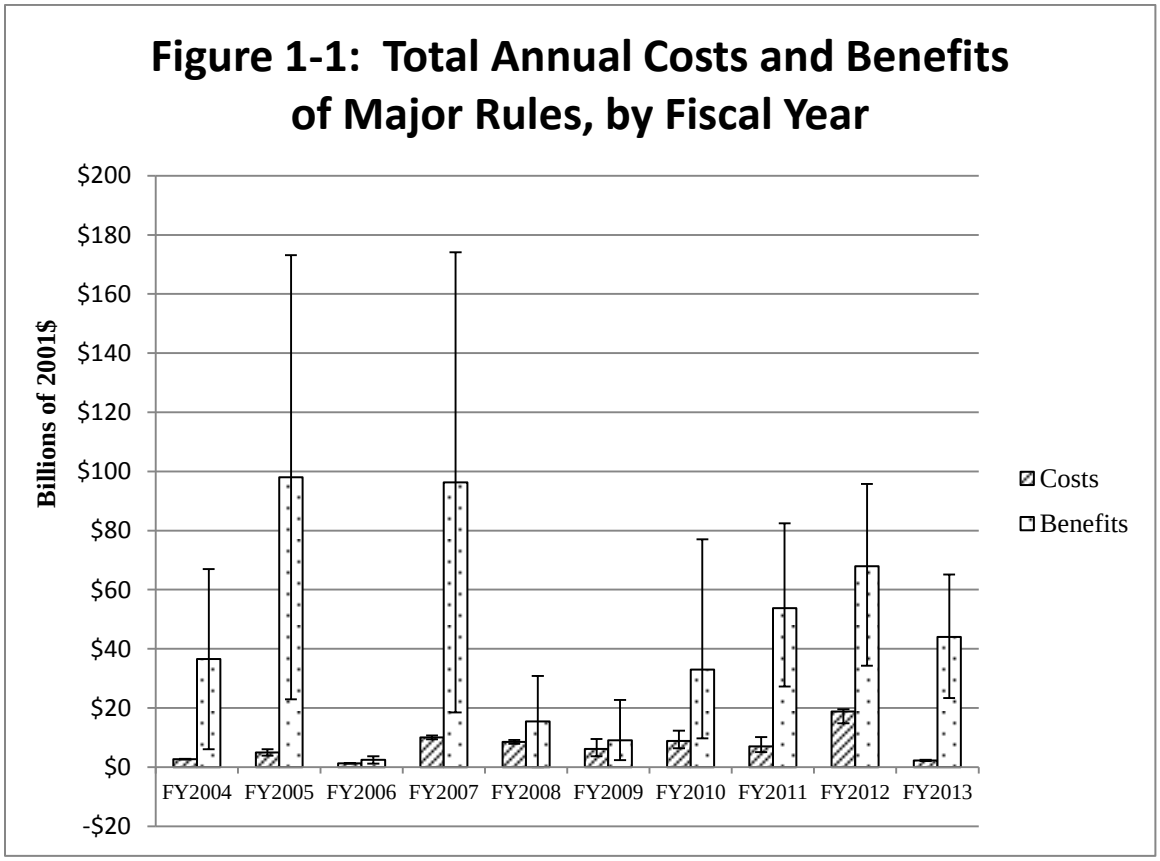
[25] This total does not include EPA's 2005 Clean Air Mercury Rule which was vacated in 2008.

[26] This total does not include the impacts of EPA's 2006 PM NAAQS rule. Consistent with past practices, the benefit and cost estimates of the NAAQS rulemaking was only included until the implementing regulations were finalized.

[27] This total excludes DOT's 2008 Hours of Service rule which finalized provisions included for an interim final rule included in the 2005 totals.

Fiscal Year	Number of Rules	Benefits		Costs	
		2001$	2010$	2001$	2010$
		$28.9	$35.0		
2010	17[28]	$18.6 to $85.9	$22.5 to $103.8	$6.4 to $12.4	$7.7 to $14.9
2011	12	$34.3 to $89.5	$41.5 to $108.1	$5.0 to $10.1	$6.1 to $12.2
2012	14	$53.2 to $114.6	$64.3 to $138.5	$14.8 to $19.5	$17.8 to $23.6
2013	7	$25.6 to $67.3	$30.9 to $81.4	$2.0 to $2.5	$2.4 to $3.0

As demonstrated by Figure 1-1, the estimated variability in benefit estimates across fiscal years is greater than in cost estimates. Note that the benefits exceed the costs in every fiscal year and that, in terms of the midpoint of the range of estimates, over the previous 10 fiscal years the highest benefit year was 2007 and the highest cost year was 2012.



[28] This total excludes the impacts of DOT's 2010 Electronic On-Board Recorders for Hours-of-Service Compliance rule. This rule was vacated by the U.S. Court of Appeals for the Seventh Circuit on August 26, 2011.

The estimates we report here are prospective estimates made by agencies during the rulemaking process. As we have emphasized, 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 some methodological variations and differing assumptions.[29] In addition, the groundwork for the regulations issued by one administration is often begun in a previous administration.[30] Nonetheless, the methodological variations and differing assumptions are usually not dramatic, and we believe that comparative information remains meaningful.

C. Estimates of the Benefits and Costs of Major Rules Issued in Fiscal Year 2013

1. Major Rules Issued by Executive Departments and Agencies

In this section, we examine in more detail the estimated benefits and costs of the 54 major final rules for which OMB concluded review during the 12-month period beginning October 1, 2012, and ending September 30, 2013.[31] (Note that 30 of the 54 rules are transfer rules.) Major rules represent approximately 29 percent of the 187 final rules reviewed by OMB.[32] OMB believes, however, that the benefits and costs of major rules, which have the largest economic effects, account for the majority of the total benefits and costs of all rules subject to OMB review.[33]

The monetized costs and benefits estimates of seven FY2013 rules, aggregated by agency in Table 1-5 and listed in Table 1-6(a), are included in the ten-year aggregates in Tables 1-1, 1-2, and 1-4.

[29] This is particularly true for EPA's air pollution regulations. Caution should be used in comparing benefits and costs over time in light of several factors, including new scientific evidence regarding the relationship between pollutants and health endpoints; changes in the EPA's choice of assumptions when uncertainty remains (e.g., regarding the shape of the concentration – response function at low levels); and differences in techniques for monetizing benefits (including changes to the value assigned to a statistical life). Aggregate estimates in the report reflect differences in approaches and assumptions over time. Summing across time does not reflect how EPA would calculate the benefits of prior rules today.

[30] For 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. Also, NHTSA's Corporate Average Fuel Economy rule for Model Year 2011 was proposed during the Bush Administration, but finalized in the first year of the Obama Administration.

[31] This count excludes rules that were withdrawn from OMB review or rules that were rescinded, stayed, or vacated after publication. It also counts joint rules as a single rule, even if they were submitted to OMB separately for review.

[32] Counts of OMB-reviewed rules are available through the "review counts" and "search" tools on OIRA's regulatory information website (www.reginfo.gov).

[33] 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.

Table 1-5: Estimates, by Agency, of the Total Annual Benefits and Costs of Major Rules: October 1, 2012 - September 30, 2013 (billions of 2001 or 2010 dollars)

Agency	Number of Rules	Benefits		Costs	
		2001$	2010$	2001$	2010$
Department of Energy	2	$0.8 to $1.3	$1.0 to $1.6	$0.3	$0.3 to $0.4
Department of Health and Human Services	1	$0 to $0.2	$0 to $0.3	< $0.1	< $0.1
Department of Transportation	1	< $0.1	< $0.1	$0.1 to $0.2	$0.1 to $0.2
Environmental Protection Agency	3	$24.7 to $65.8	$29.8 to $79.5	$1.6 to 2.0	$2.0 to $2.5
Total	**7**	**$25.6 to $67.3**	**$30.9 to $81.4**	**$2.0 to $2.5**	**$2.4 to $3.0**

Thirty of the rules were "transfer rules"— rules that primarily caused income transfers, usually from taxpayers to program beneficiaries. Most of these implement Federal budgetary programs as required or authorized by Congress. Rules of this kind are promulgated in response to statutes that authorize and often require them. Although rules that affect Federal budget programs are subject to Executive Orders 12866 and 13563 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. (For transfer rules, agencies typically report the estimated budgetary impacts.)

We recognize that markets embed distortions and that the transfers are not lump-sum. Hence, transfer rules may create social benefits or costs; for example, they 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 losses" 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 any such estimates into future Reports.

Tables 1-6(a), 1-6(b), and 1-6(c) list each of the 24 "non-transfer" rules and, where available, provides information on their monetized benefits and costs. Of the seven rules for which agencies estimated both costs and benefits, all except one had estimated benefits that exceeded estimated costs. The single exception that had estimated costs higher than estimated benefits was DOT's Pilot Certification and Requirements Rule, which was in large part required by statutory mandate.

Table 1-7(a) lists each of 28 "budget" rules and provides information on the estimated income transfers. Unless otherwise noted, OMB simply converts to 2001 dollars agencies' own estimates of annualized impacts. For all 54 budget and non-budget rules, we summarize the available information on the non-monetized impacts, where available, for these regulations in the "other information" column of Table A-1 in Appendix A. Table 1-7(b) lists the two non-budget transfer rules. The primary economic impact of each of these two rules is to cause transfers between parties outside the Federal Government, and the table includes agencies' estimates of these transfers, if available.

Overall, HHS promulgated the largest number of rules (twenty-one). Twelve of these largely transfer income from one group of entities to another without imposing significant costs on the private sector, while the other nine do have significant economic impact on the private sector.

Table 1-6 (a): Major Rules Reviewed with Estimates of Both Annual Benefits and Costs, October 1, 2012 - September 30, 2013 (billions of 2001 or 2010 dollars)

Agency	RIN[34]	Title	Benefits		Costs	
			2001$	2010$	2001$	2010$
HHS	0910-AG84	Food Labeling; Gluten-Free Labeling of Foods	$0.1 Range: $0-$0.2	$0.1 Range: $0-$0.3	< $0.1	< $0.1
DOE	1904-AC04	Energy Efficiency Standards for Distribution Transformers	$0.7 Range: $0.7-$1.0	$0.8 Range: $0.8-$1.2	$0.2 Range: $0.2-$0.3	$0.3
DOE	1904-AC07	Energy Efficiency Standards for Microwave Ovens (Standby and Off Mode)	$0.2 Range: $0.2-$0.3	$0.2 Range: $0.2-$0.3	< $0.1	$0.1
EPA	2060-AO47	Review of the National Ambient Air Quality Standards for Particulate Matter	$3.0-$7.5	$3.6-$9.1	$0-$0.3	$0.1-$0.4
EPA	2060-AQ58	Reconsideration of Final National Emission Standards for Hazardous Air Pollutants for	$0.6-$1.7	$0.7-$2.1	$0.4	$0.5

[34] In 2010, OMB issued a memorandum on "Increasing Openness in the Rulemaking Process – Use of the Regulation Identifier Number (RIN)" (available at: http://www.whitehouse.gov/sites/default/files/omb/assets/inforeg/IncreasingOpenness_04072010.pdf). The memorandum provides that agencies should use the RIN on all relevant documents throughout the entire "lifecycle" of a rule. We believe that this requirement is helping members of the public to find regulatory information at each stage of the process and is promoting informed participation.

Agency	RIN[34]	Title	Benefits		Costs	
			2001$	2010$	2001$	2010$
		Reciprocating Internal Combustion Engines				
EPA	2060-AR13	National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters; Proposed Reconsideration	$21.1-$56.6	$25.5-$68.3	$1.2-$1.4	$1.4-$1.6
DOT	2120-AJ67	Pilot Certification and Qualification Requirements (Formerly First Officer Qualification Requirements) (HR 5900)	<$0.1	<$0.1	$0.1 Range: $0.1-$0.2	$0.1 Range: $0.1-$0.2

Thirteen rules for which agencies partially monetized either benefits or costs are listed in Table 1-6(b). Two of these rules, DOI's two Migratory Bird Hunting regulations, assessed only benefits. Eleven rules reported only monetized costs or cost savings and relevant transfers, without monetizing benefits. The potential transfer effects and non-quantified effects of rules are described in "other information" column of Table A-1.[35]

Four rules for which agencies estimated neither costs nor benefits are listed in Table 1-6(c).

We continue to work with agencies to improve the quantification of the benefits and costs of these types of regulations and to make progress toward quantifying variables that have thus far been discussed only qualitatively. Executive Order 13563 notes that agencies "may consider (and discuss qualitatively) values that are difficult or impossible to quantify," but firmly states that "each agency is directed to use the best available techniques to quantify anticipated present and future benefits and costs as accurately as possible."

[35] In some instances, agencies have been unable to quantify the benefits and costs of rules because existing information does not permit reliable estimates. In these cases, agencies generally have followed the guidance of Circular A-4 and have provided detailed discussions of the non-quantified benefits and costs in their analysis of rules in order to help decision-makers understand the significance of these factors. For example, DOI promulgates annual Migratory Bird Hunting regulations, which permit hunting of migratory birds. The two potential societal costs are (1) any long-run effect on the bird populations and (2) the cost associated with administering and enforcing the permit program. Evaluating the long-term population effect of annual hunting permits is difficult. Also, State governments administer and enforce the permit program; gathering this information is difficult.

Table 1-6(b): Major Rules Reviewed with Partial Estimates of Annual Benefits or Costs, October 1, 2012 - September 30, 2013 (billions of 2001 or 2010 dollars)

Agency	RIN	Title	Benefits		Costs	
			2001$	2010$	2001$	2010$
USDA	0560-AH86	Feedstock Flexibility Program	Not Estimated		< $0.1	$0.1
USDA	0581-AD29	Mandatory Country of Origin Labeling of Beef, Pork, Lamb, Chicken, Goat Meat, Perishable Agricultural Commodities, Peanuts, Pecans, Macadamia Nuts, Ginseng, etc., LS-13-0004	Not Estimated		$0.1 Range: $0-$0.2	$0.1 Range: $0.1-$0.2
USDA	0584-AE09	National School Lunch and School Breakfast Programs: Nutrition Standards For All Foods Sold in School, as Required By the Healthy, Hunger-Free Kids Act of 2010	Not Estimated		< $0.1	< $0.1
HHS	0910-AG31	Unique Device Identification	Not Estimated		$0.1 Range: $0-$0.1	$0.1 Range: $0-$0.1
HHS	0938-AR04	Medicaid, Exchanges, and Children's Health Insurance Programs: Eligibility, Appeals, and Other Provisions Under the Affordable Care Act (CMS-2334-F)	Not Estimated		$1.0	$1.3 Range: $1.2-$1.3
HHS	0938-AR33	Transparency Reports and Reporting of Physician Ownership of Investment Interests (CMS-5060-F)	Not Estimated		$0.2	$0.2
HHS	0938-AR40	Patient Protection and Affordable Care Act; Health Insurance Market: Rate Review (CMS-9972-F)	Not Estimated		<$0.1 (partial estimate)	<$0.1 (partial estimate)
HHS	0945-AA03	Modifications to the HIPAA Privacy, Security, Enforcement, and Breach Notification Rules	Not Estimated		<$0.1	<$0.1
DOI	1018-	Migratory Bird Hunting;	$0.2-	$0.3-	Not Estimated	

Agency	RIN	Title	Benefits		Costs	
			2001$	2010$	2001$	2010$
	AY87	2013-2014 Migratory Game Bird Hunting Regulations (Early Season)	$0.3	$0.4		
DOI	1018-AY87	Migratory Bird Hunting; 2013-2014 Migratory Game Bird Hunting Regulations (Late Season)	$0.2-$0.3	$0.3-$0.4	Not Estimated	
DOL	1250-AA00	Affirmative Action and Nondiscrimination Obligations of Contractors and Subcontractors Regarding Protected Veterans	Not Estimated		$0.2 Range: $0.1-$0.3	$0.2 Range: $0.1-$0.3
DOL	1250-AA02	Affirmative Action and Nondiscrimination Obligations of Contractors and Subcontractors Regarding Individuals with Disabilities	Not Estimated		$0.3 Range: $0.2-$0.4	$0.3 Range: $0.2-$0.4
DHS	1615-AB99	Provisional Unlawful Presence Waivers of Inadmissibility for Certain Immediate Relatives	Not Estimated		$0.1 Range: $0-$0.1	$0.1 Range: $0-$0.1

Table 1-6(c): Major Rules Reviewed Without Estimates of Annual Benefits or Costs
October 1, 2012 - September 30, 2013

Agency	RIN	Title	Benefits	Costs
HHS	0938-AQ70	Pre-Existing Condition Insurance Plan; High Risk Pool (CMS-9995-F)	Not Estimated	Not Estimated
HHS	0938-AR03	Patient Protection and Affordable Care Act; Standards Related to Essential Health Benefits, Actuarial Value, and Accreditation (CMS-9980-F)	Not Estimated	Not Estimated
HHS	0938-AR68	Exchange Functions: Eligibility for Exemptions;	Not Estimated	Not Estimated

Agency	RIN	Title	Benefits	Costs
		Miscellaneous		
OPM	3206-AM47	Multi-State Exchanges; Implementations for Affordable Care Act Provisions	Not Estimated	Not Estimated

Table 1-7(a) Major Rules Implementing or Adjusting Federal Budgetary Programs, October 1, 2012 - September 30, 2013 (billions of 2001 or 2010 dollars)

Agency	RIN	Title	Transfers	
			2001$	2010$
USDA	0572-AC06	Rural Broadband Access Loans and Loan Guarantees	<$0.1	<$0.1
ED	1840-AD11	Federal Pell Grant Program	($3.8-$3.9)	($4.6-4.7)
ED	1840-AD05	Federal Perkins Loan Program, Federal Family Education Loan Program, and William D. Ford Federal Direct Loan Program	$0.3	$0.4
HHS	0938-AQ63	Payments for Services Furnished by Certain Primary Care Physicians and Charges for Vaccine Administration Under the Vaccines for Children Program (CMS-2370-F)	$4.7	$5.7
HHS	0938-AR10	Proposed Changes to Hospital OPPS and CY 2013 Payment Rates; ASC Payment System and CY 2013 Payment Rates (CMS-1589-FC)	$0.5	$0.6
HHS	0938-AR11	Revisions to Payment Policies Under the Physician Fee Schedule and Part B for CY 2013 (CMS-1590-FC)	($19.7)	($23.7)
HHS	0938-AR13	Changes to the End-Stage Renal Disease Prospective Payment System for CY 2013 (CMS-1352-F)	($0.1)	($0.1)
DOD	0790-AI50	Voluntary Education Programs	$0.4	$0.5
TREAS	1559-AA01	Interim Rule for the CDFI Bond Guarantee Program	$0.2-$1.6	$0.2-$1.9
DOT	2132-AB02	Major Capital Investment Projects (RRR)	$0.2	$0.2
DOC	0651-AC54	Setting and Adjusting Patent Fees	($2.2) Range: ($1.9-$2.3)	($2.7) Range: ($2.3-$2.8)

