HOW TO IMPROVE REGULATORY ACCOUNTING: COSTS, BENEFITS AND IMPACTS OF FEDERAL REGULATIONS

HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY POLICY, NATURAL RESOURCES AND REGULATORY AFFAIRS

OF THE

COMMITTEE ON GOVERNMENT REFORM

HOUSE OF REPRESENTATIVES

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HOW TO IMPROVE REGULATORY ACCOUNTING: COSTS, BENEFITS AND IMPACTS OF FEDERAL REGULATIONS

TUESDAY, MARCH 11, 2003

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ENERGY POLICY, NATURAL RESOURCES AND REGULATORY AFFAIRS,
COMMITTEE ON GOVERNMENT REFORM,
Washington, DC.

The subcommittee met, pursuant to notice, at 2 p.m., in room 2154, Rayburn House Office Building, Hon. Doug Ose (chairman of the subcommittee) presiding.

Present: Representatives Ose, Janklow, Miller, Tierney and Cooper.

Staff present: Dan Skopec, staff director; Barbara Kahlow, deputy staff director; Melanie Tory, clerk; Yier Shi, press secretary; Alexandra Teitz, minority counsel; and Jean Gosa, minority assistant clerk.

Mr. OSE. Good afternoon. Welcome to today's hearing on the Subcommittee on Energy Policy, Natural Resources and Regulatory Affairs. I am pleased to be here with my colleagues at this hearing.

In fall of 2001, the Small Business Administration released a report which estimated that, in the year 2000, Americans spent $843 billion to comply with Federal regulations. This report concluded that if every household received a bill for an equal share, each would have owed $8,164. The report also found that in the business sector, those hit hardest by Federal regulations are small businesses. It stated firms employing fewer than 20 employees face an annual regulatory burden of $6,975 per employee, a burden nearly 60 percent above that facing a firm employing over 500 employees. Regulations add to business costs and decreased capital available for investment.

In September 2002, another study entitled, "Compliance Costs of Federal Workplace Regulations: Survey Results for U.S. Manufacturers," revealed that, in 2000, manufacturers spent an average of $2.2 million per firm, or $1,700 per employee, just to comply with Federal workplace regulations.

Because of congressional concern about the increasing costs and incompletely estimated benefits of Federal rules and paperwork, in 1996, Congress required the Office of Management and Budget, which we're going to refer to from now on as OMB, to submit its first regulatory accounting report. In 1998, Congress changed the annual report's due date to coincide with the President's budget.

Congress established a simultaneous deadline so that Congress and the public could be given an opportunity to simultaneously review both the on-budget and off-budget costs associated with each Federal agency imposing regulatory or paperwork burdens on the public.

In 2000, Congress made this a permanent annual reporting requirement. The law requires OMB to estimate the total annual costs and benefits for all Federal rules and paperwork in the aggregate, by agency, by agency program, and by major rule, and to include an associated report on the impacts of Federal rules and paperwork on certain groups, such as small business.

Today, we will examine OMB's draft sixth annual regulatory accounting report, which was published on February 3, 2003, the same day as release of the President's budget. In addition, we will discuss how to improve compliance with the statutory requirements for an accounting statement by agency and by agency program and for an associated report on impacts.

Data by agency and by agency program are important for the public to know the aggregate costs and benefits associated with each agency and each major regulatory program. For example, what are the aggregate costs and benefits of the requirements imposed by the Environmental Protection Agency or the Labor Department's Occupational Health and Safety Administration? Is there an alternative approach for EPA or OSHA to more effectively, with less burden on the public and less cost to the public, accomplish an intended objective?

From September 1997 to February 2003, OMB issued five final and one draft regulatory accounting reports. All six failed to meet some or all of the statutorily-required content requirements. For example, all six were not presented as an accounting statement, and the February 2003 did not include the associated report on impacts. However, OMB has progressively made improvements, such as adding agency-level detail for eight agencies in March 2002 and adding agency program-level detail for seven major regulatory programs in February 2003.

For OMB's Information Collection Budget and for the President's budget, OMB tasks agencies annually with preparing paperwork and budgetary estimates respectively for each agency, bureau and program. OMB uses the Information Collection Budget to manage the burden of Federal paperwork imposed on the public. In contrast, for Federal regulations, OMB does not similarly task agencies annually with preparing cost-benefit estimates for the agency as a whole and for each of the agency's major regulatory programs.

After our March 2002 hearing, I recommended that OMB issue annual regulatory accounting bulletins to require agency, bureau and program estimates. This would assist OMB in preparing more complete annual regulatory accounting statements. To date, OMB has not done so.

I'm going to enter the rest of my statement in the record. I do want to welcome our witnesses. I look forward to their testimony. My time has expired.

[The prepared statement of Hon. Doug Ose follows:]

Chairman Doug Ose
Opening Statement
How to Improve Regulatory Accounting: Costs, Benefits, and Impacts of Federal Regulations
March 11, 2003

In Fall 2001, the Small Business Administration released a report, which estimated that, in 2000, Americans spent $843 billion to comply with Federal regulations. This report concluded, "Had every household received a bill for an equal share, each would have owed $8,164." The report also found that, in the business sector, those hit hardest by Federal regulations are small businesses. It stated, "Firms employing fewer than 20 employees face an annual regulatory burden of $6,975 per employee, a burden nearly 60 percent above that facing a firm employing over 500 employees." Regulations add to business costs and decrease capital available for investment.