Agency	RIN	Title	Transfers	
			2001$	2010$
DOT	2127-AL30	Uniform Procedures for State Highway Safety Programs	$0.2	$0.3
HHS	0938-AR51	Notice of Benefit and Payment Parameters (CMS-9964-P)	$5.1-$5.3	$6.2-$6.5
ED	1855-AA09	Investing in Innovation	$0.1	$0.1
DOT	2132-AB13	Public Transportation Emergency Relief Program	$8.6	$10.4
USDA	0584-AE07	Supplemental Nutrition Assistance Program: Nutrition Education and Obesity Prevention Grant	($0.1)	($0.1)
ED	1840-AD13	150% Regulations	($0.2)	($0.2)
HHS	0938-AR69	Medicare Advantage (MA) and Prescription Drug Benefit Programs: Medical Loss Ratio Requirements (CMS-4173-F)	($0.6-$0.7)	($0.8)
HHS	0938-AR54	Changes to the Hospital Outpatient Prospective Payment System and Ambulatory Surgical Center Payment System for CY 2014 (CMS-1601-F)	$0.5	$0.6
DOD	0720-AB41	TRICARE; Reimbursement of Sole Community Hospitals	(<$0.1)	(<$0.1)
ED	1810-AB17	Race to the Top--District	$0.1	$0.1
HHS	0938-AR64	FY 2014 Hospice Rate Update (CMS-1449-F)	$0.1	$0.1
HHS	0938-AR65	Prospective Payment System and Consolidated Billing for Skilled Nursing Facilities--Update for FY 2014 (CMS-1446-F)	$0.4	$0.4
HHS	0938-AR66	Prospective Payment System for Inpatient Rehabilitation Facilities for FY 2014 (CMS-1448-F)	$0.3 Range: $0.1-$0.5	$0.4 Range: $0.2-$0.6
HHS	0938-AR53	Changes to the Hospital Inpatient and Long-Term Care Prospective Payment System for FY 2014 (CMS-1599-F)	$0.9	$1.1
ED	1810-AB18	Race to the Top--Early Learning Challenge	$0.2	$0.3
HHS	0938-AR31	Disproportionate Share Hospital Payment Reduction (CMS-2367-F)	($0.4)	($0.5)
USDA	0572-AC19	Energy Efficiency Program Loans	$0.2	$0.2

( ) indicates a budget savings

Table 1-7(b): Additional Non-Budget Transfer Rules Reviewed, October 1, 2012 - September 30, 2013
(billions of 2001 or 2010 dollars)

Agency	RIN	Title	Transfers	
			2001$	2010$
DOL	1205-AB69	Wage Methodology for the Temporary Nonagricultural Employment H-2B Program, Part 2	Not Estimated	
DOL	1235-AA05	Application of the Fair Labor Standards Act to Domestic Service	$0.3 Range: $0.2-$0.4	$0.4 Range: $0.2-$0.5

When regulations address externalities or other traditional market failures, rule-induced costs and benefits are generally experienced by different members of society. With some rules, however, these interpersonal effects can be accompanied, or even dominated, by impacts that are experienced as both costs and benefits by the same person. Some of the most notable such regulations are designed to conserve energy; for these rules, the issuance of the "Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866" in February 2010 offers a method to estimate avoided climate change damages from reduced CO_2 emissions, apart from private benefits of saved fuel. "The purpose of the 'social cost of carbon' (SCC) estimates presented here is to allow agencies to incorporate the social benefits of reducing carbon dioxide emissions into cost-benefit analysis of regulatory actions that have small or 'marginal' impacts on cumulative global emissions."[36] "The SCC is an estimate of the monetized damages associated with an incremental increase in carbon emissions in a given year. It is intended to include (but is not limited to) changes in net agricultural productivity, human health, property damages from increased flood risk, and the value of ecosystem services due to climate change."[37] The social benefits are apart from the energy savings the consumers who would undertake these energy saving measures would accrue. In Table 1-8, we separate the external social benefits from private fuel benefits associated with two energy conservation rules issued in FY 2013.

The external social benefits from the two energy efficiency rules range from twenty-six percent to thirty percent of the total estimated benefits. A majority of the external benefits are associated with reductions in CO_2 emission, and others are associated with reductions in NO_x. For both rules, DOE concludes that the private energy savings (i.e., electricity saved) exceed the cost of purchasing energy efficient devices by a substantial margin.

There is an ongoing and extensive discussion in the economic literature on why consumers who would reap energy savings that exceed the cost of purchase do not purchase energy saving devices (a situation which could be considered a rationale for regulatory

[36] Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866, p. 1.
[37] Ibid, p. 2.

intervention).[38] Allcott and Greenstone provide a discussion on why consumers might undervalue future energy savings.[39] They are: (1) uncertainty associated with future energy cost savings; (2) excessive focus on the short-term and lack of sufficient salience of the long-term benefits; (3) difficulties associated with the evaluation of relevant trade-offs; and (4) a divergence in incentives between those who use the equipment versus those who purchase them (e.g., renter vs. building owner; builder vs. home owner). In such cases, the standard neoclassical assumption—that private energy benefits are entirely, rather than partially, offset by utility losses—would likely be incorrect.

Table 1-8: Estimates of Private Benefits, External Social Benefits and Costs of Selected Energy Efficiency Rules, October 1, 2012 – September 30, 2013 (billions of 2001 or 2010 dollars)

Agency	RIN	Title	Private Fuel or Electricity Savings Benefit		Social Benefit Associated with Reductions in CO_2 and Other Pollutants		Cost	
			2001$	2010$	2001$	2010$	2001$	2010$
DOE	1904-AC04	Energy Efficiency Standards for Distribution Transformers	$0.5	$0.6	$0.2	$0.2	$0.2	$0.3
DOE	1904-AC07	Energy Efficiency Standards for Microwave Ovens (Standby and Off Mode)	$0.1	$0.2	<$0.1	$0.1	<$0.1	$0.1

2. Major Rules Issued by Independent Agencies

The Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA)[40] requires the Government Accountability Office (GAO) to submit to Congress reports on major rules, including rules issued by agencies not subject to Executive Orders 13563 and 12866. 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, 2012 to

[38] See Allcott and Greenstone (2012) for an overview.
[39] Allcott and Greenstone (2012).
[40] Pub. L. No. 104-121.

September 30, 2013.[41] GAO reported that seven agencies issued a total of 18 major rules during this period. (Rules by independent agencies are not subject to OMB review under Executive Order 13563 and Executive Order 12866.)

Table 1-10 lists each of these major rules and the extent to which GAO reported benefit and estimates for the rule. The majority of rules were issued to regulate the financial sector. Notably, the Consumer Financial Protection Bureau (CFPB) issued four rules and the Securities and Exchange Commission, five rules.

13 of the 18 rules provided some information on the benefits and costs of the regulation. The independent agencies still continue to struggle in providing monetized estimates of benefits and costs of regulation. Two rules included analyses that monetized portions of the costs; none of the rules provided analyses that include monetized estimates of benefits. In light of the limited information provided by the GAO, the Office of Management and Budget 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.

The agencies in question are independent under the law, and under existing Executive Orders, OMB generally does not have authority to review their regulations formally or to require analysis of costs and benefits. We emphasize, however, that for the purposes of informing the public and obtaining a full accounting, it would be highly desirable to obtain better information on the benefits and costs of the rules issued by independent regulatory agencies. The absence of such information is a continued obstacle to transparency, and it might also have adverse effects on public policy. Recall that consideration of costs and benefits is a pragmatic instrument for ensuring that regulations will improve social welfare; an absence of information on costs and benefits can lead to inferior decisions.

Executive Order 13563 emphasizes the importance of agency use of "the best available techniques to quantify anticipated present and future benefits and costs as accurately as possible." While that Executive Order applies only to executive agencies, independent agencies may wish to consider the use of such techniques. In Executive Order 13573, the President explicitly said that the independent agencies should follow the central principles of Executive Order 13563. In its February 2, 2011, guidance on Executive Order 13563, OMB also encouraged the independent agencies to follow the principles and requirements of the order.[42]

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 lookback for regulation included in recent Reports. It examines the number of major rules promulgated by independent agencies as reported to the

[41] 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.
[42] Memorandum for the Heads of Executive Departments and Agencies, and of Independent Regulatory Agencies, M-11-10, "Executive Order 13563, 'Improving Regulation and Regulatory Review,'" p. 6, available at http://www.whitehouse.gov/sites/default/files/omb/memoranda/2011/m11-10.pdf

GAO from 2003 through 2013, which are presented in Tables C-1 and C-2.[43]

Table 1-10: Major Rules Issued by Independent Regulatory Agencies, October 1, 2012 - September 30, 2013

Agency	Rule	Information on Benefits or Costs	Monetized Benefits	Monetized Costs
Consumer Financial Protection Bureau	Ability-to-Repay and Qualified Mortgage Standards Under the Truth in Lending Act (Regulation Z) (78 FR 6408)	Yes	No	No
Consumer Financial Protection Bureau	Loan Originator Compensation Requirements Under the Truth in Lending Act (Regulation Z) (78 FR 11280)	Yes	No	No
Consumer Financial Protection Bureau	Mortgage Servicing Rules Under the Real Estate Settlement Procedures Act (Regulation X) (78 FR 10,696)	Yes	No	No
Consumer Financial Protection Bureau	Mortgage Servicing Rules Under the Truth in Lending Act (Regulation Z) (78 FR 10,902)	Yes	No	Yes
Commodity Futures Trading Commission	Clearing Exemption for Swaps Between Certain Affiliated Entities (78 FR 21,750)	No	No	No
Commodity Futures Trading Commission	Core Principles and Other Requirements for Swap Execution Facilities (78 FR 33,476)	Yes	No	No

[43] 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 2003 through 2012 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.

Agency	Rule	Information on Benefits or Costs	Monetized Benefits	Monetized Costs
Federal Communications Commission	Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking To Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services (78 FR 2572)	No	No	No
Federal Deposit Insurance Corporation	Regulatory Capital Rules: Regulatory Capital, Implementation of Basel III, Capital Adequacy, Transition Provisions, Prompt Corrective Action, Standardized Approach for Risk-weighting Assets, Market Discipline and Disclosure Requirements, Advanced Approaches Risk-Based Capital Rule, and Market Risk Capital Rule (78 FR 55,340)	Yes	No	No
Federal Reserve System	Supervision and Regulation Assessments for Bank Holding Companies and Savings and Loan Holding Companies With Total Consolidated Assets of $50 Billion or More and Nonbank Financial Companies Supervised by the Federal Reserve (78 FR 52,391)	No	No	No
Nuclear Regulatory Comission	Electric Power Research Institute; Seismic Evaluation Guidance (78 FR 13,097)	No	No	No
Nuclear Regulatory Commission	Inflation Adjustments to the Price-Anderson Act Financial Protection Regulations (78 FR 41,835)	No	No	No
Nuclear Regulatory Commission	Physical Protection of Byproduct Material (78 FR 16,922)	Yes	No	Yes

Agency	Rule	Information on Benefits or Costs	Monetized Benefits	Monetized Costs
Nuclear Regulatory Comission	Revision of Fee Schedules; Fee Recovery for Fiscal Year 2013 (78 FR 39,462)	Yes	No	No
Securities and Exchange Comission	Broker-Dealer Reports (78 FR 51,910)	Yes	No	No
Securities and Exchange Commission	Disqualification of Felons and Other "Bad Actors" From Rule 506 Offerings (78 FR 44,730)	Yes	No	No
Securities and Exchange Commission	Eliminating the Prohibition Against General Solicitation and General Advertising in Rule 506 and Rule 144A Offerings (78 FR 44,771)	Yes	No	No
Securities and Exchange Commission	Financial Responsibility Rules for Broker-Dealers (78 FR 51,824)	Yes	No	No
Securities and Exchange Commission	Registration of Municipal Advisors (78 FR 67,468)	Yes	No	No

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

Section 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. In addition, the 2011 Presidential Memorandum: Administrative Flexibility calls for a series of measures to promote flexibility for State, local, and tribal governments; these measures include reduced reporting burdens and streamlined regulation.[44]

1. Impacts on State, Local, and Tribal Governments

Over the past ten years, only five rules have imposed costs of more than $100 million per year ($2001 adjusted for inflation) on State, local, and tribal governments that have been

[44] President Barack Obama, Memorandum for the Heads of Executive Departments and Agencies, "Presidential Memorandum – Administrative Flexibility," available at http://www.whitehouse.gov/the-press-office/2011/02/28/presidential-memorandum-administrative-flexibility.

classified as public sector mandates under the Unfunded Mandates Reform Act of 1995 (UMRA):[45]

- *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 $89 million to $144 million.
- *EPA's National Primary Drinking Water Regulations: Stage 2 Disinfectants and Disinfection Byproducts Rule* (2006): The rule protects against illness due to drinking water disinfectants and disinfection byproducts (DBPs).[46] The rule effectively tightens the existing standards by making them applicable to each monitoring location 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

[45] We 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.

[46] 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).

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.

- *EPA's National Emission Standards for Hazardous Air Pollutants from Coal- and Oil-Fired Electric Utility Steam Generating Units and Standards for Performance for Electric Utility Steam Generating Units (2011)*: This rule will reduce emissions of hazardous air pollutants (HAP) including mercury from electric power generators, both private and public. The annualized estimated cost is $9.6 billion ($2007, using discount rates of 3% and 7%). The lower annualized estimated benefit is $33 billion ($2007, 7% discount rate); the higher $90 billion ($2007, 3% discount rate). The annualized net compliance cost to state, local, and tribal government entities is approximately $294 million in 2015.

- *USDA's Nutrition Standards in the National School Lunch and School Breakfast Programs (2012)*: This rule updates the meal patterns and nutrition standards for the National School Lunch and School Breakfast Programs to align them with the Dietary Guidelines for Americans. This rule requires most schools to: (1) increase the availability of fruits, vegetables, whole grains, and fat-free and low-fat fluid milk in school meals; (2) reduce the levels of sodium, saturated fat and trans fat in meals; and (3) meet the nutrition needs of school children within their calorie requirements. USDA estimates $479 million in annual costs for the Local School Food Authorities and training, technical assistance, monitoring, and compliance costs for the State Education Agencies.

Although these five rules were the only ones over the past ten years to require public sector mandates under UMRA on 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 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

The Regulatory Right-to-Know Act calls for an analysis of the effects of regulations on small business. Consistent with that direction, Executive Order 12866, "Regulatory Planning and Review," recognizes the need to consider such effects and to minimize costs on small business. That Executive Order, reaffirmed by and incorporated in Executive Order 13563, "Improving Regulation and Regulatory Review," directs 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.

In the findings section of SBREFA, Congress states that "small businesses bear a disproportionate share of regulatory costs and burdens."[47] When relevant regulations are issued, each firm must determine whether a regulation applies, how to comply, and whether it is in compliance. For small business, making that determination may impose significant costs. 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 recognition of these principles, many statutes and regulations explicitly attempt to reduce burdens on small businesses, in part to promote economic growth and in part to ensure against unnecessary or unjustified costs and 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, the Regulatory Flexibility Act (RFA) requires agencies to assess the effect of regulations on small businesses.[48] Under the RFA, whenever an agency concludes 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 (among other things) 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 achieving 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.

On January 18, 2011, President Obama issued a memorandum to underline the requirements of the RFA and to direct agencies to offer an explanation of any failure to provide flexibility to small businesses in proposed or final rules. Such flexibility may include delayed compliance dates, simplified reporting requirements, and partial or total exemptions. The President's memorandum emphasizes the relationship between small and new businesses and economic growth and job creation; he directed agencies to ensure, to the extent feasible and consistent with law, that regulatory initiatives contain flexibility for small businesses.[49]

The empirical evidence of the effects of regulation on small business remains less than 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 at least four studies that estimate the burden of regulation on small businesses.[50] A study sponsored by SBA (and cited in our 2010 Report), by Dean, et al., concludes that environmental regulations act as barriers to entry for small firms.[51]

Becker offers a more complex view, focusing on the effect of air pollution regulation on

[47] Section 202(2) of Pub. L. No. 104-121.
[48] 5 U.S.C. §§ 601-612.
[49] Barack Obama, Memorandum for the Heads of Executive Departments and Agencies, "Presidential Memoranda – Regulatory Flexibility, Small Business, and Job Creation," available at http://www.whitehouse.gov/the-press-office/2011/01/18/presidential-memoranda-regulatory-flexibility-small-business-and-job-cre.
[50] See Hopkins (1995); Dean, et al. (2000); Crain and Hopkins (2001); Crain (2005).
[51] Dean, et al. (2000).

small business.[52] He finds that although "progressively larger facilities had progressively higher unit abatement costs, ceteris paribus,"[53] the relationship between firm size and pollution abatement costs varies 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."[54]

However, more recent work by Becker, Pasurka and Shadbegian, which focuses on the relationship between establishment size and spending on pollution abatement, finds that "spending on pollution abatement operating costs per unit of output increases with establishment size."[55] In particular, they find that the very largest establishments (with 1000+ employees) spend between $1.92 and $5.61 more on pollution abatement operating costs per $1000 of output than the establishments with 1-19 employees.

The evidence in the literature, while suggestive, remains 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. As the President's 2011 memorandum directs, agencies should specifically explain any refusal to take such steps, especially in light of the importance of small businesses and startups for economic growth and job creation.

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 one or both dimensions, whereas other regulations might produce benefits. The relevant effects can be quite complex, since in general equilibrium, regulation in one area can have ripple effects across many markets, making it difficult to produce aggregate figures.

Executive Order 13563 states that our "regulatory system must protect public health, welfare, safety, and our environment while promoting economic growth, innovation, competitiveness, and *job creation*" (emphasis added). Furthermore, Executive Order 12866 states that regulatory impact analyses should include assessments of regulations' effects on the functioning of the economy and on employment. OMB continues to believe that it is important for regulatory agencies to attempt, to the extent feasible, to consider the employment effects (whether negative or positive) of their regulations. However, when assessing the effects of

[52] Becker (2005).
[53] *Id.*, p. 163.
[54] *Id.*, p. 165.
[55] Becker, Pasurka and Shadbegian (2013), p. 535.

regulations on employment and applying those assessments to policy decisions, there are several potential pitfalls:

- Expecting a precise, measurable impact from most individual regulations. Only a small fraction of individual regulations or agency actions will have a large enough effect to allow for measurement of changes in gross domestic product (GDP) or national employment. It is the cumulative sum over time of many small changes that is much more likely to be significant in these areas.

- Ignoring long-run or indirect impacts. Many regulatory actions have direct, short-run effects that are mitigated by long-run market adjustments. For example, businesses sometimes shut down as a result of a regulation; because jobs are temporarily lost, a short-run, industry-specific job-counting model would give the impression that regulation reduces employment. Alternatively, firms may need to hire new workers to perform activities necessary for coming into compliance with a regulation; in this case, the same job-counting model would give an impression that regulation increases employment. However, these apparent reductions or increases in employment often will, in the medium or long run, turn out to be shifts in employment between economic sectors.[56]

- Ignoring the importance of timing. With employment-related policy goals, timing is often essential; spurring job creation is much more desirable during an economic downturn than during expansionary portions of the business cycle. Regulatory development, meanwhile, typically involves years of assessing evidence on the need for and effect of regulation; also, once issued, many regulations will remain effective indefinitely. Given their development and effectiveness timeframes, very few regulations that were originally motivated by policy goals unrelated to employment will be well-suited to targeting job creation when it is most needed.

We discuss below the effect of labor market regulations, environmental regulations, and economic regulations on wages and employment. OMB continues to investigate the possibility that certain kinds of regulations can have adverse effects on job creation in particular, and is interested both in empirical work and in taking steps to reduce or eliminate such adverse effects.

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. There are many different types of labor market regulations. Perhaps the most obvious are direct price controls, such as minimum wage laws.[57] 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

[56] Examples may be seen in a variety of areas, including tobacco (Warner et al., 1996), water resource investment (Haveman and Krutilla, 1967) and many others.
[57] Neumark & Wascher (2008).