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Because of Congressional concern about the increasing costs and incompletely estimated benefits of Federal rules and paperwork, in 1996, Congress required the Office of Management and Budget (OMB) to submit its first regulatory accounting report. In 1998, Congress changed the annual report's due date to coincide with the President's Budget. Congress established this simultaneous deadline so that Congress and the public could be given an opportunity to simultaneously review both the on-budget and off-budget costs associated with each Federal agency imposing regulatory or paperwork burdens on the public. In 2000, Congress made this a permanent annual reporting requirement. The law requires OMB to estimate the total annual costs and benefits for all Federal rules and paperwork in the aggregate, by agency, by agency program, and by major rule, and to include an associated report on the impacts of Federal rules and paperwork on certain groups, such as small business.

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requirements. For example, all six were not presented as an accounting statement and the February 2003 draft did not include the associated report on impacts. However, OMB has progressively made improvements, such as adding agency level detail for eight agencies in March 2002, and adding agency program level detail for seven major regulatory programs in February 2003.

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Currently, the economic impacts of Federal regulation receive much less scrutiny than programs in the Budget and the Federal deficit. I believe that the public deserves to know if it getting its money's worth from Federal regulation. As a consequence, in July 2002, I co-authored an op-ed with former OMB Director James C. Miller, III. We advocated a regulatory appropriations process. This innovation would make Congress more accountable to the public for regulations that are implemented in response to the laws Congress passes. As a first step, I support a pilot test to determine the feasibility of regulatory budgeting. This vehicle would help ensure that the worst societal problems are addressed first.

One of my goals when I came to Congress was to make the government more efficient. Regulatory accounting is a useful way to improve the cost-effectiveness of government. Both Presidents Reagan and Clinton issued executive orders requiring cost-benefit analyses so that policymakers could see the strengths and weaknesses of alternative approaches and could make choices to ensure that benefits to the public are maximized. I support these requirements and want to make sure that the Government is doing everything it can to minimize the cost of Federal regulations on the American public.

I look forward to the testimony of our witnesses. They include: Dr. John D. Graham, Administrator, Office of Information and Regulatory Affairs (OIRA), OMB; James C. Miller III, former OMB Director and first OIRA Administrator and current Chairman, CapAnalysis Group; Dr. Jim J. Tozzi, former OIRA Deputy Administrator and current Advisory Board Member, The Center for Regulatory Effectiveness; Dr. Robert W. Hahn, Director, AEI-Brookings Joint Center for Regulatory Studies; Lisa Heinzerling, Professor of Law, Georgetown University Law Center; and Rabbi Daniel J. Swartz, Executive Director, Children's Environmental Health Network.

Laws Requiring Regulatory Accounting Reports and OMB Issuances

Date of Law	Due Date for OMB Report	Date of OMB Report	Required Content for OMB
9/30/96	9/30/97	9/97	(1) annual costs & benefits of Federal regulatory programs & of each major rule (2) impacts on private sector & State/locals (3) recommendations to reform/eliminate
10/10/97	9/30/98	1/99	same as prior year
10/21/98	with the President's Budget (2/7/00)	6/00	(1) accounting statement with annual costs & benefits of Federal rules & paperwork in the aggregate, by agency & agency program, & by major rule (2) associated report with impacts on small business, State/locals, etc. (3) recommendations for reform also: (4) OMB guidelines to agencies to standardize cost/benefit measures & format of accounting statements
9/29/99	with the Budget (4/9/01)	12/21/01	same as prior year
12/21/00	permanently with the Budget (2/4/02)	draft 3/18/02 final 12/18/02	same as prior year
	with the Budget (2/3/03)	draft 2/3/03	same as prior year

Prepared for Congressman Doug Ose

Progress in OMB's Regulatory Accounting Reports

DEPARTMENT/AGENCY	Date Started	Agency PROGRAM	Date Started
Agriculture	3/02		
Commerce			
Defense			
Education	3/02		
Energy	3/02	Energy Efficiency & Renewable Energy	2/03
		All Other DOE	
Health & Human Services	3/02	FDA	2/03
		All Other HHS	
Housing & Urban Development	3/02		
Interior			
Justice			
Labor	3/02	OSHA	2/03
		All Other DOL	
State			
Transportation	3/02	NHTSA	2/03
		Coast Guard	2/03
		All Other DOT	
Treasury			
Veterans Affairs			
EPA	3/02	Office of Air	2/03
		Office of Water	2/03
		All Other EPA	

Prepared for Congressman Doug Ose

Mr. OSE. I'd like to recognize the gentleman from Massachusetts for the purpose of an opening statement for 5 minutes.

Mr. TIERNEY. Thank you, Mr. Chairman.

Dr. Graham, thank you for joining us again. I apologize that I have to leave after the opening statement. Certainly it is no disrespect, and I know that you've been kind enough and gracious enough to make yourself and your staff available whenever we need to talk to you, and I appreciate that.