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. Yet 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 and 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.[58] 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 the benefit, 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 decrease 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.[59] Consider, 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. To the extent that 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 mandates can be analyzed in the standard framework provided by Summers described above, and because wages adjust down, are

[58] Summers (1989).
[59] Jolls (2000).

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.[60] In contrast, Gruber finds that regulations that require employers to provide comprehensive coverage for childbirth in health insurance plans result in a decrease in women's wages but have no effect on their employment levels.[61] Studies examining the effect of the FMLA in the U.S., 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.[62] Bartik reviews labor market literature and offers recommendations on how to improve employment benefits using adjusted reservation wage gains and adjusted earnings gains.[63] Using 1994-1998 International Adult Literacy Survey microdata for Canada, Finland, Italy, the Netherlands, Switzerland, the United Kingdom, and the US, Kahn finds that employment protection mandates increase the incidence of temporary employment for low skilled workers, youth and women and raise relative joblessness among the young, immigrants and possibly women.[64] Botero et al. largely echo this result when they examined the relationship between labor force participation and employment laws, collective relations laws and social security laws in 85 countries.[65] OMB continues to investigate the growing literature on these topics. The references here are meant to be illustrative rather than exhaustive.

b. Environmental regulation.

There is widespread belief that new or more stringent environmental regulations raise production costs thereby reducing production which in turn must lead to lower employment ("output effect"). However, it is also conceivable that the new regulation will require more labor input – this will depend on the extent to which the required abatement activities and labor are substitutes or compliments ("abatement activity" effect).[66] Thus, the effects of environmental regulation on the labor market can be difficult to assess. Isolating the effect of environmental regulation on employment is further complicated by the fact that changes in other economic conditions (e.g. recessions, import competition, tax policy) also affect employment over time and across sectors and therefore must be taken into consideration. Moreover estimating changes in net employment is complicated by the fact that they are comprised of changes in employment in different sectors and while some changes represent potential decreases in employment (i.e. the directly regulated sector and up and down stream sectors[67]) some of these changes represent

[60] Acemoglu and Angrist (2001).
[61] Gruber (1994).
[62] 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.
[63] Bartik (2012).
[64] Kahn (2007).
[65] Botero, et al. (2004).
[66] See Berman and Bui (2001).
[67] Upstream sectors supply inputs to the regulated sector (e.g., coal mines supplying coal to power plants) and downstream sectors purchase output from the regulated sector (e.g., manufacturing plants purchasing electricity from power plants).

increases in employment (e.g. pollution abatement sector[68]). Therefore, the underlying questions regarding the effect of environmental regulations on labor markets requires careful and continuing conceptual analysis and empirical study, and OMB is following new developments in both areas. In this section we summarize some of the leading articles that are often cited in the academic literature.

Pollution abatement activities can be divided into two basic categories: end-of-pipe (EOP) controls, which remove pollutants from the discharge stream after they are produced (e.g. electrostatic precipitators removing particulates or a waste water treatment plant removing total suspended solids) and change-in-production-process (CIPP) techniques which reduce the amount of waste produced during production (e.g. switching from high to low sulfur coal or increasing the efficiency of boilers). EOP controls will require labor to install them and to operate them, so in this case labor and abatement activities are likely to be complements. On the other hand, CIPP techniques may reduce the amount of labor to operate the plant due to an increase in the capital-labor ratio caused by technological change. Thus the abatement activity effect is ambiguous and therefore standard microeconomic analysis cannot predict a priori whether or not environmental regulations have a negative effect on labor demand in the directly regulated sector. Determining the sign and magnitude of the effect of environmental regulation on labor demand in the directly regulated sector will require empirical studies.

To estimate the net employment impacts of an environmental regulation requires the additional step of estimating the employment impacts of regulation in the up and down stream sectors as well as the pollution abatement sector. In many instances environmental regulations generate increased demand by regulated facilities for pollution control equipment and services to bring them into compliance with the regulation. In turn this higher demand could increase employment in pollution abatement sector, especially in time of high unemployment.[69] On the other hand, while increased employment in the pollution abatement sector is positive for that industry, it represents labor costs to the directly regulated sector, so determining the net effect is important.

There is a broad empirical literature analyzing the effect of environmental regulations on various economic outcomes including productivity, investment, competitiveness as well as environmental performance. On the other hand, there are only a few papers that examine the impact of environmental regulation on employment, but this literature has been growing. Studies that examine the effect of environmental regulation on employment include Berman and Bui[70], Greenstone[71], Walker[72] and Gray and Shadbegian[73].[74]

[68] In 2008 the pollution abatement sector, according to the U.S. Department of Commerce (2010), consisted of 119,000 environmental technology (ET) firms which produced roughly $300 billion in domestic revenues (approximately 2% of GDP), and produced exports worth $43.8 billion (roughly 2% of total export).
[69] Schmalansee and Stavins (2011).
[70] Berman and Bui (2001).
[71] Greenstone (2002).
[72] Walker (2011).
[73] Gray and Shadbegian (2013).
[74] All these studies examine the impact of regulations in the directly regulated sector and do not estimate employment effects in either the up or down stream industries or the pollution abatement sector.

Berman and Bui, using plant-level data, estimate the impact of some of the most stringent air quality regulations in the United States enacted by the South Coast Air Quality Management District around Los Angeles from 1979 to 1992. They find that even though regulations impose large costs on plants they only have a very small insignificant effect on employment. According to Berman and Bui, the likely explanation for the small effects is that the regulations disproportionately affect capital-intensive plants with relatively low levels of employment, which sold output mostly to local markets where their competition faced the same level of regulation. Furthermore, they surmised that pollution abatement inputs and employment were complements. Gray and Shadbegian use 4-digit SIC industry level data to examine the impact of environmental regulation, proxied by the percent of output spent on pollution abatement operating costs, on employment in U.S. manufacturing (1973-1994). They find that in most cases more stringent regulations have a statistically significant yet quantitatively small negative effect on employment, with slightly larger effects in the most highly regulated industries.

Greenstone examines the difference in employment growth between counties that are designated as being in nonattainment for one or more of the criteria pollutants (particulate matter, sulfur dioxide, ozone and carbon monoxide) and counties in attainment. Regulators impose more stringent regulations on plants in non-attainment areas relative to attainment areas to help bring those areas into compliance. Greenstone finds that these more stringent regulations cause a loss of approximately 590,000 jobs in non-attainment areas relative to attainment areas between 1972 and 1987. Walker finds that employment at plants in newly designated non-attainment areas due to the 1990 Clean Air Act Amendments is 15% lower relative to plants in attainment areas. At first glance, the employment effects in these studies sound large, however one important point to note about these studies is that their findings do not mean that there is lower aggregate employment due to more stringent environmental regulation. The findings only imply that the relative growth rate of employment in some sectors differs between attainment and non-attainment areas. In other words, the results of Greenstone and Walker may be due to their inability to control for geographic reallocation of economic activity from non-attainment to attainment areas. As a matter of fact, List et al. find that new pollution-intensive plants are less likely to open in non-attainment areas implying that this geographic relocation is most likely occurring.[75]

Environmental regulations may also have a less visible effect on employment, by lowering investment in the U.S. by multinational corporations. Using 17-year panel data, Keller and Levinson find the stringency of environmental regulation (expressed in pollution abatement costs) has "small deterrent effects" on states competing for foreign direct investment.[76] Xing and Kolstad find "using instruments for the unobserved variables, the statistical results show that the laxity of environmental regulations in a host country is a significant determinant of F[oreign] D[irect] I[nvestment] from the US for heavily polluting industries and is insignificant for less polluting industries."[77]

[75] List, et al. (2003).
[76] Keller and Levinson (2002), p. 691.
[77] Xing and Kolstad (2002), p. 1.

A recent study by Hanna measured the response of US-based multinationals foreign direct investment decisions to the Clean Air Act Amendments using a panel of firm-level data over the period 1966-1999.[78] Consistent with the theory that regulation causes firms to substitute foreign for domestic production, the authors find 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."[79] The authors also find that these results are more robust for firms that manufactured within an industry for which imports had historically accounted for a large percentage of US consumption (see also Greenstone discussed above). Like Hanna, Brunnermeier and Levinson, using panel data, also find "statistically significant pollution haven effects of reasonable magnitude."[80] Levinson and Taylor's results in examining trade flows and environmental regulation are consistent with these other studies.[81]

In this context, the evidence is both suggestive and mixed. In their review of the literature on the effect of environmental regulation on the manufacturing sector, Jaffe et al. find that "although the long-run social costs of environmental regulation may be significant, including adverse effects on productivity, studies attempting to measure the effect of environmental regulation on net exports, overall trade flows, and plant-location decisions have produced estimates that are either small, statistically insignificant, or not robust to tests of model specification."[82]

c. Economic regulation.

Rate regulations and restrictions on entry in product markets—commonly referred to as "economic regulation"—can have important effects on labor markets. As emphasized by Peoples,[83] 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.

To the extent that economic regulation also results in higher prices in the product market, consumers, including workers, will of course have to pay those prices. 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.[84] The theoretical negative effect of entry

[78] Hanna (2010).
[79] Hanna (2010), p. 160.
[80] Brunnermeier and Levinson (2004), p. 6.
[81] Levinson and Taylor (2008).
[82] Jaffe et al. (1995), p. 157-158.
[83] Peoples (1998).
[84] Blanchard and Giavazzi (2003).

regulation on employment was supported empirically by Bertrand and Kramarz,[85] who examine entry restrictions in the French retail industry and find that they have reduced employment growth in France. Using individual worker information from CPS files from 1973 through 1988, Peoples and Saunders show that deregulation of the trucking industry led to significant real wage reduction for white drivers, narrowing the black/white income gap.[86]

4. Impact on Economic Growth

Measuring the effects of regulation on economic growth is a complex task. The category of "regulation" is of course very large. Criminal law, property law, and contract law are not always characterized as "regulation," but they do have regulatory functions, and if well-designed, they can promote and even be indispensable to economic growth. A system of freedom of private property and freedom of contract promotes such growth, and it cannot exist without regulation (including that form of regulation that occurs through the common law). Some forms of national regulation may have a positive effect on growth, perhaps by promoting stable and efficient operation of financial markets, by improving educational outcomes, by promoting innovation, or by upgrading the operation of the transportation system. An absence of regulation, or poorly designed deregulatory initiatives, may have significant adverse effects on growth – if, for example, they undermine the stability and efficiency of financial markets.

Excessive and unnecessary regulations, on the other hand, can place undue burdens on companies, consumers, and workers, and may cause growth and overall productivity to slow. While the evidence remains less than entirely clear, some evidence suggests that domestic environmental regulation has led some U.S.-based multinationals to invest in other nations (especially in the domain of manufacturing), and in that sense, such regulation may have an adverse effect on domestic growth.[87] It is generally agreed that predictability and certainty are highly desirable features of a regulatory system. (We note that Executive Order 13563 emphasizes that our regulatory system "must promote predictability and reduce uncertainty"; in certain recent actions and decisions, including the decision not to finalize the EPA's proposed ozone rule in 2011, the Administration has emphasized the importance of predictability and certainty.) At the same time, the direct impacts of particular regulations, or categories of regulations, on the overall economy may be difficult to establish because causal chains are uncertain and because it is hard to control relevant variables.

One difficulty with measuring the relationship between regulation and economic growth is identifying the appropriate measure of output. Economists frequently look at Gross Domestic Product (GDP), which is also our principal emphasis here (see below), but as a growing technical literature suggests, GDP may not adequately account for the effects of some regulations. For example, GDP does not capture directly relevant benefits of regulation, such as improvements to the environment, human health, and quality of life, that do not result in increases in goods or services produced.[88] Efforts to expand the national accounts to incorporate omitted factors – such

[85] Bertrand and Kramarz (2002).
[86] Peoples and Saunders (1993).
[87] See Brunnermeier and Levinson (2004), Levinson and Taylor (2008).
[88] See Sen (1999a, 1999b), Krueger (2009), Kahneman, et al. (2004), and Stiglitz, et al. (2010).

as improvements in environmental quality in satellite accounts – suggest the incompleteness of existing measures.[89]

While identifying the appropriate measure of output is a difficult task, debate also continues about how to evaluate the impact of regulations on the standard indicators of economic activity. Exploration of that impact continues to be centrally important, as Executive Order 13563 makes clear with its clear reference to "economic growth, innovation, competitiveness, and job creation." At the same time, regulatory impacts on economic growth may be difficult to demonstrate because of other simultaneous changes in the economy. For example, economic growth may be strong while regulatory activity is increasing; even if so, the strength of economic growth may not be caused by such activity.

Many regulations affect economic growth indirectly through their effects on intermediate factors. There is a growing consensus specifying these intermediate drivers of growth, including increased human capital, capital investment, research and development, economic competition, physical infrastructure, and good governance (including good institutions).[90] Some evidence strongly suggests that regulations promoting educational attainment may improve human capital accumulation, thereby increasing economic growth.[91] Ashenfelter and Krueger study the economic returns to schooling using survey data of identical twins and conclude that "each year of school completed increases a worker's wage rate by 12-16 percent."[92] Other studies show a positive link between increased life expectancy and growth.[93]

If they are not carefully designed, regulations can also impose significant costs on businesses, potentially dampening economic competition and capital investment. Djankov et. al.[94] find that increased regulations on entry into markets—such as licensing and fees—create higher costs of entry and thus adversely affect economic outcomes.[95] By contrast, van Stel et. al. find that entry regulations actually have little impact on entrepreneurship, but that regulations creating greater labor rigidity have a discernible negative impact. [96]

Relatively few studies attempt to measure the economic impact of regulations in the aggregate; the literature focuses instead on particular regulatory arenas.[97] The literature

[89] Nordhaus & Kokkelenberg (1999); Nordhaus (2004).
[90] See, e.g., Temple (1999).
[91] For a recent empirical analysis using new OECD data to find a strong positive impact of increased education on economic output, see Cohen & Soto (2007).
[92] Ashenfelter and Krueger (1994), p. 1157. Krueger and Lindahl (2001) provide an overview of two literatures: (1) labor literature on monetary return to schooling and (2) the macro growth literature that investigates the relationship between education in different countries and their subsequent economic growth.
[93] See, e.g., Bloom et al. (2004). Bloom et al. survey the existing literature on health and economic outcomes, and find in their own cross-country analysis that a one year increase in life expectancy generates a 4 percent increase in economic output, controlling for other variables.
[94] Djankov, et al. (2002).
[95] Djankov et al. (2002).
[96] van Stel et al. (2007). They also find that regulations improving access to credit have a positive impact on entrepreneurship.
[97] One of the few such studies is an analysis by Hahn and Hird (1991), which estimates the net costs of regulations on the economy to be $46 billion, with aggregate annual transfer payments between $172.1 and $209.5 billion. But the authors note that their estimates have a wide range of uncertainty due to difficulties in estimation methods and

examining the effects of environmental regulations in particular is extensive. Here are a few examples:[98]

- Jorgenson and Wilcoxen modeled dynamic simulations with and without environmental regulation on long-term growth in the U.S. to assess the effects and reported that the long-term cost of regulation is a 2.59% reduction in Gross National Product.[99]
- 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"[100] and that "abatement associated with the SCAQMD regulations was productivity enhancing."[101]
- Greenstone, List, and Syverson (2011) analyze plant-level production data to estimate the effects of environmental regulations on manufacturing plants' total factor productivity (TFP) levels. Using the Clean Air Act Amendments' division of counties into pollutant-specific nonattainment and attainment categories, they find that among surviving polluting plants, a nonattainment designation is associated with a roughly 2.6 percent decline in TFP.
- Gray and Shadbegian examine the investment activity of paper mills from 1979 to 1990,[102] and they find 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."[103]

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available data. Further, this study is likely to be outdated due to major policy and economic developments in the years since its publication. EPA (2011) conducted an analysis to examine the macroeconomic effects of the Clean Air Act Amendments using a computable general equilibrium model. They find that output of goods and services decrease as a result of regulations associated with the Clean Air Act Amendments but these decreases are offset by increases in leisure. EPA's analysis states that in 2020 the increases in leisure would outpace the decreases in goods and services.

[98] Berman and Bui (2001a) provide a helpful summary of some of this literature. It should be recalled that many environmental regulations affect provision of non-market goods that are not explicitly reflected in standard measures of economic activity. Thus, in addition to the direct economic costs imposed by environmental regulations, these same regulations have social welfare and other non-market impacts that are not captured in these studies.

[99] Jorgensen & Wilcoxen (1990).

[100] *Id*, p. 509.

[101] *Id*, p. 499. SCAQMD is South Coast Air Quality Management District.

[102] Gray & Shadbegian (1998).

[103] *Id*, at 254-255.

- Becker and Henderson[104] 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."[105]
- Greenstone[106] 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)."[107] However, Greenstone notes that these impacts remain modest in comparison to the size of the national manufacturing sector. Further, these results indicate statistically significant economic costs associated with carbon monoxide regulations but not with ozone or sulfur dioxide regulations.
- 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.[108]
- As noted above, Hanna[109] finds that domestic environmental regulation has had an effect in increasing the outbound foreign direct investment of U.S.-based multinational firms. The results include an increase in foreign investments in polluting industries by 5.3 percent and in foreign output by 9 percent; the results are concentrated in manufacturing.
- Jaffe and Palmer[110]find that increases in compliance costs generated by environmental regulations lead to a lagged effect of increases in research and development expenditures, as measured by patents of new environmental technologies. Other studies provide similar findings. [111] These studies suggest that there may be positive economic effects related to technological innovation in the years following increased environmental regulatory compliance costs. As Jaffe and Palmer argue, "in the aggregate, the disincentives for R&D attributed to a command-and-control approach to environmental regulation may be overcome by the high returns that regulation creates for new pollution-control technology."[112] These results, however, are noted to be sensitive to the definitions of the time lag and difficulties in specifying research and development models, coding patent types, and linking research and development to overall economic growth.

[104] Becker & Henderson (2000).
[105] *Id.*, at 414-415.
[106] Greenstone (2002).
[107] *Id*, at 1213.
[108] List, et al. (2003).
[109] Hanna (2010).
[110] Jaffe and Palmer (1997).
[111] See Lanoie et al. (2008).
[112] Jaffe & Palmer (1997), at 618.

- Chay and Greenstone[113] find that improvements in air quality induced by Clean Air Act regulations resulted in increased housing values at the county level between 1970 and 1980. This finding suggests possible economic gains in asset values resulting from improved environmental conditions, which may have had longer-term impacts on economic growth. Again, these overall impacts are difficult to quantify.
- Kahn examines census and state data and finds that better educated, wealthier populations experienced cleaner air, but that poorer, less educated populations experienced a greater overall improvement in air quality between 1980 and 1998 in California. During this time period, the exposure of the Hispanic population to pollution also fell sharply along with exposure differentials between richer and poorer people. The author concludes that, "[g]iven the overall trend in improvements for certain demographic groups, it appears that regulation under the Clean Air Act has helped, and not economically harmed, the 'have nots.'"[114]

Outside of the context of environmental regulation, a number of studies find that some regulations have promoted economic growth and otherwise had desirable economic effects. For example, Carpenter (2009) finds that certain approaches to entry regulation – such as the discretionary approval regimes used by the Food and Drug Administration – can actually increase economic activity by establishing credible expectations of fairness and product safety.[115] Similarly, Greenstone et al. (2006) find that disclosure rules in the securities industry can reduce the adverse effects of informational asymmetries and increase market confidence. Their study finds that the 1964 Securities Act Amendments generated $3-6 billion of asset value for shareholders as a result of increased investment activity. According to their evidence, higher levels of investor protection and disclosure requirements are associated with the higher valuation of equities.[116]

Another body of work focuses more specifically on behaviorally informed approaches to regulation—including setting appropriate default rules, reducing complexity, using disclosure as a regulatory tool, and presenting information so as to promote clarity and salience. The relevant work explores how such approaches might help improve market functioning or reduce economic costs associated with more aggressive regulatory efforts. Regulations aimed at managing risks can also have significant economic benefits by increasing the willingness of market actors to

[113] Chay & Greenstone (2005). Fullerton (2011) uses a carbon permit system – specifically, the cap-and-trade legislation that passed the U.S. House of Representatives in 2009 (which then stalled in the Senate) – to illustrate six different types of distributional effects: (1) the higher prices of carbon-intensive products, (2) changes in relative returns to factors like labor, capital, and resources, (3) allocation of scarcity rents from a restricted number of permits, (4) distribution of the benefits from improvements in environmental quality, (5) temporary effects during the transition, and (6) capitalization of all those effects into prices of land, corporate stock, or house values. He concludes that, in this particular case, many or all effects may be regressive – that is, the net burden as a fraction of income is higher for the poor than for the rich.

[114] Kahn (2001).

[115] Carpenter (2009). For more historical and formal modeling approaches to this same argument, see, e.g., Carpenter (2004) and Carpenter & Ting (2007).

[116] *Id.* See also La Porta et al. (1999).

participate in market transactions.[117] These studies suggest that when examining the economic effects of regulation, analysts should be mindful of the importance of considering alternative regulatory approaches, in addition to deregulatory options, as the baseline for comparison.

Executive Order 13563 refers in particular to the importance of flexible approaches, stating that with relevant qualifications, "each agency shall identify and consider regulatory approaches that reduce burdens and that maintain flexibility and freedom of choice for the public." In some cases, carefully chosen forms of regulation, increasing flexibility, may yield the same social welfare benefits as existing regulatory approaches while imposing significantly lower costs. In other cases, alternative regulatory approaches may actually improve market functioning, increase economic activity, and promote economic growth.[118]

OMB continues to investigate the underlying questions; no clear consensus has emerged on all of the answers. Further work of the sort outlined here might ultimately make it possible to connect regulatory initiatives to changes in GDP and also to changes in subjective well-being under various measures.

[117] On the possible welfare and economic gains from employing alternative regulatory approaches, see generally Moss & Cisternino (2009).
[118] *Id.* See also Balleisen and Moss, eds. (2009).

CHAPTER II: RECOMMENDATIONS FOR REFORM

The Regulatory Right-to-Know Act charges OMB with making "recommendations for reform." In this year's draft Report, in addition to a general discussion of regulatory reform, we have decided to focus on the implementation of the retrospective review components of Executive Orders 13563 and 13610, international regulatory cooperation, and OMB's efforts to improve transparency and public participation in regulation.

Recommendations for Reform

In its 2009, 2010, 2011 2012, and 2013 reports, OMB recommended a wide range of regulatory and analytic reforms and practices, including retrospective analysis of existing rules; examination of how to conduct and present regulatory impact analyses when necessary inputs are non-quantifiable; use of cost-effectiveness analysis, especially for regulations designed to reduce mortality risks; clear presentation of quantified and non-quantifiable costs, benefits, and distributional effects of proposed regulations and their alternatives; promotion of public participation and transparency through technological means; regulatory cooperation with international trading partners; promotion of economic growth and innovation; empirical testing of disclosure strategies; and careful consideration of approaches to regulation that are informed by an understanding of human behavior and choice.[119] OMB continues to support these recommendations.

Implementation of Executive Order 13563 and 13610 in Fiscal Year 2013

The range of activities conducted under the auspices of Executive Order 13563 and 13610 has included reducing regulatory burden, simplifying reporting requirements, improving regulatory coordination, and encouraging public participation in the regulatory process.

A. Reducing Regulatory Burden and Simplifying Paperwork Requirements

The prospective analysis of regulatory costs and benefits required by Executive Orders 12866 and 13563 may depend on a degree of speculation, so the actual costs and benefits of a regulation may be lower or higher than what was originally anticipated. Executive Order 13563 calls for careful reassessment—in other words, retrospective analysis—of regulations that are in place. After retrospective analysis has been undertaken, agencies will be in a position to streamline, modify, expand, or eliminate rules that do not make sense in their current form or under existing circumstances.

The President subsequently formalized the retrospective review process in EO 13610 "Identifying and Reducing Regulatory Burdens." Starting in 2012, agencies now provide a public report on their retrospective review efforts twice per year. Finally, Executive Order 13579, "Regulation and Independent Regulatory Agencies," asked independent agencies to follow the same principles as Executive Agencies, including a retrospective review of existing regulations.

[119] Earlier versions of the benefit-cost report are available on OMB's website at http://www.whitehouse.gov/omb/inforeg_regpol_reports_congress/.

The early phase of retrospective review implementation has been characterized by fairly straightforward reforms, such as switches from paper to electronic notifications. Moving ahead, however, OMB expects agencies will progress to more analytically-driven retrospective reviews, where the assessments are akin to currently-conducted regulatory impact analyses (RIAs) but have the advantage of post-implementation data. Of course, agencies do not have a monopoly on assessing regulatory impacts; outside researchers often seek to estimate such effects.[120] Agencies would, however, examine all or most aspects of a previous cost-benefit analysis, not just the surprising or analytically novel results that would typically receive attention from academic journals. Perhaps more importantly, agencies have the ability to facilitate retrospective analysis at the time when rules are issued; for example, in some cases, they can require—as a provision of a rule—the submission of data that would be necessary for assessing that rule's effectiveness. In other cases, they may commit themselves in the regulatory text to conduct a retrospective review of regulation, including a plan and metrics to measure effectiveness, and a decision of whether the review identifies potentially net beneficial regulatory changes, by a certain date. OMB recommends that agencies pursue retrospective review in a comprehensive fashion—encompassing continual look-back at administrative procedures; thorough cost-benefit analysis of previously-issued, non-administrative regulations; and the incorporation of plans for retrospective policy assessment into rulemaking currently underway.

In addition to looking back at existing regulations, OMB is also focused on reducing unjustified non-regulatory reporting and paperwork burdens. In 2012, OIRA asked executive departments and agencies to assess possibilities for eliminating redundant or unnecessary information collections; streamlining forms; exempting small businesses from information collections; simplifying applications for federal licenses or approvals for participation in federal programs; using sampling rather than collecting data from every member of a population of interest; replacing paper-based communication or data systems with electronic options; reducing frequency of information collection; reducing record retention requirements; or maximizing re-use of data that are already collected.[121] Previous versions of this Report have provided more detail on the specific opportunities identified by agencies for substantially reducing paperwork burdens.

B. Regulatory Coordination

Building on Executive Order 13563, which directs agencies to promote "coordination, simplification, and harmonization," President Obama issued Executive Order 13609, "Promoting International Regulatory Cooperation" in May, 2012. The Executive Order emphasizes the importance of international regulatory cooperation as a key tool for eliminating unnecessary differences in regulation between the United States and its major trading partners; this approach supports economic growth, job creation, innovation, trade and investment, while also protecting public health, safety, and welfare. OMB sees international regulatory cooperation as an another

[120] Seong and Mendeloff (2004), for example, have examined OSHA safety regulations and found that their effectiveness at reducing occupational hazard-related mortality has been substantially lower than estimated in prospective RIAs.

[121] For a related memorandum released in June of 2012, see http://www.whitehouse.gov/sites/default/files/omb/inforeg/memos/reducing-reporting-and-paperwork-burdens.pdf.

potentially fruitful area where agencies could consider reviewing, modifying, and streamlining existing regulation in order to avoid unnecessary or inadvertent regulatory differences.

Several major steps were taken toward greater international regulatory coordination in FY 2013, including in December, 2012, when the United States-Canada Regulatory Cooperation Council (RCC) presented its one-year "Progress Report to Leaders."[122] The Progress Report provides status updates on each of 29 Work Plans and highlights the full range of activities currently being undertaken by U.S. and Canadian regulators to achieve more effective and coordinated approaches to regulation. These approaches are aimed at reducing unnecessary regulatory differences. The work plans have two-year timeframes and include clear milestones and timelines, mechanisms to promote ongoing regulatory alignment, and regular opportunities for public participation and stakeholder engagement.

In addition to pursuing regulatory coordination within North America, OMB's Office of Information and Regulatory Affairs, through its contributions to the Transatlantic Economic Council and its leadership role on the U.S.-E.U. High Level Regulatory Cooperation Forum ("the Forum"), is working to enhance regulatory cooperation with the European Union. On February 12, 2013, President Obama and E.U. leaders announced their intention to launch negotiations on a Transatlantic Trade and Investment Partnership.[123] The goals of the Partnership include addressing costly "behind the border" non-tariff barriers that impede the flow of goods and services and reducing the cost of differences in regulation and standards by promoting greater compatibility, transparency, and cooperation.

OMB has also joined with the Office of the United States Trade Representative and the National Institute of Standards and Technology to develop a comprehensive proposal, released in draft form in February 2014, to update Circular A-119, "Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities," which has provided guidance to federal agencies since 1995 and was last revised in 1998.[124] This forward-looking proposal includes important and timely updates to U.S. policies on how standards and conformity assessment support regulation, procurement, international regulatory cooperation and other government functions. The proposed changes are intended to: ensure that U.S. regulations reflect state-of-the-art technical solutions for purposes of interoperability; support a flexible, transparent, and innovative U.S. standards system; strengthen implementation of international trade rules, helping prevent the creation of trade barriers, and avoiding unnecessary regulatory differences with key trading partners; and reduce regulatory complexity, duplication and costs on companies, workers, consumers and the U.S. government itself. Similar to other areas of international regulatory cooperation, OMB also sees the draft revised Circular as related to our overall efforts toward institutionalizing the retrospective review of regulation. Among other things, the Circular revisions discuss how agencies could consider

[122] Available at http://www.whitehouse.gov/sites/default/files/docs/pco_bnet-30471-v38-rcc-progress_report_-_dec_2012_final.pdf.

[123] The official announcement is available at ://www.whitehouse.gov/the-press-office/2013/02/13/statement-united-states-president-barack-obama-european-council-presiden.

[124] The draft revised Circular A-119 is available at http://www.whitehouse.gov/sites/default/files/omb/inforeg/revisions-to-a-119-for-public-comments.pdf

how conformity assessment procedures can facilitate the retrospective review of their regulations, and streamline regulations that incorporate standards by reference.

C. Public Participation

Under Executive Order 13563, agencies are directed to promote public participation. Moreover, OIRA itself is committed to using technology to improve transparency and to increase public participation in the regulatory process. Efforts in this area have been a high priority, as shown by, among other developments, the introduction and redesign of websites that facilitate communication between members of the public and the U.S. federal government. For example, in April 2014 OMB changed the way it discloses meetings with outside parties held under Executive Order 12866 to be more accessible and transparent. Specifically, we have now integrated the notice of those meetings with www.reginfo.gov, and have provided a method to search for meeting notices by individual regulation, the rule-making stage of that regulation, department or agency, and by date. We have also provided a calendar function in order to provide a monthly view of all the meetings we have held.

The public can participate in policy-making in a more informed way when the government does not have sole access to the data needed for analyzing the effects of regulations, programs and other policy interventions. In May of 2013, the President signed an Executive Order to make government-held data more accessible to the public.[125] Under the terms of the Executive Order and a new Open Data Policy, all newly generated government data will be required to be made available in open, machine-readable formats, greatly enhancing their accessibility and usefulness, while ensuring privacy and security.[126] More recently, OMB has built on this effort by releasing additional guidance to federal agencies about how to inventory and publish their data assets, new FAQs about how open data requirements apply to federal acquisition and grant-making processes, and a framework for creating measurable goals that agencies can use to track progress. All of this is available on the Project Open Data website, which also features additional case studies and free software tools.[127]

While there is still more work to do, federal agencies are making progress toward data openness. Over a dozen agencies have launched webpages at agency.gov/data, making it easier for the public to find, understand and use government data. Many agencies have released new datasets, which are now available both on agencies' public data webpages and on Data.gov. Federal agencies are also working to put processes in place to manage data more strategically; over 15 agencies have launched internal data working groups to improve coordination around data management, data security and protection, and data release efforts.

[125] Available at http://www.whitehouse.gov/the-press-office/2013/05/09/executive-order-making-open-and-machine-readable-new-default-government-.
[126] For more information on the Open Data Policy, see http://www.whitehouse.gov/sites/default/files/omb/memoranda/2013/m-13-13.pdf.
[127] Available at http://project-open-data.github.io/.

D. Request for Public Comment

Consistent with this year's focus on the retrospective review of regulation, OMB requests comment on all aspects of the Administration's emphasis on looking back at the effectiveness of existing regulations, and building into new regulations a process for measuring their success in the future. We are especially interested in both new ideas for specific programs that could benefit from retrospective review, as well as ideas that would facilitate the continuing institutionalization of regulatory lookback as a key part of every agency's standard regulatory agenda.

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

Introduction

This report represents OMB's seventeenth 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 2012 through September 2013; rules published before October 2012 are described in last year's report.

Since 2001, this report has been included in 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. Both reports also highlight the need for regulating in a responsible manner, accounting for benefits and costs and taking into consideration the interests of our intergovernmental partners.

State and local governments have a vital constitutional role in providing government services. They have the primary 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, State, local, and tribal governments 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 (UMRA, or "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 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 prepare an estimate of direct benefits and costs for use in the consultation process;
- 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 UMRA (see Appendix D for a description of agency consultation activities).

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, 2012 to September 30, 2013.

In FY 2013, Federal agencies issued nine final rules that were subject to Sections 202 and 205 of the Unfunded Mandate Reform Act of 1995 (UMRA), as they required 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 Environmental Protection Agency published one, the Department of Agriculture published one, the Department of Energy published one, the Department of Health and Human Services published two, the Department of Labor published three, and the Department of Transportation published one.[128]

OMB worked with the agencies in applying the requirements of Title II of the Act to their selection of the regulatory options for these rules. Descriptions of the rules in addition to agency statements regarding compliance with the Act are included in the following section.[129]

[128] Interim final rules were not included in this chapter since "Section 202 [of the Unfunded Mandates Reform Act]... does not apply to interim final rules or non-notice rules issued under the 'good cause' exemption in 5 U.S.C. 553(b)(B)." See OMB, Memorandum for the Heads of Executive Departments and Agencies, M-95-09, "Guidance for Implementing Title II of S.1," 1995, available at http://www.whitehouse.gov/sites/default/files/omb/memoranda/m95-09.pdf.

[129] All cost estimates are in 2001 dollars.

A. Environmental Protection Agency

1. *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters; Proposed Reconsideration*

This final rule established emissions standards for air pollutants emitted by industrial, commercial, and institutional boilers and process heaters.

EPA estimated $1.2 to $1.4 billion 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 Agriculture

1. Mandatory Country of Origin Labeling of Beef, Pork, Lamb, Chicken, Goat Meat, Perishable Agricultural Commodities, Peanuts, Pecans, Macadamia Nuts, Ginseng, etc.

Under this final rule, origin designations for muscle cut covered commodities derived from animals slaughtered in the United States are required to specify the production steps of birth, raising, and slaughter of the animal from which the meat is derived that took place in each country listed on the origin designation. In addition, this rule eliminates the allowance for commingling of muscle cut covered commodities of different origins.

The costs of these requirements will be incurred by the private sector, specifically intermediaries (packers and processors of muscle cut covered commodities) and retailers subject to requirements of mandatory country of origin labeling. Combining costs for label changes with costs from the elimination of commingling flexibility, the annual cost of the rule is estimated to be between $42 and $153 million. Consequently, the rule constitutes a private sector mandate under UMRA.

2. National School Lunch and School Breakfast Program: Nutrition Standards for All Foods Sold in School, As Required by the Healthy, Hunger-Free Kids Act of 2010

This interim final rule requires, as a condition of participation in the national school lunch and school breakfast programs, that all foods sold to children in school during the school day meet certain macronutrient and food group standards. Although USDA has been unable to fully quantify the costs, benefits and distributional effects of the rule, the impacts may be of a nature and magnitude to constitute a State, local or Tribal government or private sector mandate under UMRA.

C. Department of Energy

1. Energy Efficiency Standards for Distribution Transformers

This final rule amends energy conservation standards for certain distribution transformers as a result of a settlement agreement.

DOE estimates $216 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.

D. Department of Health and Human Services

1. Transparency Reports and Reporting of Physician Ownership of Investment Interests

This final rule requires certain manufacturers of drugs, devices, biologicals, or medical supplies to report payments or transfers of value over $10 provided to physicians or teaching hospitals. The final rule also requires certain manufacturers and group purchasing organizations to report physician ownership or investment interests.

HHS estimated that the impact of these reporting requirements would be $156 million annually. Consequently, the provisions of this rule constitute a private sector mandate under UMRA.

2. Unique Device Identification

This final rule implements a national system for labeling medical devices with a unique identifier.

HHS estimated first year costs of $162 to $409 million. The overall impact on the private sector does exceed the $100 million threshold. Consequently, the provisions of this rule constitute a private sector mandate under UMRA.

3. Modifications to the HIPAA Privacy, Security, Enforcement, and Breach Notification Rules

This final rule revises requirements related to privacy of health and genetic information. HHS estimates that, in the first year after rule finalization, the cost of these requirements would be about $91 to $180 million (in 2001 dollars), most of which would fall on private sector health care providers, health plans and business associates. Consequently, the provisions of this rule constitute a private sector mandate under UMRA.

4. *Patient Protection and Affordable Care Act; HHS Notice of Benefit and Payment Parameters for 2014*

This final rule provides detail and parameters related to various aspect of Affordable Care Act implementation, including: the risk adjustment, reinsurance, and risk corridors programs; cost-sharing reductions; user fees for Federally-facilitated Exchanges; advance payments of the premium tax credit; the Federally-facilitated Small Business Health Option Program; and the medical loss ratio program. Although HHS has not been able to quantify the user fees that will be associated with this rule, the combined administrative cost and user fee impact may be high enough to constitute a State, local, or Tribal government or private sector mandate under UMRA.

E. Department of Labor

1. Affirmative Action and Nondiscrimination Obligations of Contractors and Subcontractors Regarding Individuals with Disabilities

This final rule strengthens affirmative action requirements for federal contractors that are intended to aid in efforts to recruit and hire individuals with disabilities.

DOL estimates the annual costs of the rule to be $268 million. 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. Consequently, the provisions of the final rule constitute a private sector mandate under UMRA.

2. *Affirmative Action and Nondiscrimination Obligations of Contractors and Subcontractors Regarding Protected Veterans*

This final rule strengthens affirmative action requirements for federal contractors that are intended to aid in efforts to recruit and hire protected veterans.

DOL estimates the annual costs of the rule to be $194 million. 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 final rule constitute a private sector mandate under UMRA.

3. *Application of the Fair Labor Standards Act to Domestic Service*

This final rule revises the Fair Labor Standards Act (FLSA) exemption from minimum wage and overtime compensation for domestic employees engaged in providing companionship services. The rule narrows the definition of "companionship services" and prohibits use of the exemption by third-party employers.