Mr. Chairman, I want to thank you for holding today's hearing. Over the past several decades, the United States has made great strides in protecting public health and the environment. Workplaces are safer than those of our parents. Most of our children are growing up with cleaner air, safer drinking water and safer products. Laws, such as the Clean Air Act, the Safe Drinking Water Act and the Occupational Health and Safety Act, have made this progress possible.

But, the day-to-day improvements in all these areas are due to implementing regulations issued by government agencies. While the Clean Water Act calls for fishable and drinkable waters, it's the EPA's regulations that have cleaned up our rivers by requiring each facility to limit its pollution discharges.

Over the years, regulated industries have waged an ongoing battle against government mandates to protect health, safety and the environment. The public overwhelmingly supports strong regulatory protections in these areas. As a consequence, they're more rarely compelled to mount a frontal assault on popular laws, such as the Clean Air Act. Instead, industry is increasingly focused on subtly influencing the regulatory process. This background is critical context for understanding innocent-sounding regulatory reform proposals.

But, we hear today that the White House Office of Information and Regulatory Affairs improves the efficiency of government by stringently analyzing and reviewing regulations and assessing the overall burdens that regulations impose on society. Unquestionably, there is room for improvement in regulation, but, for many advocates of stringent regulatory review, the real underlying goal of such reviews is not better regulation, but less regulation. Many of the same corporations that have spent millions of dollars to lobby Congress and Federal agencies against regulatory requirements fund some of the institutions we will hear from today.

My constituents want to know the government is acting wisely on their behalf. They want to protect the environment, but they don't want to shut down industry. They are willing to pay a bit more for products so their children won't get asthma. They want a safe workplace, but they don't want their employer to go out of business. These are the tradeoffs that regulation requires, and the regulatory agencies make these tradeoffs every day using information provided by every interested party.

What my constituents don't want is a disguised and systematic assault on regulations that protect public health and the environment.

So, Mr. Chairman, I look forward to receiving the testimony from the witnesses on this issue. We'll read it, and my staff, of course,

will be here throughout the hearing. And, I ask unanimous consent to include relevant materials in the record.

Mr. OSE. Without objection.

Mr. TIERNEY. Thank you.

Mr. OSE. The gentleman from South Dakota for the purposes of an opening statement for 5 minutes.

Mr. JANKLOW. Thank you very much, Mr. Chairman. I'm going to be extremely brief. As a new Member of Congress, and a new member of this committee, I look forward to working under your leadership on a bipartisan basis to look at these kinds of issues.

I find it absolutely incredible that this country could be spending approximately $850 billion a year through its various business entities and organizations to comply with Federal mandates and Federal rules with respect to, basically for all practical purposes, bookkeeping.

This is unbelievable. This is one of the reasons that we find ourselves continuously in a more uncompetitive atmosphere. There isn't any question that it is not an issue of a clean environment. I have five grandchildren. They drink the water. They bathe in it. Their food is cooked in it.

We need a safe workplace for everyone. There isn't any question about that. But, the real question is to do what we need to get done in the environmental sense, to do what we need to get done in the safe working area sense, to do what we need to get done in the regulatory sense, does it really take approximately $850 billion a year for people to comply? Is there not a more efficient, more effective way that it can be done? Is there not a more reasonable, productive way that it can be done without having incurred this type of expense?

If, after thorough, honest examination, we reach the conclusion, all of us, that it can't be done any better, then we ought to continue to do it this way, but, if the truth is that there is a more efficient, more effective, more productive way to do it, and at the same time accomplish the goals and objectives that we set for ourselves as a society, then we're honor-bound and duty-bound to try and find that way and get it implemented as quickly as possible.

So, I look forward to the enlightenment we'll get from these witnesses, the discussion under your leadership, Mr. Chairman, so that we can move forward on this to try and see if there isn't a better way to deal with the regulatory environment that our society has to deal with. Thank you.

Mr. OSE. I thank the gentleman, and look forward, as our new vice chairman——

Mr. JANKLOW. Thank you.

Mr. OSE [continuing]. To your efforts here.

I also want to welcome the gentlelady from Michigan, Candice Miller. Do you have a statement you would like to make?

Mrs. MILLER OF MICHIGAN. I do not, Mr. Chairman.

Mr. OSE. OK. We're grateful for your attendance and participation in this subcommittee.

Now, for the benefit of the witnesses, we're going to—I just want to make sure we go through the ground rules here carefully. We have received your written testimony. We've read it. If we haven't read it, it's not your fault, but somebody else's.

We're going to be very attentive to the 5-minute rule here so that we can get to Member questions. If there are more Member questions than can be accommodated within the 5-minute rule, we'll have a second round of questions. I am going to be very attentive to the 5-minute rule, and the gavel is going to be right next to me. So, I want to make sure everybody understands that going in.

Again, we do appreciate you submitting your testimony in writing beforehand. It has been read. Trust me. I read it. I read it again this morning.

The other thing here is that we, as a matter of course, swear in all of our witnesses. So our first panel, Dr. Graham, if you would please rise.

[Witness sworn.]

Mr. OSE. Let the record show that the witness answered in the affirmative.