This rule includes a Federal mandate that might result in increased expenditures by the private sector or state, local, and tribal governments of more than $100 million in any one year. The primary impact on state, local, and tribal governments would be through increased Medicaid reimbursement rates, depending on how home care agencies adjust scheduling to

reduce or eliminate overtime hours; and how states adjust Medicaid budgets in response to the rule. DOL assumed that public funds account for 75 percent of direct care workers and the private pay market accounts for 25 percent of workers, and thus approximately 25 percent of transfers in the form of overtime and travel time compensation. Based on DOL estimates, the rule will likely lead to private sector expenditures above the UMRA threshold in multiple years, beginning in 2015.

F. Department of Transportation

1. Pilot Certification and Qualification Requirements

This final rule established new certification and qualification requirements for pilots in air carrier operations. As a result of this action, a second in command (first officer) in domestic, flag, and supplemental operations must now hold an airline transport pilot certificate and an airplane type rating for the aircraft to be flown. An airline transport pilot certificate requires that a pilot be 23 years of age and have 1,500 hours total time as a pilot.

DOT estimates $122 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.

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, 2003 and September 30, 2013. OMB presents more detailed explanation of these regulations in several documents.

- 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 the 2009 Report.
- Rules from October 1, 2008 to September 30, 2009: Tables 1-4 and A-1 of the 2010 Report.
- Rules from October 1, 2009 to September 30, 2010: Tables 1-5(a) and A-1 of the 2011 Report.
- Rules from October 1, 2010 to September 30, 2011: Tables 1-5(a) and A-1 of the 2012 Report.
- Rules from October 1, 2011 to September 30, 2012: Tables 1-6(a) and A-1 of the 2013 Report.
- Rules from October 1, 2012 to September 30, 2013: Tables 1-6(a) and A-1 of this Report.

In assembling estimates of benefits and costs presented in this Report, 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.[130] 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 discount rates of 3 and 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 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 and refine 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 in applying the guidance to their impact analyses.

Table A-1 below presents the unmodified information on the impacts of 54 major rules reviewed by OMB from October 1, 2012 through September 30, 2013, and includes additional explanatory text on the impacts for these rulemakings. The estimates presented in Table A-1 are annualized impacts in 2001 dollars, which is the requested format in OMB Circular A-4.

Table 1-6(a) in Chapter 1 of this Report presents the adjusted impact estimates for the seven rules finalized in 2012-2013 that were added to the Chapter 1 accounting statement totals. Table A-2 below presents the benefits and costs of previously reported major rules reviewed by OMB from October 1, 2003 through September 30, 2012 that are also included in the Chapter 1 accounting statement totals.

[130] See *National Income and Product Accounts*, http://www.bea.gov.

Table A-1: Summary of Agency Estimates for Final Rules October 1, 2012 - September 30, 2013, As of Date of Completion of OMB Review (Millions of $2001)[131]

RIN	Title	Benefits	Costs	Other Information
Department of Agriculture				
0560-AH86	Feedstock Flexibility Program	Not Estimated	$42.8	Transfers: $29.7 Estimated costs and transfers reflect the reallocation of sugar from a relatively high-value use (achieved via USDA's Re-Export Program) to a relatively low-value use (the manufacture of biofuels).
0572-AC06	Rural Broadband Access Loans and Loan Guarantees	Not Estimated	$0.7	Transfers: $25.5 Transfers are from USDA/RUS to private entities.
0572-AC19	Energy Efficiency Program Loans	Not Estimated	Not Estimated	Transfers: $196.5
0581-AD29	Mandatory Country of Origin Labeling of Beef, Pork, Lamb, Chicken, Goat Meat, Perishable Agricultural Commodities, Peanuts, Pecans, Macadamia Nuts, Ginseng, etc., LS-13-0004	Not Estimated	$98.4 Range: $42.4-$153.2	Estimated costs reflect both the adjustments packing facilities will need to make as they develop procurement arrangements for livestock that are segregated by country of origin and the costs incurred by retailers as they re-label packages and provide revised information on products' country of origin.
0584-AE07	Supplemental Nutrition Assistance Program: Nutrition Education and Obesity Prevention Grant	Not Estimated	Not Estimated	Transfers: $103.0 Transfers are from state SNAP agencies to the Federal Government. The first-year cost reduction for the Federal Government is estimated at $158 million, with a total cost reduction of $663 million in the first five years (2014$).

[131] Please note that for budgetary transfer rules, benefits and costs are generally not estimated because agencies typically estimate budgetary impacts instead.

RIN	Title	Benefits	Costs	Other Information
0584-AE09	National School Lunch and School Breakfast Programs: Nutrition Standards For All Foods Sold in School, as Required By the Healthy, Hunger-Free Kids Act of 2010	Not Estimated	$18.4	By requiring, as a condition of participation in the national school lunch and school breakfast programs, that all foods sold to children in school during the school day meet certain macronutrient and food group standards, this interim rule aims to promote healthy eating habits, including the consumption of foods such as whole grains, fruit, vegetables, and dairy products that are low in fat and added sugar. Quantified costs represent school food authority (SFA) and state educational agency administrative expenses to comply with the rule's reporting and recordkeeping requirements. Potential costs that have not been estimated include: the higher costs to schools and to industry of acquiring or producing healthier foods, the costs incurred by students (including travel costs) in purchasing alternative foods off campus, and net utility losses to students who switch to less preferred foods. Transfers likely include: changes in student expenditures on foods other than reimbursable school meals (sold by SFAs and non-SFA school groups) and changes in the purchase and consumption of reimbursable school meals, resulting in changes in amounts transferred from students to school food authorities, and from USDA to school food authorities for reduced price and paid meals.
Department of Commerce				
0651-AC54	Setting and Adjusting Patent Fees	Not Estimated	Not Estimated	Transfers: $2,221.8; Range: $1,889.9 to $2,332.6 Transfers are from patent applicants and owners to the Federal Government.
Department of Defense				
0720-AB41	TRICARE; Reimbursement of Sole Community Hospitals	Not Estimated	Not Estimated	Transfers: $29.1 Transfers are from hospitals the Department of Defense. (The rule reduces payments.) The agency only estimated the first year's transfers, but payments are expected to increase over time.
0790-AI50	Voluntary Education Programs	Not Estimated	$205.8	Transfers: $432.4 Transfers are from military departments to colleges and universities.
Department of Education				
1810-AB17	Race to the Top--District	Not Estimated	Not Estimated	Transfers: $94.3 Transfers are from the Federal Government to school districts.

RIN	Title	Benefits	Costs	Other Information
1810-AB18	Race to the Top--Early Learning Challenge	Not Estimated	Not Estimated	Transfers: $220.0 Transfers are from the Federal Government to States.
1840-AD05	Federal Perkins Loan Program, Federal Family Education Loan Program, and William D. Ford Federal Direct Loan Program	Not Estimated	$0.9 Range: $0.8-$1.0	Transfers: $292.8 Transfers are from the Federal Government to borrowers in the ICR-A program. Costs are costs of compliance with PRA burdens.
1840-AD11	Federal Pell Grant Program	Not Estimated	Not Estimated	Transfers: $3,839.6 to $3,859.5 Transfers are from recipients of a second Pell Grant to the Federal Government. This rule finalizes an earlier IFR.
1840-AD13	150% Regulations	Not Estimated	$4.1	Transfers: $167.2 to $186.7 Transfers are from Direct Loan recipients to the Federal Government. Direct Loan Program borrowers who exceed the 150% limit and lose eligibility for further subsidy loans or become responsible for interest on existing loans while in-school or deferment. Costs are the costs of compliance with PRA burdens.
1855-AA09	Investing in Innovation	Not Estimated	Not Estimated	Transfers: $110.0; range: $70.7 to $117.9 Transfers are from the Federal Government to LEA & Non-profit organizations.
Department of Energy				
1904-AC04	Energy Efficiency Standards for Distribution Transformers	$671.3 Range: $653.4-$1,017.1	$215.9 Range: $208.6-$263.8	

RIN	Title	Benefits	Costs	Other Information
1904-AC07	Energy Efficiency Standards for Microwave Ovens (Standby and Off Mode)	$189.9 Range: $176.9-$266.2	$47.4 Range: $46.7-$55.0	
Department of Health and Human Services				
0910-AG31	Unique Device Identification	Not Estimated	$68.4 Range: $38.2-$97.7	Under this rule, most medical devices must be labeled with a unique device identifier (UDI) and labelers must submit information to FDA's database. Major costs include the costs to integrate UDI into existing information systems; to install, test, and validate barcode printing software; to train employees; to redesign labels of devices; to purchase and install equipment; to meet recordkeeping and reporting requirements; and to directly mark certain devices. Domestic costs are estimated to be $202.6 to $510.6 million upfront and $31.8 to $78.6 million annually thereafter. Costs to foreign labelers are not included in the totals just mentioned, but may be between $86.5 and $374.2 million in the first year and between $38.7 and $100.3 million in subsequent years (2012$).
0910-AG84	Food Labeling; Gluten-Free Labeling of Foods	$89.3 Range: $15.8-$247.0	$5.5 Range:$5.2-$6.1	
0938-AQ63	Payments for Services Furnished by Certain Primary Care Physicians and Charges for Vaccine Administration Under the Vaccines for Children Program (CMS-2370-F)	Not Estimated	Not Estimated	Transfers: $4,739.5 to $4,741.1 Transfers are from the Federal Government to Medicaid providers. Additional transfers of $271-272M ($2012) are from Medicaid providers to state governments.
0938-AQ70	Pre-Existing Condition Insurance Plan; High Risk Pool (CMS-9995-F)	Not Estimated	Not Estimated	By reducing the per-claim costs paid by the federally-administered Pre-Existing Condition Insurance Plan, the rule allows facilities and providers serving enrollees in the Plan to continue receiving payment for such care, rather than risk receiving no payment should PCIP program funding be exhausted prior to 2014.

RIN	Title	Benefits	Costs	Other Information
0938-AR03	Patient Protection and Affordable Care Act; Standards Related to Essential Health Benefits, Actuarial Value, and Accreditation (CMS-9980-F)	Not Estimated	Not Estimated	Estimated costs of $1.7 to $1.8 million (2001$) are costs associated with information collections. Not quantified are administrative costs insurers will incur as they alter benefit packages to ensure compliance with the definition of essential health benefits or as they calculate actuarial value. Also not quantified are costs due to higher service utilization; as consumers gain additional coverage for benefits that previously did not meet the standards outlined in this proposed rule (for example, pediatric dental or vision coverage), utilization--and thus costs--may increase. Unquantified benefits may include: expanded access to coverage, particularly in the individual market, including maternity and prescription drug coverage; flexibility for states; allowance for health plan innovation (e.g., substitution within benefit categories); and increased transparency and consumer ability to compare coverage.
0938-AR04	Medicaid, Exchanges, and Children's Health Insurance Programs: Eligibility, Appeals, and Other Provisions Under the Affordable Care Act (CMS-2334-F)	Not Estimated	$1,023.4-$1,046.1	Transfers: $42.8 to $43.5 Quantified costs include grant outlays to States to establish Exchanges; most of these Exchange-establishment costs have also been included in the estimated impact for a previously-issued Exchange rule. Unquantified costs include State implementation costs above the amount covered by Federal grants, and increased medical costs associated with more widespread enrollment in health insurance. Estimated transfers include $54 to $55 million from beneficiaries to the federal government and $35.8 million (with a 7% discount rate) or $36.5 million (with a 3% discount rate) from beneficiaries to state governments (2013$).
0938-AR10	Proposed Changes to Hospital OPPS and CY 2013 Payment Rates; ASC Payment System and CY 2013 Payment Rates (CMS-1589-FC)	Not Estimated	($2.4-$3.0)	Transfers: $493.0 Transfers include $600 million (2012$) from the Federal Government to outpatient hospitals and other providers who receive payment under the hospital Outpatient Prospective Payment System, and $18 million from the federal government to ambulatory surgery centers.
0938-AR11	Revisions to Payment Policies Under the Physician Fee Schedule and Part B for CY 2013 (CMS-1590-FC)	Not Estimated	$24.4	Transfers: $19,655.1 Transfers are from the Medicare providers to the Federal Government (budget savings). Quantified costs, which will be borne by providers and Medicare beneficiaries, are associated with face-to-face encounters and written orders prior to delivery of durable medical equipment.

RIN	Title	Benefits	Costs	Other Information
0938-AR13	Changes to the End-Stage Renal Disease Prospective Payment System for CY 2013 (CMS-1352-F)	Not Estimated	$9.9	Transfers: $65.5 Transfers are from Medicare end-stage renal disease (ESRD) providers to the Federal Government (budget savings). Additional transfers of $60M (2012$) are from beneficiaries to Medicare ESRD providers (via co-insurance).
0938-AR31	Disproportionate Share Hospital Payment Reduction (CMS-2367-F)	Not Estimated	Not Estimated	Transfers: $430.7 to$431.5 Transfers are from States, on behalf of beneficiaries, to the Federal Government.
0938-AR33	Transparency Reports and Reporting of Physician Ownership of Investment Interests (CMS-5060-F)	Not Estimated	$155.8 Range: $154.2-$155.8	Estimated costs, of $269 million in the first year and $180 million annually thereafter (2011$), are associated with submission of information to CMS by group purchasing organizations and manufacturers of covered drugs, devices, biologicals, and medical supplies, as well as physicians and teaching hospitals. Benefits are not quantified, but public reporting of the extent and nature of relationships between physicians, teaching hospitals, and industry manufacturers through increased transparency may permit patients to make better-informed decisions when choosing health care professionals and making treatment decisions, and may deter inappropriate financial relationships.
0938-AR40	Patient Protection and Affordable Care Act; Health Insurance Market: Rate Review (CMS-9972-F)	Not Estimated	$13.8	Agency provided a partial estimate of costs. Estimated costs represent administrative costs related to submission of data by issuers seeking rate increases below the rate review threshold, costs to issuers related to rate review data extraction, costs of disclosure of state rating requirements, and costs incurred by states choosing to establish rating areas and age rating curves. Unquantified costs include: additional costs incurred by issuers to comply with provisions in the proposed rule; costs related to possible increases in utilization of health care for the newly insured; and costs incurred by states for disclosure of rate increases, when applicable. Unquantified transfers likely include: lower rates for individuals in the individual and small group market who are older and/or in relatively poor health, and women; potentially higher rates for some young men; a reduction in uncompensated care for providers who treat the uninsured and an increase in payments from issuers; a decrease in out-of-pocket expenditures by the newly insured and an increase in health care spending by issuers, which may be more than offset by an increase in premium revenue.

RIN	Title	Benefits	Costs	Other Information
0938-AR51	Notice of Benefit and Payment Parameters (CMS-9964-P)	Not Estimated	$54.2 -$55.3	Transfers: $5,131.3 to $5,346.4 This rule implements standards for programs that are anticipated to: provide consumers with affordable health insurance coverage, reduce the impact of adverse selection, and stabilize premiums in the individual and small group health insurance markets and in an Exchange. Estimated transfers are from the Federal Government to States on behalf of consumers. Not quantified are user fees, which are transfers from health insurance issuers to the Federal government. Estimated costs reflect administrative costs to States, health insurance issuers, and Exchanges.
0938-AR53	Changes to the Hospital Inpatient and Long-Term Care Prospective Payment System for FY 2014 (CMS-1599-F)	Not Estimated	$2.3	Transfers: $921.4 Transfers include $1,210 from the Federal Government to inpatient providers and -$18 (2014$) from the federal government to long-term care hospitals (LTCHs). Estimated costs are associated with data collection by LTCH providers.
0938-AR54	Changes to the Hospital Outpatient Prospective Payment System and Ambulatory Surgical Center Payment System for CY 2014 (CMS-1601-F)	Not Estimated	Not Estimated	Transfers: $514.0; Range: $506.9 to $521.0 Transfers are from the Federal Government to Medicare providers and suppliers. $600 million of the total is due to fee schedule increase, $27 million is due to ASC payment system revisions, and $17.99 to $35.97 million is due to EHR incentive program revisions (2013$)
0938-AR64	FY 2014 Hospice Rate Update (CMS-1449-F)	Not Estimated	$11.2	Transfers: $123.7 Transfers are from the Federal Government to hospices. Estimated costs are associated with the submission of data by hospices.
0938-AR65	Prospective Payment System and Consolidated Billing for Skilled Nursing Facilities--Update for FY 2014 (CMS-1446-F)	Not Estimated	Not Estimated	Transfers: $363.3 Transfers are from the Federal Government to skilled nursing facilities.

RIN	Title	Benefits	Costs	Other Information
0938-AR66	Prospective Payment System for Inpatient Rehabilitation Facilities for FY 2014 (CMS-1448-F)	Not Estimated	$7.2	Transfers: $332.4; Range: $131.4 to $533.4 Transfers are from the Federal Government to inpatient rehabilitation facilities (IRFs). Estimated costs are associated with the submission of data by IRFs (under the Quality Reporting Program).
0938-AR68	Exchange Functions: Eligibility for Exemptions; Miscellaneous Minimum Essential Coverage Provisions (CMS-9958-F)	Not Estimated	Not Estimated	The rule would generate exemption request activity and could also potentially affect the amount of shared responsibility payments made each year and the number of individuals who would enroll in or switch health insurance plans.
0938-AR69	Medicare Advantage (MA) and Prescription Drug Benefit Programs: Medical Loss Ratio Requirements (CMS-4173-F)	Not Estimated	$7.1-$7.3	Transfers: $630.3 to $654.6 Transfers are from Medicare Advantage organizations and Part D sponsors to the Federal Government.
0945-AA03	Modifications to the HIPAA Privacy, Security, Enforcement, and Breach Notification Rules	Not Estimated	$27.6 Range: $20.6-$34.6	Estimated costs, of $114 to $225 million in the first year and $14.5 million annually thereafter (2011$), include costs of revising and distributing new notices of privacy practices; costs related to breach notification; and costs to bring subcontracts into compliance with business associate agreement requirements. Not quantified are costs to covered entities and researchers who may need to obtain individuals' authorizations for activities which they currently engage in without authorization or costs to certain entities that choose to purchase new hardware or software to produce electronic copies of individuals' protected health information, or who may need to take actions to ensure that individuals' requests to restrict certain disclosures are honored. Benefits are not quantified but are anticipated to accrue to individuals with regard to the privacy and security of their health information, and with regard to their rights to that information, and to the research community and others due to provisions simplifying and streamlining requirements and increasing flexibility.
Department of Homeland Security				
1615-AB99	Provisional Unlawful Presence Waivers of Inadmissibility for Certain Immediate Relatives	Not Estimated	$61.1 Range: $22.3-$61.1	This rule will reduce the amount of time that U.S. citizens are separated from their alien immediate relatives, thus reducing the financial and emotional hardship for these families.
Department of the Interior				

RIN	Title	Benefits	Costs	Other Information
1018-AY87	Migratory Bird Hunting; 2013-2014 Migratory Game Bird Hunting Regulations (Early Season)	$249.8-$327.6	Not Estimated	
1018-AY87	Migratory Bird Hunting; 2013-2014 Migratory Game Bird Hunting Regulations (Late Season)	$249.8-$327.6	Not Estimated	
Department of Labor				
1205-AB69	Wage Methodology for the Temporary Nonagricultural Employment H-2B Program, Part 2	Not Estimated	Not Estimated	The Department was unable to project what would happen to wage and visa requests under the program since the majority of wage requests have been made based on the four-tiered wage methodology, which is no longer available under the program. The Department was unable to estimate the economic effects of the rule, but determined that due to the change in the prevailing wage provisions, this interim final rule is likely an economically significant regulatory action under section 3(f)(1) of E.O. 12866, because without the rule H-2B applications might fall precipitously.
1235-AA05	Application of the Fair Labor Standards Act to Domestic Service	$19.4 Range: $8.0-$27.7	$5.5 Range: $4.9-$5.5	Transfers: $261.2; Range: $128.8 to $359.0 Transfers result from minimum wage, travel wages and overtime wages being paid to home health care workers (approximately 75% of transfers may be from Medicaid and Medicare, with the remainder from some combination of state and county payers, insurers, consumers paying out of pocket, and reductions in employer profits). Estimated benefits accrue to employers as savings due to reduced employee turnover. Estimated costs include regulatory familiarization for home health agencies and families employing covered workers. Not estimated are transition costs for employees and managerial time costs for employers rearranging employee schedules, and potential decreased continuity of care.
1250-AA00	Affirmative Action and Nondiscrimination Obligations of Contractors and Subcontractors Regarding Protected Veterans	Not Estimated	$194.0 Range: $99.7-$287.4	Upfront costs of $177 to $484 million (2013$), with costs of $120 to $348 million annually thereafter. Assuming all contractors will choose to meet the OFCCP benchmark of 8 percent, OFCCP estimates that Federal contractors would need to hire an additional 205,500 protected veterans.

RIN	Title	Benefits	Costs	Other Information
1250-AA02	Affirmative Action and Nondiscrimination Obligations of Contractors and Subcontractors Regarding Individuals with Disabilities	Not Estimated	$267.7 Range: $169.0-$364.0	Upfront costs of $350 to $660 million (2013$), with costs of $162 to $481 million annually thereafter. To meet the section 503 rule's utilization goal of 7 percent, Federal contractors would have to hire an additional 594,580 individuals with disabilities.
Department of Transportation				
2120-AJ67	Pilot Certification and Qualification Requirements (Formerly First Officer Qualification Requirements) (HR 5900)	$19.7 Range: $13.0-$29.4	$122.0 Range: $122.0-$153.1	Costs are equal to statutory costs ($208.9 at 7% discount rate, $266.5 at 3%), plus rule costs ($13.1 at 7%, $14.5 at 3%), less cost savings included in the rule ($74.6 at 7%, $96.0 at 3%) (2010$).
2127-AL30	Uniform Procedures for State Highway Safety Programs	Not Estimated	Not Estimated	Transfers: $208.3 to $213.8 Transfers are from the Federal Government to States.
2132-AB02	Major Capital Investment Projects (RRR)	$0.3-$0.4	$0.1	Transfers: $202.9 Transfers are from Federal Government to State and local governments. Due to changes in the evaluation criteria, the projects selected for funding by the Federal Transit Administration may change. By adding quantified measures for environmental benefits, projects which have relatively large amounts of such benefits may be advantaged. On the other hand, the change to the cost effectiveness measure to cost per trip replacing use of cost per hour of travel time savings could advantage projects serving shorter trips and more densely developed areas. Estimated benefits are due to reduced costs to comply with requirements to calculate impacts of proposed projects.

RIN	Title	Benefits	Costs	Other Information
2132-AB13	Public Transportation Emergency Relief Program	Not Estimated	Not Estimated	Transfers: $8,566.2 Transfers are from the Federal Government to States and local authorities. FTA was appropriated $10.9 billion (2013$) for the Emergency Relief Program in response to Hurricane Sandy under the Disaster Relief Appropriations Act of 2013, much of which will likely be distributed during 2013. However, during years in which there is no emergency on the magnitude of Hurricane Sandy, FTA expects that far fewer funds will be transferred through this program. For example, the Administration's budget request included $25 million for fiscal year 2013 for the Emergency Relief program, which provides an indication of the amount of funds this program may transfer in a more typical year.
Department of the Treasury				
1559-AA01	Interim Rule for the CDFI Bond Guarantee Program	Not Estimated	$13.8-$58.5	Transfers: $157.2 to $1.571.8 Transfers are from Federal Government to CDFIs.
Environmental Protection Agency				
2060-AO47	Review of the National Ambient Air Quality Standards for Particulate Matter	$2,979.5-$7,531.5	$43.9-$289.7	
2060-AQ58	Reconsideration of Final National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines	$616.6-$1,696.7	$403.9	This benefits range reflects two primary estimates (Pope et al. for the lower, and Laden et al. for the higher). Monetized benefits for this NESHAP reflect the emission reductions of PM2.5 and precursors. There are no monetized benefits available for the HAP reductions. Analysis year is the year of full rule implementation (2013). Results and methodology are provided in the RIA. There are two RIAs for this rule, one for CI engines, another for SI engines. The cost estimates in ROCIS reflects the sum of the costs for both CI and SI engines.
2060-AR13	National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters; Proposed Reconsideration	$21.102.7-$56,555.3	$1,181.8-$1,350.6	This benefits range reflects two primary estimates (Pope et al. for the lower, and Laden et al. for the higher). Monetized benefits for this NESHAP reflect the direct PM2.5 and PM2.5 precursor emission reductions. There are no monetized benefits available for reductions in HAPs or CO, ecosystem effects, or visibility impairment. Analysis year is the year of full rule implementation (2014). Results and methodology are provided in the RIA.
Office of Personnel Management				

RIN	Title	Benefits	Costs	Other Information
3206-AM47	Multi-State Exchanges; Implementations for Affordable Care Act Provisions	Not Estimated	Not Estimated	The rule may shift of enrollment to multi-state plans from other plans offered on insurance Exchanges.

Table A-2: Estimates of Annual Benefits and Costs of Major Final Rules October 1, 2003 - September 30, 2012[132]

(millions of 2001 dollars)

RIN	Title	Completed	Published	Benefits	Costs	Source of Estimate
Department of Agriculture						
0579-AB73	Bovine Spongiform Encephalopathy: Minimal Risk Regions and Importation of Commodities	12/29/04	1/4/05	572-639	557-623	2006 Report: Table 1-4
0579-AB81	Mexican Hass Avocado Import Program	11/23/04	11/30/04	122-184	71-114	2006 Report: Table 1-4
0579-AC01	Bovine Spongiform Encephalopathy; Minimal-Risk Regions and Importation of Commodities	9/14/07	9/18/07	169-340	98-194	2008 Report: Table 1-4
0583-AC88	Prohibition of the Use of Specified Risk Materials for Human Food and Requirements for the Disposition of Non-Ambulatory Disabled Cattle	6/29/07	7/13/07	0	87-221	2008 Report: Table 1-4
Department of Energy						
1904-AA78	Energy Efficiency Standards for Residential Furnaces and Boilers	11/6/07	11/19/07	120-182	33-38	2009 Report: Table 1-4
1904-AA89	Energy Efficiency Standards for Clothes Dryers and Room Air Conditioners	4/8/11	4/21/11	169-310	129-182	2012 Report: Table 1-5(a)
1904-AA90	Energy Efficiency Standards for Pool Heaters and Direct Heating Equipment and Water Heaters [75 FR 20112]	3/30/10	4/16/10	1,274-1,817	975-1,122	2011 Report: Table A-1
1904-AA92	Energy Efficiency Standards for General Service Fluorescent Lamps and Incandescent Lamps	6/26/09	7/14/09	1,111-2,886	192-657	2010 Report: Table 1-4
1904-AB08	Energy Efficiency Standards for Electric Distribution Transformers	9/27/07	10/12/07	490-865	381-426	2008 Report: Table 1-4
1904-AB50	Energy Efficiency Standards for Fluorescent Lamp Ballasts	10/28/2011	11/14/2011	760-1,556	179-153	2013 Report: Table 1-6(a)
1904-AB59	Energy Efficiency Standards for Commercial Refrigeration Equipment	12/18/08	1/9/09	186-224	69-81	2010 Report: Table 1-4
1904-AB70	Energy Conservation Standards for Small Electric Motors [75 FR 10874]	2/25/10	3/9/10	688-827	218	2011 Report: Table A-1

[132] Based on date of completion of OMB review.

RIN	Title	Completed	Published	Benefits	Costs	Source of Estimate
1904-AB79	Energy Efficiency Standards for Residential Refrigerators, Refrigerator-Freezers, and Freezers	8/25/11	9/15/11	1,660-3,034	803-1.281	2012 Report: Table 1-5(a)
1904-AB90	Energy Conservation Standards for Residential Clothes Washers	4/26/2012	5/31/2012	1,010-1,802	151-253	2013 Report: Table 1-6(a)
1904-AC06	Energy Efficiency Standards for Residential Furnaces, Central Air Conditioners and Heat Pumps	6/6/11	6/27/11	719-1,766	475-724	2012 Report: Table 1-5(a)
1904-AB93	Energy Efficiency Standards for Commercial Clothes Washers [75 FR 1122]	12/23/09	1/8/10	46-67	17-21	2011 Report: Table A-1
Department of Health and Human Services						
0910-AB76	CGMPs for Blood and Blood Components: Notification of Consignees and Transfusion Recipients Receiving Blood and Blood Components at Increased Risk of Transmitting HCV Infection (Lookback)	8/14/07	8/24/07	28-130	11	2008 Report: Table 1-4
0910-AB88	Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Dietary Ingredients and Dietary Supplements	5/8/07	6/25/07	10-79	87-293	2008 Report: Table 1-4
0910-AC14	Prevention of Salmonella Enteritidis in Shell Eggs	7/2/09	7/9/09	206-8,583	48-106	2010 Report: Table 1-4
0910-AC26	Bar Code Label Requirements for Human Drug Products and Blood Products	2/17/04	2/26/04	1,352-7,342	647	2005 Report: Table 1-4
0910-AC34	Amendments to the Performance Standard for Diagnostic X-Ray Systems and Their Major Components	5/27/05	6/10/05	87-2,549	30	2006 Report: Table 1-4
0910-AF19	Declaring Dietary Supplements Containing Ephedrine Alkaloids Adulterated Because They Present an Unreasonable Risk of Illness or Injury (Final Rule)	2/5/04	2/11/04	0-130	7-89	2005 Report: Table 1-4
0919-AA01	Patient Safety and Quality Improvement Act of 2005 Rules	11/14/08	11/21/08	69-136	87-121	2010 Report: Table 1-4
0938-AH99	Health Insurance Reform: Standard Unique Health Care Provider Identifier -- CMS-0045-F	1/13/04	1/23/04	214	158	2005 Report: Table 1-4
0938-AM50	Updates to Electronic Transactions (Version 5010) (CMS-0009-F)	1/9/09	1/16/09	1,114-3,194	661-1,449	2010 Report: Table 1-4

RIN	Title	Completed	Published	Benefits	Costs	Source of Estimate
0938-AN25	Revisions to HIPAA Code Sets (CMS-0013-F)	1/9/09	1/16/09	77-261	44-238	2010 Report: Table 1-4
0938-AN49	Electronic Prescribing Standards(CMS-0011-F)	11/1/05	11/7/05	196-660	82-274	2007 Report: Table 1-4
0938-AN79	Fire Safety Requirements for Long-Term Care Facilities: Sprinkler Systems (CMS-3191-F)	8/6/08	8/13/08	53-56	45-56	2009 Report: Table 1-4
0938-AN95	Immunization Standard for Long Term Care Facilities (CMS-3198-P)	9/30/05	10/7/05	11,000	6	2006 Report: Table 1-4
0938-AQ11	Administrative Simplification: Adoption of Standards for Electronic Funds Transfer (EFT) (CMS-0024-IFC)	1/6/2012	1/10/2012	223-332	2-3	2013 Report: Table 1-6a)
0938-AQ12	Administrative Simplification: Adoption of Authoring Organizations for Operating Rules and Adoption of Operating Rules for Eligibility and Claims Status (CMS-0032-IFC)	6/30/11	7/8/11	930-1,138	260-616	2012 Report: Table 1-5(a)
0938-AQ13	Administrative Simplification: Standard Unique Identifier for Health Plans and ICD-10 Compliance Date Delay (CMS-0040-F)	8/27/2012	9/5/2012	425-1,017	150-758	2013 Report: Table 1-6(a)
Department of Homeland Security						
1625-AA32	Standards for Living Organisms in Ships' Ballast Water Discharged in U.S. Waters	2/23/2012	3/23/2012	4-442	77-152	2013 Report: Table 1-6(a)
1651-AA72	Changes to the Visa Waiver Program To Implement the Electronic System for Travel Authorization (ESTA) Program	5/30/08	6/9/08	20-29	13-99	2009 Report: Table 1-4
Department of Housing and Urban Development						
2502-AI61	Real Estate Settlement Procedures Act (RESPA); To Simplify and Improve the Process of Obtaining Mortgages and Reduce Consumer Costs (FR-5180)	11/7/08	11/17/08	2,303	884	2010 Report: Table 1-4
Department of Justice						
1117-AA60	Electronic Orders for Schedule I and II Controlled Substances	3/18/05	4/1/05	275	108-118	2006 Report: Table 1-4
1117-AA61	Electronic Prescriptions for Controlled Substances [75 FR 16236]	3/10/10	3/31/10	348-1,320	35-36	2011 Report: Table A-1

RIN	Title	Completed	Published	Benefits	Costs	Source of Estimate
1190-AA44	Nondiscrimination on the Basis of Disability in Public Accommodations and Commercial Facilities [75 FR 56164]	7/22/10	9/15/10	980-2,056	549-719	2011 Report: Table A-1
1190-AA46	Nondiscrimination on the Basis of Disability in State and Local Government Services [75 FR 56236]	7/22/10	9/15/10	151-304	122-172	2011 Report: Table A-1
Department of Labor						
1210-AB06	Revision of the Form 5500 Series and Implementing Regulations	8/30/07	11/16/07	0	(83)	2008 Report: Table 1-4
1210-AB07	Improved Fee Disclosure for Pension Plan Participants	10/5/10	10/20/10	780-3,255	217-362	2012 Report: Table 1-5(a)
1210-AB35	Statutory Exemption for Provision of Investment Advice	9/29/11	10/25/11	5,789-15,134	1,571-4,218	2012 Report: Table 1-5(a)
1218-AB45	Occupational Exposure to Hexavalent Chromium (Preventing Occupational Illness: Chromium)	2/17/06	2/28/06	35-862	263-271	2007 Report: Table 1-4
1218-AB77	Employer Payment for Personal Protective Equipment	11/2/07	11/15/07	40-336	2-20	2009 Report: Table 1-4
1218-AC20	Hazard Communication	2/21/2012	3/26/2012	517-1,584	132-164	2013 Report: Table 1-6(a)
1219-AB46	Emergency Mine Evacuation	12/5/06	12/8/06	10	41	2008 Report: Table 1-4
1218-AC01	Cranes and Derricks in Construction [75 FR 47906]	6/22/10	8/9/10	172	123-126	2011 Report: Table A-1
Department of Transportation						
2120-AH68	Reduced Vertical Separation Minimum in Domestic United States Airspace (RVSM)	10/8/03	10/27/03	(60)	(320)	2005 Report: Table 1-4
2120-AI17	Washington, DC, Metropolitan Area Special Flight Rules Area	12/3/08	12/16/08	10-839	89-382	2010 Report: Table 1-4
2120-AI23	Transport Airplane Fuel Tank Flammability Reduction	7/9/08	7/21/08	21-66	60-67	2009 Report: Table 1-4
2120-AI51	Congestion and Delay Reduction at Chicago O'Hare International Airport	8/18/06	8/29/06	153-164	0	2007 Report: Table 1-4
2120-AI92	Automatic Dependent Surveillance--Broadcast (ADS-B) Equipage Mandate to Support Air Traffic Control Service [75 FR 30160]	5/20/10	5/28/10	144-189	148-284	Internal database[133]
2120-AJ01	Part 121 Pilot Age Limit	6/8/09	7/15/09	30-35	4	2010 Report: Table 1-4

[133] The benefits and costs of this rule were misreported in Table A-1 of the *2011 Report to Congress on the Costs and Benefits of Federal Regulations and Unfunded Mandates on State, Local and Tribal Entities.* The correct estimates are drawn from the OMB internal database, "ROCIS."

RIN	Title	Completed	Published	Benefits	Costs	Source of Estimate
2125-AF19	Real-Time System Management Information Program	10/13/10	11/8/10	152-166	132-137	2012 Report: Table 1-5(a)
2126-AA59	New Entrant Safety Assurance Process	11/26/08	12/16/08	472-602	60-72	2010 Report: Table 1-4
2126-AA89	Electronic On-Board Recorders for Hours-of-Service Compliance[134]	3/18/2010	4/5/10	Not Included	Not Included	2011 Report: Table A-1
2126-AA90	Hours of Service of Drivers	8/16/05	8/25/05	19	(235)	2006 Report: Table 1-4
2126-AA97	National Registry of Certified Medical Examiners	4/4/2012	4/20/2012	58-180	25-28	2013 Report: Table 1-6(a)
2126-AB14	Hours of Service of Drivers[135]	11/13/08	11/19/08	Not included	Not included	2010 Report: Table 1-4
2126-AB26	Hours of Service	12/20/2012	12/27/2012	182-1,025	389	2013 Report: Table 1-6(a)
2127-AG51	Roof Crush Resistance	4/30/09	5/12/09	374-1,160	748-1,189	2010 Report: Table 1-4
2127-AH09	Upgrade of Head Restraints	11/23/04	12/14/04	111-139	83	2006 Report: Table 1-4
2127-AI91	Rear Center Lap/Shoulder Belt Requirement--Standard 208	11/30/04	12/8/04	188-236	162-202	2006 Report: Table 1-4
2127-AJ10	Side Impact Protection Upgrade--FMVSS No. 214	8/28/07	9/11/07	736-1,058	401-1,051	2008 Report: Table 1-4
2127-AJ23	Tire Pressure Monitoring Systems	3/31/05	4/8/05	1,012-1,316	938-2,282	2006 Report: Table 1-4
2127-AJ37	Reduced Stopping Distance Requirements for Truck Tractors	7/16/09	7/27/09	1,250-1,520	23-164	2010 Report: Table 1-4
2127-AJ61	Light Truck Average Fuel Economy Standards, Model Year 2008 and Possibly Beyond	3/28/06	4/6/06	847-1,035	666-754	2007 Report: Table 1-4
2127-AJ77	Electronic Stability Control (ESC)	3/23/07	4/6/07	5,987-11,282	913-917	2008 Report: Table 1-4
2127-AK23	Ejection Mitigation	12/23/10	1/19/11	1,500-2,375	419-1,373	2012 Report: Table 1-5(a)

[134] This rule was vacated on Aug. 26, 2011, by the U.S Court of Appeals for the Seventh Circuit. (Benefits: $165-170 million; Costs: $126-129 million)

[135] As explained in the 2010 Report, the benefits and costs of this rule are not included in the benefit and cost totals for the 10-year aggregate. 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.