Dr. Graham joins us. He is the Director of the OIRA—excuse me, the Administrator. I stand corrected. He has been here numerous times to visit with us, both in committee and over the phone. We're always grateful for his input.

Dr. Graham, thank you for coming. You're recognized for 5 minutes.

STATEMENT OF JOHN D. GRAHAM, ADMINISTRATOR, OFFICE OF INFORMATION AND REGULATORY AFFAIRS, OFFICE OF MANAGEMENT AND BUDGET

Dr. GRAHAM. Thank you, Mr. Chairman. I look forward to the opportunity to discuss our annual report to the Congress on the costs and benefits of Federal regulation. We have, as you know, a draft report open for public comment now, and I want to just highlight a few of the key features of that report.

For the first time, as you note, Mr. Chairman, this report was released at the same time as the administration's budget. We did this, as you know, in substantial measure upon your request. We agree with you that this will help appropriators do their work of tailoring budgetary evaluations to performance of programs, and certainly costs and benefits are an important element in the performance of programs.

Second of all, for the first time this report covers the entire past 10 years of Federal regulatory activity. We have, in fact, looked at over 50 major rules during this period, and there is good news in this report. The benefits of these major rules are estimated in the range of $135 billion per year, with an upper bound maybe as high as $218 billion, while the costs are in the range of $38 to $44 billion. Keep in mind that these figures don't include the nonquantified benefits and costs of these regulations.

Why does this year's report offer some good news compared to previous reports? The answer is found in a third feature of the report. For the first time, we have broken down the performance of these regulations not just by agency, but by the program within each agency, and it turns out there is one particular program in the Federal Government that is responsible for the majority of all the benefits accounted for by all regulations in the Federal Government, and that is the Clean Air Program of EPA's Office of Air and Radiation. And, indeed, if you take this one program out of the sta-

tistics, the remaining programs have a much more questionable balance of benefits and costs. They do exceed the cost, but not by very much.

Now, it turns out that we are actually trying to expand the authority and resources for this particular program. As you know, in his State of the Union Address, President Bush asked for Congress to pass the Clear Skies Initiative, and this would accomplish a 70 percent reduction in power plant pollution over the next 15 years. And, this is accomplished not through traditional command-and-control, litigation-oriented regulation. It is accomplished through market-based cap and trade programs, such as those accomplished in the Clean Air Act Amendments of 1990. This is what we mean by more efficient and innovative regulatory approaches.

Finally, for the first time OMB guidelines on regulatory analysis and accounting have been made available for public comment. We have previously gotten expert review and interagency review, but this is the first time we are asking anyone who wants to offer comments on how we can improve the way we analyze regulations and review the analyses of agencies.

In these guidelines, we recognize that the value of these benefit and cost numbers is only as good as the quality of the science and analysis that underpins them, and hence we encourage people to participate in the process of improving these guidelines.

Mr. Chairman, I've looked forward to working with you and other members of the subcommittee to continue improvements in the report. I heard your opening statement. We realize we don't have an A grade at the present time, but we would like to argue that we are in a trend-line of improvement. Thank you very much.

Mr. OSE. Thank you, Dr. Graham. We are cognizant of the improvement that has been made. So we're grateful for that.

[The prepared statement of Dr. Graham follows:]

STATEMENT OF
JOHN D. GRAHAM, PH.D.
ADMINISTRATOR,
OFFICE OF INFORMATION AND REGULATORY AFFAIRS
BEFORE THE
SUBCOMMITTEE ON ENERGY POLICY, NATURAL RESOURCES
AND REGULATORY AFFAIRS
UNITED STATES HOUSE OF REPRESENTATIVES

March 11, 2003

Mr. Chairman, and Members of this Subcommittee, thank you for inviting me to this hearing. I am John D. Graham, Ph.D., Administrator, Office of Information and Regulatory Affairs, Office of Management and Budget. Prior to joining the Bush Administration, I served as a faculty member at the Harvard School of Public Health, where I founded and directed the Harvard Center for Risk Analysis.

Since I testified last year before this subcommittee, our office has been working to improve the regulatory review process and to produce the reports to Congress required under the Regulatory Right to Know Act, which is the focus of this hearing.

As you know the Regulatory Right-to-Know Act[1], also known as the Regulatory Accounting Act, requires that:

(a) For calendar year 2002 and each year thereafter, the Director of the Office of Management and Budget shall prepare and submit to Congress, with the budget, an accounting statement and associated report containing
(1) an estimate of the total annual costs and benefits (including quantifiable and nonquantifiable effects) of Federal rules and paperwork, to the extent feasible
(A) in the aggregate;
(B) by agency and agency program; and
(C) by major rule;
(2) an analysis of impacts of Federal regulation on State, local, and tribal government, small business, wages, and economic growth; and
(3) recommendations for reform.

(b)The Director of the Office of Management and Budget shall provide public notice and an opportunity to comment on the statement and report under subsection (a) before the statement and report are submitted to Congress.

(c)To implement this section, the Director of the Office of Management and Budget shall issue guidelines to agencies to standardize
(1) measures of costs and benefits; and
(2) the format of accounting statements.

[1]Section 624 of the Treasury and General Government Appropriations Act, 2001, 31 U.S.C. § 1105 note, Pub. L. 106-554, §1(a)(3) [Title VI, § 624], Dec. 21, 2000, 114 Stat. 2763, 2763A-161.

(d) The Director of the Office of Management and Budget shall provide for independent and external peer review of the guidelines and each accounting statement and associated report under this section.

Today I would like to report on the progress we have made in providing the Congress and the public with the regulatory information and accounting statements required by the Act. As promised last year in my March 12th testimony before this committee, we published on March 28, 2002 a draft report for comment and peer review. After digesting the comments from the public, agencies and peers, we issued last December, *Stimulating Smarter Regulation: 2002 Report to Congress on the Costs and Benefits of Regulations and Unfunded Mandates on State, Local, and Tribal Entities*. On February 3, 2003, we released this year's draft sixth report to Congress. These two reports, which devote significant attention to regulatory accounting, are the focus of my testimony.

OMB's 2002 Final Report to Congress

The 2002 report, which was our fifth annual report to Congress on this subject, includes information on all major rules issued between April 1, 1999 and September 30, 2001 including details on how the agencies and OMB estimated their costs, benefits, and impacts. The report also contained an analysis of impacts of Federal regulation on State, local, and tribal government, small business, wages, and economic growth. The four earlier reports contain detailed information on the costs and benefits of major regulations issued between April 1, 1995, and March 31, 1999 as well as on aggregate costs and benefits of regulation and paperwork in total, by type of regulation, and by agency.

Because the Regulatory Right to Know Act requires more than regulatory accounting, the 2002 report devoted considerable attention to recommendations for regulatory reform received from the public. The report provides an overview of how the Administration is pursuing regulatory reforms and discusses comments from the public suggesting ways to improve that pursuit along with 316 specific recommendations for reform.

These public recommendations were forwarded to the federal agencies to which they applied and the agencies are currently working on determining the appropriate responses to the suggestions. We expect that in our sixth annual report we will report on the results of these efforts.

Appendix A of my written testimony summarizes the report in greater detail. The report together with an appendix discussing the nominations from the public and the comments from the public is on our website at http://www.whitehouse.gov/omb/inforeg/regpol-reports_congress.html.

OMB's 2003 Draft Report to Congress

We released the draft version of our sixth report to Congress with the President's budget on February 3, 2003. The draft report expands considerably upon earlier reports, particularly in the area of regulatory accounting. The report presents estimates for the first time of the costs and benefits of major regulations reviewed by OMB between October 1, 1992 and March 31, 1995. With the addition of costs and benefits from rules issued during fiscal year 2002, the report now contains estimates for all major rules issued in the past ten years. The report estimates that the annual quantifiable benefits of major rules issued during this period range between $135 billion and $218 billion with their quantifiable costs ranging between $38 billion and $44 billion. Nonquantifiable benefits and costs for all major regulations issued during this ten year period are found for the individual regulations in the appropriate annual report. It is our intention to continue to report costs and benefits of major rules on a ten-year rolling basis.

For the first time, the report also describes the costs and benefits over a ten-year period for eight cabinet departments and several agencies and programs. Most notably, the report indicates that the Clean Air Program in the Environmental Protection Agency's Office of Air and Radiation accounts for the majority of regulatory benefits over the past decade (between $106 billion and $163 billion). The President's Clear Skies Initiative calls for expanded authority for this program to reduce power plant pollution by 70% over 15 years.

The report also contains our Draft Guidelines for the Conduct of Regulatory Analysis and the Format of Accounting Statements. These draft guidelines were prepared by my staff in collaboration with the President's Council of Economic Advisors. The guidelines are designed to help analysts in the regulatory agencies by encouraging good regulatory impact analysis and standardizing the way that benefits and costs of Federal regulations are measured and reported.

We will be accepting comments from the public on the entire report and the draft guidelines through April 3, 2003. I have also asked expert peer reviewers to give us comments on these guidelines. We are also convening a group of agency experts and practitioners to review and offer suggestions to improve the guidelines. In February, the agencies sponsored a two-day conference of the world's leading experts on benefit-cost analysis and cost-effectiveness analysis at Resources for the Future. The conference was very well attended and much interest was expressed in improving the analysis of regulatory and public health outcomes.

The draft report also asks for public comment on how federal agencies are currently assessing and managing emerging risks to human health, safety, and the environment, particularly those risks that are subject to substantial scientific uncertainty. We are specifically interested in the role of precaution in health, safety, and environmental regulation. For future homeland security regulations, the draft report requests comment on improving the analysis of the benefits and costs of these proposals.

Appendix B of my written testimony summarizes the 2003 draft report and is on our website at http://www.whitehouse.gov/omb/inforeg/regpol-reports_congress.html.

Thank you very much for the opportunity to appear today. I am willing to answer any questions you may have.

Appendix A: OMB's 2002 Final Report to Congress

The major features and findings of the 2002 Final Report, which was issued on December 19, 2002 include:

- Since September 11th, OIRA cleared 58 significant Federal regulations aimed at responding to the terrorist attacks. These rules addressed urgent matters such as homeland security, immigration control, airline safety, and the need for assistance to businesses harmed by the resulting economic disaster.