RIN	Title	Completed	Published	Benefits	Costs	Source of Estimate
2127-AK29	Passenger Car and Light Truck Corporate Average Fuel Economy Model Year 2011	3/24/09	3/30/09	857-1,905	650-1,910	2010 Report: Table 1-4
2130-AC03	Positive Train Control [75 FR 2597]	12/30/09	1/15/10	34-37	519-1,264	2011 Report: Table A-1
2130-AC27	Positive Train Control Systems Amendments (RRR)	5/9/2012	5/14/2012	34-65	1-3	2013 Report: Table 1-6(a)
2137-AD54	Pipeline Integrity Management in High Consequence Areas (Gas Transmission Pipelines)	11/26/03	12/15/03	154	288	2005 Report: Table 1-4
2137-AE15	Pipeline Safety: Distribution Integrity Management [74 FR 63906]	11/6/09	12/4/09	97-145	92-97	2011 Report: Table A-1
2137-AE25	Pipeline Safety: Standards for Increasing the Maximum Allowable Operating Pressure for Gas Transmission Pipelines	10/2/08	10/17/08	85-89	13-14	2010 Report: Table 1-4
2130-AB84	Regulatory Relief for Electronically Controlled Pneumatic Brake System Implementation	8/29/08	10/16/08	828-884	130-145	2009 Report: Table 1-4
Department of Transportation and Environmental Protection Agency						
2127-AK50: 2060-AP58	Light-Duty Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards [75 FR 25323]	3/31/10	5/7/10	3.9-18.2 thousand	1.7-4.7 thousand	2011 Report: Table 1-5(a)
2127-AK74; 2060-AP61	Commercial Medium- and Heavy-Duty On-Highway Vehicles and Work Truck Fuel Efficiency Standards	8/8/11	9/15/11	2,150-2,564	331-496	2012 Report: Table 1-5(a)
2127-AK79; 2060-AQ54	Joint Rulemaking to Establish 2017 and Later Model Year Light Duty Vehicle GHG Emissions and CAFE Standards	8/27/12		21,220-28,822	5,305-8,828	2013 Report: Table 1-6(a)
Environmental Protection Agency						
2040-AD37	National Primary Drinking Water Regulations: Long Term 2 Enhanced Surface Water Treatment Rule	6/22/05	1/5/06	262-1,785	89-144	2006 Report: Table 1-4
2040-AD38	National Primary Drinking Water Regulations: Stage 2 Disinfection Byproducts Rule	11/23/05	1/4/06	598-1,473	74-76	2007 Report: Table 1-4
2040-AD56	Effluent Guidelines and Standards for the Meat and Poultry Products Point Source Category (Revisions)	2/26/04	9/8/04	0-10	41-56	2005 Report: Table 1-4

RIN	Title	Completed	Published	Benefits	Costs	Source of Estimate
2040-AD62	Establishing Location, Design, Construction, and Capacity Standards for Cooling Water Intake Structures at Large Existing Power Plants (Final Rule)[136]	2/16/04	7/9/04	Not Included	Not Included	2005 Report: Table 1-4
2040-AF11	Water Quality Standards (Numeric Nutrient Criteria) for Florida's Lakes and Flowing Waters	11/18/10	12/6/10	23	111-169	2012 Report: Table 1-5(a)
2050-AG16	Revisions to the Spill Prevention, Control, and Countermeasure (SPCC) Rule [74 FR 58784]	10/23/09	11/13/09	0	(78-85)	2011 Report: Table A-1
2050-AG23	Oil Pollution Prevention; Spill Prevention, Control, and Countermeasure (SPCC) Requirements--Amendments	11/15/06	12/26/06	0	(86-148)	2008 Report: Table 1-4
2050-AG31	Definition of Solid Wastes Revisions	9/17/08	10/30/08	16-285	14	2009 Report: Table 1-4
2050-AG50	Oil Pollution Prevention: Spill Prevention, Control, and Countermeasure Rule Requirements - Amendments for Milk Containers	4/8/11	4/18/11	0	(118-121)	2012 Report: Table 1-5(a)
2060-AG52	Plywood and Composite Wood Products	2/26/04	7/30/04	152-1,437	155-291	2005 Report: Table 1-4
2060-AG63	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	2/26/04	6/15/04	105-1,070	270	2005 Report: Table 1-4
2060-AG69	National Emission Standards for Hazardous Air Pollutants: Industrial/Commercial/Institutional Boilers and Process Heaters[137]	2/26/04	9/13/04	Not Included	Not Included	2005 Report: Table 1-4
2060-AI44	Review of the National Ambient Air Quality Standards for Particulate Matter[138]	9/21/06	10/17/06	Not Included	Not Included	2007 Report: Table 1-4
2060-AJ31	Clean Air Visibility Rule	6/15/05	7/6/05	2,302-8,153	314-846	2006 Report: Table 1-4

[136] On January 25, 2007 the Second Circuit remanded this rule back to EPA for revisions and EPA suspended the provisions of the rule. On April 1, 2009 the Supreme Court reversed one part of the Second Circuit ruling related to the use of cost-benefit analysis and remanded the rule to the lower court, which returned the rule to EPA for further consideration at the agency's request. (Benefits: $72 million; Costs: $383 million)

[137] On June 19, 2007, the United States Court of Appeals for the District of Columbia Circuit vacated and remanded the national emission standards for hazardous air pollutants for industrial/commercial/institutional boilers and process heaters. Thus, we exclude this rule from the 10-year aggregates in previous reports. (Benefits: $3,752-$38,714 million; Costs: $876 million)

[138] Although promulgated in 2006, this rule was removed from the 10-year aggregate estimates to avoid double counting benefits and costs with implementing regulations. (Benefits: $3,837-39,879: Costs: 2,590-2,833.)

RIN	Title	Completed	Published	Benefits	Costs	Source of Estimate
2060-AJ65	Clean Air Mercury Rule--Electric Utility Steam Generating Units[139]	3/15/05	5/18/05	Not Included	Not Included	2006 Report: Table 1-4
2060-AK27	Control of Emissions of Air Pollution From Nonroad Diesel Engines and Fuel (Final Rule)	5/7/04	6/29/04	6,853-59,401	1,336	2005 Report: Table 1-4
2060-AK70	Control of Hazardous Air Pollutants From Mobile Sources	2/8/07	2/26/07	2,310-2,983	298-346	2008 Report: Table 1-4
2060-AK74	Clean Air Fine Particle Implementation Rule	3/28/07	4/25/07	18,833-167,408	7,324	2008 Report: Table 1-4
2060-AL76	Clean Air Interstate Rule Formerly Titled: Interstate Air Quality Rule[140]	3/10/05	5/12/05	11,947-151,769	1,716-1,894	2006 Report: Table 1-4
2060-AM06	Control of Emissions from New Locomotives and New Marine Diesel Engines Less Than 30 Liters per Cylinder	2/14/08	5/6/08	4,145-14,550	295-392	2009 Report: Table 1-4
2060-AM34	Control of Emissions From Nonroad Spark-Ignition Engines and Equipment	8/18/08	10/8/08	899-4,762	196-200	2009 Report: Table 1-4
2060-AM82	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	6/28/06	7/11/06	679-757	56	2007 Report: Table 1-4
2060-AN24	Review of the National Ambient Air Quality Standards for Ozone	3/12/08	3/27/08	1,581-14,934	6,676-7,730	2009 Report: Table 1-4
2060-AN72	Petroleum Refineries--New Source Performance Standards (NSPS)--Subpart J	4/30/08	6/24/08	176-1,669	27	2009 Report: Table 1-4
2060-AN72	Petroleum Refineries--New Source Performance Standards (NSPS)--Subparts J and Ja	5/7/2012	9/12/2012	240-580	(79)	
2060-AN83	Review of the National Ambient Air Quality Standards for Lead	10/15/08	11/12/08	455-5,203	113-2,241	2010 Report: Table A-1

[139] On February 8, 2008, the D.C. Circuit vacated EPA's rule removing power plants from the Clean Air Act list of sources of hazardous air pollutants. At the same time, the Court vacated the Clean Air Mercury Rule. Thus, we exclude this rule from the 10-year aggregates. (Benefits: $1-2 million; Costs: $500 million)

[140] On July 11, 2008, the DC Circuit Court vacated the 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. As explained in more detail in a previous footnote. On July 6, 2011, EPA finalized the Cross-State Air Pollution Rule (CSAPR), which was designed to replace the Clean Air Interstate Rule (CAIR). On August 21, 2012, however, the final CSAPR rule was vacated. EPA has filed a petition for certiorari in the Supreme Court.

RIN	Title	Completed	Published	Benefits	Costs	Source of Estimate
2060-AO15	National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry and Standards of Performance for Portland Cement Plants [75 FR 54970]	8/6/10	9/9/10	6,074-16,317	839-861	2011 Report: Table A-1
2060-AO48	Review of the National Ambient Air Quality Standards for Sulfur Dioxide [75 FR 35519]	6/2/10	6/22/10	2,809-38,628	334-2,019	2011 Report: Table A-1
2060-AP36	National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (Diesel) [75 FR 9647]	2/17/10	3/3/10	709-1,920	296-311	2011 Report: Table A-1
2060-AP50	Cross State Air Pollution Rule (CAIR Replacement Rule)	7/1/11	8/8/11	20,467-59,697	691	2012 Report: Table 1-5(a)
2060-AP52	National Emission Standards for Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Electric Utility Steam Generating Units	12/16/2011	2/16/2012	28,143-76,753	8,187	2013 Report: Table 1-6(a)
2060-AP76	Oil and Natural Gas Sector--New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants	4/17/2012	8/16/2012	155	142	2013 Report: Table 1-6(a)
2060-AQ13	National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines--Existing Stationary Spark Ignition (Gas-Fired) [75 FR 51569]	8/10/10	8/20/10	380-992	202-209	2011 Report: Table A-1
2070-AC83	Lead-Based Paint; Amendments for Renovation, Repair and Painting	3/28/08	4/22/08	618-1,612	366-400	2009 Report: Table 1-4
2070-AJ55	Lead; Amendment to the Opt-out and Recordkeeping Provisions in the Renovation, Repair, and Painting Program [75 FR 24802]	4/22/10	5/6/10	785-2,953	267-290	2011 Report: Table A-1

( ) indicates negative.

APPENDIX B: THE BENEFITS AND COSTS OF FISCAL YEAR 2003 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, 2002 and September 30, 2003. These rules were included in Chapter I of the 2013 Report as part of the ten-year totals, but are not included in the 2014 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 the previous year's Report in order to provide transparency.

Table B-1: Estimates of Annual Benefits and Costs of Six Major Federal Rules
October 1, 2002 - September 30, 2003
(millions of 2001 dollars)

Agency	RIN	Title	OMB Review Completed	Benefits	Costs
USDA	0583-AC46	Performance Standards for Ready-To-Eat Meat and Poultry Products	5/30/03	$43-$152	$17
HHS	0910-AB66	Food Labeling: Trans Fatty Acids in Nutrition Labeling, Nutrient Content Claims, and Health Claims	7/2/03	$230-$2,839	$9-$26
HHS	0910-AC48	Applications for FDA Approval To Market a New Drug Patent Listing Requirements and Application of 30-Month Stays on Approval of Abbreviated New Drug Applications Certifying That a Patent...	6/9/03	$226	$10
EPA	2040-AD19	National Pollutant Discharge Elimination System Permit Regulation and Effluent Guidelines and Standards for Concentrated Animal Feeding Operations (CAFOs)	12/14/02	$204-$355	$360
DOT	2126-AA23	Hours of Service Drivers; Driver Rest and Sleep for Safe Operation	4/9/03	$690	$1,318
DOT	2127-AI70	Light Truck Average Fuel Economy Standards, Model Years 2005-2007	3/31/03	$255	$220

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

Table C-1: Total Number of Major Rules Promulgated by Independent Agencies, October 1, 2004 – September 30, 2013

Agency	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Consumer Financial Protection Bureau (CFPB)	--	--	--	--	--	--	--	--	2	4
Commodity Futures Trading Commission (CFTC)	--	--	--	--	--	--	--	1	13[141]	2
Consumer Product Safety Commission (CPSC)	--	--	1	--	--	--	--	1	1	--
Department of Treasury, Office of the Comptroller of the Currency (OCC)	--	--	--	--	--	--	--	--	1[142]	--
Federal Communications Commission (FCC)	1	4	2	2	4	--	--	--	--	1
Federal Deposit Insurance Corporation (FDIC)	--	--	--	--	--	--	--	--	1[143]	1
Federal Energy Regulatory Commission (FERC)	--	--	--	--	1	--	--	--	--	--
Federal Reserve System	1	--	--	--	--	3	7	4	1[144]	1
Federal Trade Commission (FTC)	--	1	--	--	--	--	1	--	--	--
National Credit Union Administration (NCUA)	--	--	--	--	--	--	--	--	--	--
Nuclear Regulatory Commission (NRC)	1	1	1	1	2	2	1	1	1	4
Pension Benefit Guaranty Corporation (PBGC)	--	--	--	--	--	--	--	--	--	--
Securities and Exchange Commission (SEC)	1	5	--	7	4	8	9	10	8[145]	5
Total	4	11	4	10	11	13	17	17	23	18

Table C-2: Total Number of Major Rules with Some Information on Benefits or Costs Promulgated by Independent Agencies, October 1, 2004- September 30, 2013[146]

Agency	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Consumer Financial Protection Bureau (CFPB)	--	--	--	--	--	--	--	--	2	4

[141] Three of these rules are joint rules with SEC.
[142] This is a joint rule with FDIC and the Federal Reserve System.
[143] This is a joint rule with OCC and the Federal Reserve System.
[144] This is a joint rule with OCC and FDIC.
[145] Three of these rules are joint rules with CFTC.
[146] Table C-2 excludes all fee assessment rules promulgated by independent agencies. FCC promulgated six fee assessment rules from 1997 through 2002. NRC promulgated 15 statutorily mandated fee assessment rules from 1997 through 2013.

Commodity Futures Trading Commission (CFTC)	--	--	--	--	--	--	--	1	9[147]	1
Consumer Product Safety Commission (CPSC)	--	--	1	--	--	--	--	0	0	--
Department of Treasury, Office of the Comptroller of the Currency (OCC)	--	--	--	--	--	--	--	--	0	--
Federal Communications Commission (FCC)	1	0	0	0	0	--	--	--	--	0
Federal Deposit Insurance Corporation (FDIC)	--	--	--	--	--	--	--	--	0	1
Federal Energy Regulatory Commission (FERC)	--	--	--	--	1	--	--	--	--	--
Federal Reserve System	1	--	--	--	--	0	2	0	0	0
Federal Trade Commission (FTC)	--	0	--	--	--	--	1	--	--	--
National Credit Union Administration (NCUA)	--	--	--	--	--	--	--	--	--	--
Nuclear Regulatory Commission (NRC)	--	--	--	--	1	1	--	1	1	1
Pension Benefit Guaranty Corporation (PBGC)	--	--	--	--	--	--	--	--	--	--
Securities and Exchange Commission (SEC)	1	5	--	7	4	8	9	9	7[148]	5
Total	3	5	1	7	6	8	11	11	17	7

[147] Two of these rules are joint rules with SEC.
[148] Two of these rules are joint rules with CFTC.

APPENDIX D: AGENCY CONSULTATION ACTIVITIES UNDER THE UNFUNDED MANDATES REFORM ACT OF 1995

Sections 203 and 204 of the Unfunded Mandates Reform Act require agencies to seek input from State, local, and tribal governments on new Federal regulations imposing significant intergovernmental mandates. This appendix summarizes selected consultation activities by agencies whose actions affect State, local, and tribal governments.[149]

Three agencies (the Departments of Agriculture, Energy, and Health and Human Services) have provided examples of consultation activities that involved State, local, and tribal governments not only in their regulatory processes, but also in their program planning and implementation phases. These agencies have worked to enhance the regulatory environment by improving the way in which the Federal Government relates to its intergovernmental partners. In general, many of the departments and agencies not listed here (i.e. the Departments of Justice, State, Treasury, and Veterans Affairs, the Small Business Administration, and the General Services Administration) do not often impose mandates upon States, localities, or tribes, and thus have fewer occasions to consult with these governments.

As the following descriptions indicate, Federal agencies conduct a wide range of consultations. Agency consultations sometimes involve multiple levels of government, depending on the agency's understanding of the scope and impact of the rule.

A. Department of Agriculture

National School Lunch and School Breakfast Program: Nutrition Standards for All Foods Sold in School as Required by the Healthy, Hunger-Free Kids Act of 2010

The Interim Final Rule "National School Lunch and School Breakfast Program: Nutrition Standards for All Foods Sold in School as Required by the Healthy, Hunger-Free Kids Act of 2010 (78 FR 39068), issued June 28, 2013, establishes nutrition standards for all foods sold in schools other than food sold under the federal lunch and breakfast programs. The statute requires that such standards be consistent with the Dietary Guidelines for Americans and authoritative scientific recommendations for nutrition standards; existing school nutrition standards; current State and local standards; practical application of the standards in schools; and special exemptions for infrequent school-sponsored fundraisers.

The groups directly affected by the provisions of this rule are State agencies, school districts, students/households, food manufacturers, and stakeholders such as the School Nutrition Association (which represents school food service professionals). USDA gave consideration to the National Academies' Institute of Medicine's (IOM) 2007 report "Nutrition Standards for Food in Schools: Leading the Way Toward Healthier Youth." The Agency received informal input from key stakeholders such as the State agencies, the School Nutrition Association, the

[149] The consultation activities described in this appendix are illustrative of intergovernmental consultations conducted by Federal agencies and are not limited to consultations on regulations meeting the UMRA threshold for an unfunded mandate. Similarly, this should not be considered an exhaustive list of Federal consultation activities.

Food Research and Action Center, and the National Alliance for Nutrition and Activity at public forums such as national conferences and regional meetings.

Subsequent to publication of the proposed rule, USDA conducted numerous briefings, meetings and webinars to explain the provisions of the proposed rule to affected parties. USDA received 247,871 public comments in response to the proposed rule. These comments were carefully considered in the development of the interim final rule. The key concerns raised by stakeholders and other program partners included:

- Cost of improving competitive foods available to students in school;
- Possible decrease in revenues due to changes in food available for purchase in schools by students;
- Ability of schools and manufacturers to meet the nutrition standards requirements.

USDA modified several proposed provisions in response to the input provided by stakeholders and partners. In comparison with the proposal, the final rule:

- Initially allows that competitive food may be sold if they contain 10 percent of the Daily Value of a nutrient of public health concern through naturally occurring nutrients by allowing such nutrients to be included through fortification until July 1, 2016;
- Exempts entrees served in the NSLP and SBP from the nutrition requirements for competitive foods on the day of service and the day after service in the NSLP and SBP;
- Allows fruit packed in light syrup to be exempt from the nutrition standards, in addition to fruit packed in water, extra light syrup and 100% juice and allows canned vegetables and dried fruit with minimal amounts of sugar necessary for processing and palatability;
- Adopts a sugar standard based upon weight of the food that is derived from total sugars which expands the types of foods eligible to be served;
- Allows beverages that consist of 100% juice diluted with water to be allowed to be sold;
- Eliminates time and place restrictions on the sale of other beverages in high school originally proposed; and
- Allows State agencies to establish the number of fundraisers that may be conducted by schools in the state.

Furthermore, USDA has available a wide array of technical resources and practical tools that provide guidance on competitive foods to reflect the new competitive foods requirements and continues to develop guidance and conduct outreach, briefings at conferences and webinars for stakeholder groups. Resources are available online at: http://www.fns.usda.gov/school-meals/smart-snacks-school.

B. Department of Energy

Tribal Summit

At the May 5, 2011 Tribal Summit described in the DOE's UMRA report for October 2010 – September 2011, Secretary Chu announced DOE's intent to form an Indian clean energy

and infrastructure working group to provide a forum to survey, analyze and provide viewpoints on real-time obstacles that tribes face in deploying clean energy, as well as potential solutions.