- OIRA's goals in regulatory oversight include openness, promptness, and analytic rigor. OIRA's website regular updates rules under review, meetings with outside parties, and key letters and memoranda to agencies. The number of OIRA reviews consuming more than the allotted 90 days declined from what had regularly been 15-20 rules at any given time to near zero in the fall. From July 1, 2001, to March 1, 2002, OIRA returned more than 20 rules to agencies for reconsideration, more than the total number of rules returned to agencies during the entire Clinton Administration

- OIRA developed the "prompt letter" for suggesting promising regulatory and informational priorities for agency consideration. OIRA's initial six prompt letters addressed a range of issues at five different agencies, including the use of lifesaving defibrillators in the workplace, food labeling requirements for trans-fatty acids, and better information regarding the environmental performance of industrial facilities. Agencies performed independent assessments of each of these suggestions and adopted reasonable responses.

- Pursuant to statutory mandate, OIRA issued government-wide guidelines to enhance the quality of information that Federal agencies disseminate to the public. OIRA worked with agencies to finalize their guidelines prior to the October 1, 2002, statutory deadline. These guidelines offer a new opportunity for affected members of the public to request corrections when poor quality information is disseminated or used to justify new regulations or other policies. OMB has directed each agency to develop an administrative mechanism to resolve these requests, including an independent appeals mechanism.

- The report summarizes regulatory reform activities now underway in developed countries throughout the world, with special focus on the European Union. The European Commission has recently issued an Action Plan for Better Regulation that includes expanded transparency, consultation with stakeholders, and more rigorous regulatory impact analysis.

- In response to an open, invitational process of regulatory reform proposals, OIRA received public suggestions on 316 regulations and guidance documents covering 26 Federal agencies. This number of public nominations is over four times larger than the 71 nominations received in 2001 and covers a broader range of topics. The 2002 commenters are also more diverse in organizational affiliation. The 2002 public reform nominations include suggestions to review existing paperwork requirements and guidance documents, as well as to add, modify, or rescind regulations. The 2002 final report provides a summary of these nominations and describes a review process in which agencies should consider the nominations and identify those that are worthy reforms. This year's review process is different from last year's process, when OIRA identified high priority reform candidates. Rather than suggest any specific agency priorities, OIRA forwarded all of the public's suggestions, with the expectation that agencies will make decisions about which, if any, reforms to pursue based on their assessment of the prospects and practicality of achieving regulatory improvements.

- The Bush Administration is concerned about unfunded mandates that impact State and local governments. The scope of consultation activities undertaken by Federal agencies such as Agriculture and Justice demonstrate the Bush Administration's commitment to building strong relationships with our governmental partners. Federal agencies are now actively consulting with States, localities, and tribal governments.

- Small businesses play a vital role in creating jobs and stimulating growth despite their disproportionate share of regulatory costs and burdens. The 2002 final report contains numerous constructive suggestions on how agencies can reduce unnecessary regulations and paperwork requirements that impose especially large burdens on small business.

Appendix B: OMB's 2003 Draft Report to Congress

The major features and findings of the 2003 Draft Report, which was published in the Federal Register on February 3, 2003 include:

- The report will be published in its final form after revisions to draft report are made based on public comment, external peer review, and interagency review.

- Major federal regulations cleared by OMB from October 1, 1992 to September 30, 2002 were examined to determine their quantifiable benefits and costs. The estimated annual benefits range from $135 billion to $218 billion while the estimated annual costs range from $38 billion to $44 billion.

- The draft report also describes the costs and benefits over a ten year period for eight cabinet departments and several agencies. For the first time, the report includes programmatic information on costs and benefits. The seven programs with three or more major regulations are listed separately. The report indicates that the Clean Air Program in the Environmental Protection Agency's Office of Air and Radiation accounts for the majority of regulatory benefits over the past decade (between $106 billion and $163 billion) as well as costs (between $18 billion and $ 21 billion.

OMB is seeking public comment on all aspects of the draft report. Comments are due no later than April 3, 2003. OMB is specifically interested in public comment in the following three areas:

- *Guidelines for Regulatory Analysis.* In order to make continued improvements in the quality of the regulatory analyses prepared by agencies, OIRA initiated in 2002 a process to refine the OMB guidelines for regulatory analysis. The OIRA Administrator and a member of the Council of Economic Advisors (CEA) are serving as co-chairs of this effort.

- *Analysis and management of emerging risks.* An Interagency Work Group on Risk Management, co-chaired by the OIRA Administrator and the Chairman of the White House Council on Environmental Quality has been formed to foster Administration-wide dialogue and coordination on the management of emerging risks to public health, safety and the environment. The Group will summarize the role of precaution in US regulatory decision making. OMB requests comments on current US approaches to analysis and management of emerging risks.

- *Improving analysis of regulations related to homeland security.* In light of the significant interest in regulations related to homeland security, OMB is seeking public comment on how to more effectively evaluate the benefits and costs of these proposals, including how agencies might better forecast the anti-terrorism benefits and the direct and indirect costs of such rules, including time, convenience, privacy, and economic productivity

Mr. OSE. We're going to go to questions. Appreciate the brevity of your comments, given the testimony you've submitted.