The final charter for the Indian Country Energy and Infrastructure Working Group (ICEIWG) was issued. The charter describes the objectives of the ICEIWG and the scope of its activities as follows:

(a) make recommendations to DOE's Director of the Office of Indian Energy Policy and Programs ("OIE Director") on the energy and infrastructure development, education, capacity building, and electrification goals and objectives of programs carried out under Title V of the Energy Policy Act of 2005, and make administrative and policy recommendations to improve these programs, including actions that should be considered to encourage non-Federal resources (including private resources) to supplement Federal financial assistance;

(b) Provide guidance to the OIE Director and the Secretary about best practices and methods that would allow the Department with respect capacity building related to energy development activities on Indian lands;

(c) Provide the OIE Director and Secretary with advice on better facilitating and encouraging appropriate development of tribal energy resources to stimulate Indian tribal economies;

(d) Make recommendations on how the Department may assist tribes in developing their expertise in managing all aspects of energy exploration and development activities;

(e) Respond to OIE Director or Secretarial requests for recommendations on DOE policy on programs or policies regarding Indian energy development;

(f) Share with the OIE Director regarding policies and approaches with respect to development that are sensitive to tribal development and stewardship consistent with tribal cultural values;

(g) Perform such other Indian energy resource development related functions as the OIE Director or the Secretary may assign to the Working Group;

(h) Serve as a liaison between the Tribes and the OIE on energy resource programs; and

(i) Encourage transfer of the results of the energy efficiency and renewable energy activities carried out by the Federal Government.

All Indian tribes and Alaska Natives have the potential to benefit from the activities of the ICEIWG. Under its charter, the IWG would survey and assess the current state of Indian energy, energy business, and energy infrastructure development and needs; exchange information about energy development practices, needs, obstacles, and potential solutions, including alternative approaches to energy development in its various forms; develop and disseminate to the public and prospective technology partners information about tribal resources and opportunities; and utilize its forum to share information, to transfer lessons-learned, and to inform and be informed on current policy, procedures, and industry partnership mechanisms. The

ICEIWG would also encourage discussion of policy concerns and forward recommendations or comments to the OIE Director well as through other appropriate channels.

During the reporting period, the following tribal members joined ICEIWG:

- Blue Lake Rancheria: Jana Ganion, Blue Lake Rancheria Energy Director
- Mississippi Band of Choctaw Indians: Harrison Ben, Tribal Council Representative
- Passamaquoddy Tribe at Indian Township: Joseph Socobasin, Tribal Chief
- Seminole Tribe of Florida: James E. Billie, Chairman
- Sisseton Wahpeton Oyate Tribe: Robert Shepherd, Chairman
- Three Affiliated Tribes: Tex Hall, Chairman
- Yurok Tribe: Susan Masten, Vice Chairperson

These new members joined the following existing Working Group members:

- Confederated Tribes of the Warm Springs Reservation of Oregon: Jim Manion, Warm Springs General Manager
- Ewiiaapaayp Band of Kumeyaay Indians: William Micklin, Chief Executive Officer
- Gila River Indian Community: Barney Enos, Jr., District 4 Community Council
- Ho-Chunk Nation: Susan Weber, Representative

The ICEIWG has met several times during the reporting period in geographically diverse locations in the United States, including Las Vegas, NV, Chandler, AZ, and Portland, ME. (See http://energy.gov/indianenergy/listings/iceiwg-meeting-agendas-and-summaries.) In addition to sessions for ICEIWG members to discuss current activities and progress towards working group goals, the meetings included open sessions for interested tribes and members of the public to receive information about ICEIWG activities and offer input on energy issues that impact tribes.

At the ICEIWG meetings, participants requested information on DOE training programs for tribal members, as well as progress reports and further consultation on the development of DOE policy to purchase renewable energy from tribal lands, among other items of importance to the development of Indian energy.

After holding numerous and in-depth roundtables and DOE Tribal Summit conversations in early 2011 with tribal governments, tribal organizations, and Alaskan Native communities and leaders, the Office of Indian Energy launched near-term strategic initiatives to support the tribal energy development and capacity-building priorities established in the Congressional statute defining the Office's mission. These initiatives made significant strides during the reporting period.

With respect to the education and training strategic initiative, the Office of Indian Energy hosted various tribal leader energy forums. Specifically, the Office sponsored a pre-conference session at the Renewable Energy Technology Conference (RETECH) held on October 16, 2012, which brought together government, tribal, and industry renewable energy leaders to explore best practices, public-private partnerships to support and encourage energy

infrastructure solutions, and public finance options for tribal clean energy projects. Participants received updates on federal policy and program support for Indian Country clean energy initiatives; the rapidly expanding federal energy marketplace; tribal clean energy marketing opportunities; and opportunities for interactive discussion with renewable energy companies that already work in Indian Country, and those seeking collaborative partnerships with Tribes and tribal corporations.

During the Alaska Federation of Natives Convention held October 18–20, 2012 in Anchorage, the DOE Office of Indian Energy and the Energy Efficiency and Renewable Energy (EERE) Tribal Energy Program presented a preconference workshop entitled "Renewable Energy and Energy Efficiency for Alaska Native Community Development." The workshop was designed to help tribal leaders and staff understand the range of energy efficiency and renewable energy opportunities that exist in their remote communities, and also covered project development and financing for clean energy projects.

On May 15, 2013, the Office presented a webinar on Department of Defense contracting requirements for energy procurement, which featured a panel of U.S. Department of Defense procurement officials providing details about military energy procurement requirements, statutory authorizations, current procurement vehicles, and regional and local command procurement requirements.

The Office of Indian Energy Tribal Leader Energy Forum on "Leveraging Tribal Renewable Resources to Support Military Energy Goals" was held May 30-31, 2013, in Chandler, Arizona. The forum provided information for western U.S. tribal leaders and military leaders on the renewable energy resource development potential on tribal lands and focused on opportunities for partnerships between tribes and military installations to promote energy development on tribal lands and achieve military energy security goals. Tribal leaders also had the opportunity to directly converse with each other and key military leadership by participating in a roundtable discussion to share ideas on how to capitalize on the various renewable energy opportunities and partnerships with the military.

On July 9-11, 2013, the Office hosted a "Commercial-Scale Renewable Energy Project Development and Finance" workshop at the National Renewable Energy Laboratory in Golden, Colorado. Twenty participants from 13 Tribes took part in this training opportunity for tribal leaders and staff to learn about the process and potential pitfalls of developing commercial-scale renewable energy projects in Indian Country.

The Office of Indian Energy held a Community- and Facility-Scale Tribal Renewable Energy Project Development and Finance Workshop September 18-20, 2013, at the National Renewable Energy Laboratory in Golden, Colorado. The workshop gave tribal participants an opportunity to learn about how to develop and finance unique and smaller scale projects that can serve to reduce costs, increase reliability, and support tribal goals for energy self-sufficiency.

To further support smart tribal energy development through collaboration and information sharing, the Office of Indian Energy hosted strategic best practices forums on energy technologies and energy project development and finance. The forums were designed to give

tribal leaders an opportunity to receive the latest updates from and interact directly with other Tribes, industry, utilities, DOE, and other federal agencies on energy deployment efforts.

Additionally, in 2012 the DOE Office of Indian Energy launched the Strategic Technical Assistance Response Team (START) Program and delivered customized on-site technical expertise to support six Tribes in the 48 contiguous states in pursuing the development and financing of specific renewable energy projects. Specifically, through the START program, the DOE Office of Indian Energy works directly with tribal communities to evaluate project financial and technical feasibility, provide ongoing training to community members, and help implement a variety of clean energy projects, including energy storage infrastructure, renewable energy deployment, and energy efficiency.

Also, in partnership with the Denali Commission, the DOE Office of Indian Energy supported community-based energy planning and staff training for five Alaska Native villages.

The START 2013 effort continued to provide assistance to further advance Native American and Alaska Native communities' efforts to increase local energy generation capacity, improve energy efficiency, and create local entrepreneurial and job opportunities. START 2013 projects were selected through a competitive application process. Between January 30 and March 15, 2013, 42 Indian Tribes in the 48 contiguous states and Alaska submitted applications to receive on-the-ground technical support through START. Technical assistance activities during summer and fall 2013 focused on the renewable energy project development assistance and Alaska Native Community Energy Planning and Projects.

C. Department of Health and Human Services

Medicare, Medicaid, Children's Health Insurance Programs; Transparency Reports and Reporting of Physician Ownership or Investments Interests

The Medicare, Medicaid, Children's Health Insurance Programs (CHIP); Transparency Reports and Reporting of Physician Ownership or Investments Interests final rule (CMS-5060-F), published on February 8, 2013 (78 FR 9457). This final rule implements section 1128G of the Social Security Act by establishing a system for annually reporting specified payments or other transfers of value and ownership and investment interest information to the Centers for Medicare & Medicaid Services (CMS).

Section 6002 of the Patient Protection and Affordable Care Act amended Title XI of the Social Security Act to add a new section, 1128G, and mandated the creation of a program for (1) reporting payments and other transfers of value to covered recipients (physicians and teaching hospitals) and physician owners or investors made by manufacturers of drugs, devices, biological, or medical supplies for which payment is available under Medicare, Medicaid, or CHIP and for (2) reporting physician ownership or investment interests held by physicians or the immediate family members of physicians in such manufacturers and group purchasing organizations (GPOs) as well as reporting payments or transfers of value made by these manufacturers and GPOs to such physicians.

Drug, device, biological and medical supply manufacturers, purchasing organizations, and distributors, which are required to report payments or other transfers of value and physician ownership or investment interests to CMS, were consulted. Physicians and teaching hospitals are affected because if they receive a payment or other transfer of value from a manufacturer or have ownership or investment interests in a manufacturer, information is reported about the physician or teaching hospital and posted on a public website.

Prior to publishing the proposed rule, CMS hosted a Special Open Door Forum on March 24, 2011 entitled, "Transparency Reports and Reporting of Physician Ownership or Investment Interests," to gather input from stakeholders. Approximately 373 timely public comments were received in response to the proposed rule published on December 19, 2011.

CMS requested comments on data collection regarding payments or other transfers of value and physician ownership or investments interests through the Paperwork Reduction Act (PRA) process. During this process, CMS received approximately 60 comments regarding details for data elements for payments or other transfers of value and ownership or investment interests required to be reported by manufacturers and GPOs. CMS devised sample files prescribing data elements necessary to report payments or other transfers of value and ownership or investment interests. Based on comments received during the PRA process, CMS amended the data elements to comply with relevant comments received.

Manufacturers commented that manufacturers without any drugs, devices, biologicals or medical supplies with reimbursement available through Medicare, Medicaid or CHIP should have additional time to comply with reporting requirements if a drug, device, biological or medical supply is reimbursed by Medicare, Medicaid, or CHIP at a later date. Manufacturers were also concerned that it was burdensome to require reporting all manufacturer or GPO ownership or investment interests held by a physician or a physician's immediate family member. They also raised concerns regarding requiring all manufacturers to register prior to submitting data to CMS, stating it is burdensome to require all manufacturers to register if they do not have payments or other transfers of value to report to CMS. Manufacturers, GPOs, physicians, and teaching hospitals requested additional time to resolve disputes beyond the minimum 45-day review period prescribed in section 1128G of the Social Security Act.

In response to comments, the agency made the following changes:

- Manufacturers without any drugs, devices, biologicals or medical supplies with reimbursement available through Medicare, Medicaid or CHIP have a 180-day grace period following a drug, device, biological, or medical supply becoming reimbursed through Medicare, Medicaid, or CHIP.

- The definition of a physician ownership or investment interest was limited to manufacturers or GPOs only reporting ownership or investment interests held by a physician or physician's immediate family member if the manufacturer or GPO knows of such interests.

- The final rule implementing section 1128G of the Social Security Act only required manufacturers and GPOs to register if they have payments or other transfers of value or ownership or investments interests to report.

- The final rule implementing section 1128G of the Social Security Act provided manufacturers, GPOs, physicians and teaching hospitals a 45-day review period and an additional 15 days following the 45-day period to resolves dispute raised during the 45-day review period.

- CMS devised sample files prescribing data elements necessary to report payments or other transfers of value and ownership or investment interests.

Patient Protection and Affordable Care Act; HHS Notice of Benefit and Payment Parameters for 2015

The Patient Protection and Affordable Care Act; HHS Notice of Benefit and Payment Parameters for 2015 final rule (CMS-9954-F), published on March 11, 2014 (79 FR 13744), sets forth payment parameters and oversight provisions related to the risk adjustment, reinsurance, and risk corridors programs; cost sharing parameters and cost-sharing reductions; and user fees for Federally-facilitated Exchanges. It also provides additional standards with respect to composite premiums, privacy and security of personally identifiable information, the annual open enrollment period for 2015, the actuarial value calculator, the annual limitation in cost sharing for stand-alone dental plans, the meaningful difference standard for qualified health plans offered through a Federally-facilitated Exchange, patient safety standards for issuers of qualified health plans, and the Small Business Health Options Program. In particular, this regulation establishes rules on the conduct of the risk adjustment data validation program and relating to the use of composite premiums in the small group market.

The Consultation Process

Risk Adjustment Data Validation

- As part of our consultations with issuers, on June 22, 2013, we published a white paper, "Affordable Care Act (ACA) HHS-Operated Risk Adjustment Data Validation White Paper" (available at: https://www.regtap.info/uploads/library/ACA_HHS_OperatedRADVWhitePaper_062213_5CR_062213.pdf).
- We followed up the white paper with a public meeting on June 25, 2013, to discuss its contents and stakeholder concerns – the ACA HHS-Operated Risk Adjustment Data Validation Stakeholder Meeting.
- We further sought comment on the white paper, and reviewed those comments before drafting the proposed rule on the topic.

Composite Premiums

- We engaged in informal stakeholder consultations for this rule.

ACA HHS-Operated Risk Adjustment Data Validation White Paper, June 22, 2013

The ACA HHS-operated Risk Adjustment Data Validation white paper was published on June 22, 2013 through RegTap.info, and presented at the stakeholder engagement meeting on June 25, 2013. HHS provided a 30-day period for stakeholders to respond to the white paper. We received comments from fifty-three (53) stakeholders including issuers, consulting firms, and health plan associations. The majority of the comments were submitted by ten (10) stakeholders: ACHP, AHIP, Altegra Health, BCBSA, BCBS South Carolina, Center for Budget and Policy Priorities, Humana, Kaiser, Verisk Health, and Wellpoint.

ACA HHS-Operated Risk Adjustment Data Validation Stakeholder Meeting, June 25, 2013

The ACA HHS-Operated Risk Adjustment Data Validation Stakeholder Meeting on June 25, 2013 was held from 9:30 a.m. to 2 p.m. at the Centers for Medicare & Medicaid Services (CMS) Central Office in Baltimore, Maryland, and through webinar. There were 51 on-site participants and 393 webinar participants, for a total of 444 participants. The majority of on-site participants were affiliated with health plans and issuer vendors. A high percentage of on-site participants described their job duties as relating to risk adjustment, information technology, finance, compliance, and operations. There were a total of 167 comments submitted during the HHS-Operated RADV Stakeholder Engagement Meeting; 33 of these were submitted through comment cards during the onsite session, while 134 were submitted through the webinar conference interface.

Composite Premiums

We held informal telephone conversations with staff from state departments of insurance, representatives of the health insurance industry, and the agent and broker community. The purpose of the conversations was to better understand existing state regulatory requirements and standard industry practice regarding composite premiums, and to assess the potential burden of new federal requirements.

In general, stakeholders were supportive of the approach presented for the ACA HHS-operated Risk Adjustment Data Validation process. Below is a high level summary of comments received.

- Stakeholders were generally in favor of the sampling assumptions and approach, though some stakeholders recommended that HHS consider additional plan attributes for sampling.
- Many stakeholders supported an initial validation certification process. Several stakeholders commented in support of HHS establishing binding standards (such as general audit standards and conflict of interest standards) for issuers and initial validation audit entities to follow without a requirement of prior certification or approval.

- Some stakeholders raised concern about the burden on providers, on issuers operating in multiple states, and timing for issuers to collect and submit proper source documentation during the initial validation audit period.
- Stakeholders supported HHS' methodology for computing an adjustment factor to adjust plan average risk.
- Many stakeholders recommended against HHS' assigning a default error for issuers that do not comply with risk adjustment data validation. Stakeholders specifically suggested that HHS apply a formal penalty, possibly in addition to civil money penalties.
- Generally, stakeholders supported HHS' considerations to assess civil money penalties on non-compliant issuers.

ACA HHS-Operated Risk Adjustment Data Validation Stakeholder Meeting, June 25, 2013:

The majority of commenters sought clarification on the general audit standards outlined in the white paper with the next most common clarification relating to the error estimation process. Additional clarification was sought regarding the initial validation audit and sampling methodology.

Composite Premiums

Stakeholders suggested that the prevailing industry practice, as permitted by most states, is for issuers in the small group market to generate a "pure" composite premium that averages together the rates of all individuals enrolled in a group health plan. This practice could result in families with children paying significantly higher premiums for health insurance coverage.

Consultation Results

Risk Adjustment Data Validation

Based on stakeholder feedback on the ACA HHS-operated Risk Adjustment Data Validation White Paper and received at the ACA HHS-operated Risk Adjustment Data Validation Stakeholder Meeting, we were able to refine our proposals to better incorporate stakeholder feedback in the 2015 Payment Notice. The standards and policies that were refined based on input received during the consultation process included:

- The consideration of additional plan attributes for sampling.
- General audit standards and conflict of interest standards for issuers and initial validation audit entities to follow.
- The confidence interval to determine statistical significance throughout risk adjustment data validation statistical tests.
- The computation of an adjustment factor to adjust plan average risk.

- The application of a default risk adjustment charge for issuers that do not comply with risk adjustment data validation in addition to civil money penalties for non-compliant issuers.

Composite Premiums in the Small Group Market

Based on stakeholder feedback that, without federal standards, families with children could be significantly negatively affected by a "pure" composite, we adopted a two-tiered approach to composite premiums in the 2015 Payment Notice.

Alliance for Advancing an Integrated Food Safety System

With the enactment of the Food Safety and Modernization Act of 2011, there has been an increase in the focus on cooperation between Federal, State, and local agencies to improve food safety efforts. This Alliance is a limited competition cooperative agreement to facilitate long-term improvements to the national food safety system.

Under this Alliance, State, local, territorial, and tribal food regulatory programs are surveyed for capacity and capabilities so that FDA can provide assistance on key food safety issues.

There was a need to build a network to serve as a learning exchange, subject matter expert registry, maintain topical index of regulatory guidance and program and keep track of legislative activity among the States.

Though this Alliance, FDA has:

- Identified and coordinated training activities with FDA or other state and local entities and their associations.
- Established the Manufactured Food Regulatory Program Alliance (MFRPA) and annual meetings to address the Manufactured Food Regulatory Program Standards (MFRPS).
- Tracks state and local food Laws and Regulation, including those that extend beyond the requirements of the Federal Food, Drug, and Cosmetic Act and regulations enforced by FDA.
- Developed Task Oriented Guidelines to Address Issues that can be adopted or into State/Local/Tribal food manufacturing programs.
- Updated, enhanced and improved a web based directory for food program managers including Federal, State, and local officials.
- In support of FSMA, FDA has worked to establish operational partnerships that assist in the capacity building of state and local agencies as well as establishing and implementing strategies for improving state and local food safety efforts.

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