I'm going to claim my time first.

The law requires OMB to include in its annual accounting statement data separately for each agency and for each agency regulatory program. The February 3rd draft report seems to be missing data on many agencies and most agency regulatory programs. If you'll look over here on the screen and on the stand, the ones in red are the salient or the related programs that we're talking about there.

At last year's hearing on March 12th and in two letters to OMB since then, one on March 27th of last year and one on January 3rd of this year, I asked if OMB would issue an annual OMB bulletin to the agencies which would require agency estimates of aggregate and new regulatory burden as it does in annual OMB bulletins to the agencies for aggregate and new paperwork burden. To date, I'm not aware of OMB having done so, and we do have some legislation to attempt to address that.

But, my question is there must be some reason why OMB has not done that, if that is the case, and I'd like to know why. That is the first part of the question. Without agency input, how does OMB expect to include a complete aggregate agency-by-agency and agency program detail in its subsequent annual regulatory accounting reports?

Dr. GRAHAM. Mr. Chairman, we have looked at all major regulations of all of the agencies for the last 10 years. There are no missing agencies. There are no missing major rules, to the best of our knowledge. We differ on whether the nonmajor rules should somehow be attempted to be quantified and included in this calculation, and before you seek the legislation that you have referred to, we urge you to consult with people in the agencies and make sure that such information even exists. As you know, the requirement for a cost-benefit analysis only applies to the economically significant or major rules that are included in the report. So, we could pass a piece of legislation and ask for this information, but it's not obvious that it is there for the agencies to provide, and I can assure you that we at OMB don't have that information, and we aren't in a position to provide it to you, sir.

Mr. OSE. You'll note that we haven't dropped the legislation yet, so that consultation will take place before we do so.

Dr. GRAHAM. Yes.

Mr. OSE. And I want to make sure everybody understands, in terms of a major rule, just for the edification, that is the $100 million threshold?

Dr. GRAHAM. Yes. For the—there are lawyers in the room, so I guess I have to be very careful about this, but there's a subtle distinction between major rule and an economically significant rule, and I could not explain that to you in detail, but both of them have as an important component, this $100 million per year threshold of economic impact. And, we have tried to identify all of the major rules for the last 10 years that meet that threshold and have at least some quantification of benefits and costs, and those are included in this year's report.

Mr. OSE. All right. Thank you.

My next question is rather lengthy. I'm going to go ahead and yield time to my good friend from South Dakota for the purpose of questioning.

Mr. JANKLOW. Dr. Graham, I believe your testimony was that the costs for $135 to about $218 billion in benefit under the rules you have examined were from $38 to $44 billion; is that correct?

Dr. GRAHAM. Correct.

Mr. JANKLOW. And, you said you've looked at all of the basic rules, the major rules that have a big cost impact within the government; is that correct?

Dr. GRAHAM. Well, that have had a big cost impact and for which agencies have estimated costs.

Mr. JANKLOW. OK. How do you square that number with the $845 billion number that the Small Business Administration had for compliance?

Dr. GRAHAM. Yeah. I think the effort in the Small Business Administration report is to look at all of the costs of all regulations, not just major regulations, and all of the transfer costs in the Federal budget that are stimulated by regulation. So that is really a different kind of number.

Our focus here is on regulations that impact the private sector and State and local governments. We don't include in our numbers regulations that are primarily budgetary impact regulations.

Mr. JANKLOW. All right. So it's not apples to apples.

Dr. GRAHAM. It's not apples to apples.

Mr. JANKLOW. Sir, in doing the analysis that you and your agency do, have you been able to find any areas of suggestion that you think can be done as well, more efficiently, more productively or in a better cost-wise manner? I mean, the name of the game is are the rules and regulations that are required the cheapest possible cost? Where are we doing it wrong?

Dr. GRAHAM. Well, I think the classic example is the one I mentioned in my opening statement. We currently have a clean air regulatory system that requires electric utilities to run through highly elaborate permitting processes and be subject to litigation every time they make a renovation or a repair on their facility.

Instead of that, the President has proposed a market-based training program with a cap on national emissions, and that will achieve pollution reductions at much lower costs than the current regulatory system that we have.

Mr. JANKLOW. OK. Let's just take that as a given for a moment, put it on the shelf. What else can bring about a savings in these megabillions?

Dr. GRAHAM. Well, in last year's report, which was published in December of last year, we described the process that we have under way to review 316 regulations and guidance documents that were nominated by the public to be looked at for purposes of your question. Are there ways that these regulations could be modified or in some cases rescinded or in some cases strengthened in order to overall improve public benefit? And, we're all now meeting with each of the major agencies that is responsible for these rules, and it is quite a substantial undertaking.

In this document, which I think your staff has a copy of, is the appendix to that report, and it has 316 examples of rules or guidance documents nominated by the public.

Mr. JANKLOW. How many of those would you say are, if I can use the phrase, politically explosive?

Dr. GRAHAM. I suspect you and the chairman or the subcommittee are probably a better barometer of that than I am, but we're looking through each one of them on the merits, costs and benefits and working with the agencies to make choices.

Mr. JANKLOW. I'll just end this round with this, sir, but I guess what I'm trying to get at is I realize the political sensitivity in this area where we're treading. I think we all understand that. Are there any things that we can do better that we could find some unanimity on?

Dr. GRAHAM. Well, I don't know the answer to that question, and quite frankly, we're not pursuing the process of regulatory reform from that particular perspective. We're looking at each of these for the purposes of whether we think you can make a benefit-cost case for a smarter regulation or in some cases no regulation at all, and, if we can make that case, you've noticed, I'm sure, that we're willing to take a little controversy in order to accomplish that. And, that is the way we feel about it in this administration.

Mr. JANKLOW. Thank you.

Mr. OSE. I thank the gentleman.

Dr. Graham, if I could go back to followup on my first question. The discussion we had there talked about a 10-year time period from 1992 to 2002 relative to the major rules that were the subject of that. However, there is a question about rules issued, say, since February 1981 when President Reagan issued Executive Order 12291.

Now, the report here does not include any of that period from February 1981 to October 1992, and I'm trying to figure out if OMB has taken any steps to include the available data for the still active major rules that were issued in that period and, beyond that, any estimates for still active major rules issued before 1981.

Now, I understand that is a heck of a question because of the complexity of calculating that, but I'm just curious as to the status of your efforts in those two areas.

Dr. GRAHAM. We have not, Mr. Chairman.

Mr. OSE. OK. Are there any plans to?

Dr. GRAHAM. Well, to be candid with you, Mr. Chairman, we are not convinced that the costs and benefit information that was estimated prior to the development of those regulations in 1985 or 1975 is really a very good quality scientific indicator of what the costs and benefits of those regulations are today, and hence what we have put out for public comment is a proposal that we will present this information to the public on a 10-year rolling basis. So, each year, we will tell you for the 10 previous years what those major rules, costs and benefits are. But as a rough surrogate, we would argue that, if it is older than 10 years old, we can't really use the information that was generated and have that much confidence in it. And, we're taking public comment and peer review on that position as we speak.

Mr. OSE. OK. One of the interesting things in every testimony here speaks directly to your point there, and that is the quality of the assumptions underlying every agency submittal to you, you know, is it hard or is it somewhat malleable? And, that is something that I kind of sit in my office and think about, and I can't even imagine the challenge that you have, but I know that we're making progress.

The other question I'd like to ask is that the law requires OMB to submit an analysis of impacts of Federal regulation on State, local and tribal government. Now, does OMB have any estimates of the impact of Federal rules and paperwork imposed on State and local governments by the following agencies: EPA and Health and Human Services; specifically within EPA, the Office of Water; and specifically in Health and Human Services for CMS, which was formerly HCFA.

And, the question really delves into wouldn't such data help in analyzing the opportunities for either prioritization of efforts within those agencies or the sunsetting, if you will, of such rules that perhaps their time has passed, so to speak?

Dr. GRAHAM. Just briefly, we have information on any of the major rules that were enacted by those agencies; however, the summary tables that are in the report only address those programs for which there were three or more major rules. If there were less than three, we said as an admittedly arbitrary cut point, we didn't think it was necessarily fair to represent that agency's performance based upon a sample of two or one.

Now, I want to get back to your earlier point, because we have some indirect evidence on whether old regulations are really a major concern of the public.

Mr. OSE. All right.

Dr. GRAHAM. This document was generated when 1,700 Americans responded to the President's personal request—as well as our Federal Register notice—for nomination of specific regulations and paperwork requirements and guidance documents that they felt did not have benefits that justified their costs or that could have stronger benefits if they were amended.

It's interesting, when you look through these 316, only a very small fraction of them are older rules or guidance documents. A very strong fraction of them are those that have been enacted within the last 10 years, and, in most cases the commenters are not asking for these to be repealed, and that makes sense when you look at some of our cost-benefit information which says a lot of these rules are pretty sensible. They do have benefits that seem to outweigh their costs.

What commenters are looking for is modifications of these rules to make them more practical, more feasible, or to have less cost for the same benefit. And, I think it's very important for the focus of this subcommittee's effort to see that the agenda here is to make the regulatory system smarter and to incrementally reduce the cost while maintaining the benefits or increase benefits while maintaining the costs.

There is no demand that we're aware of for wholesale elimination of specific older regulatory programs.

Mr. OSE. The gentleman from South Dakota.

Mr. JANKLOW. Thank you, Mr. Chairman.

Sir, could you tell me, the comment period is open until April 3rd. At this point how many comments have you received; do you know?

Dr. GRAHAM. I don't know, but quite frankly, what we find, our experience is that people use that full comment period, and most of our comments come in toward the end of that period.

Mr. JANKLOW. It's like a term paper? You get it done——

Dr. GRAHAM. Sort of like us trying to get our report done for release with the Federal budget. It's got the same spirit to it.

Mr. JANKLOW. And, I notice, sir, also on page 6 of your documentation, you talk about the concern of the administration—the rightful concern the administration has on unfunded mandates. Have you ever undertaken an analysis as to the unfunded mandates that are shifted onto State and local governments and what the real fiscal impact is nationwide? Now, that is something, I think, that can be done with real definity, if I can use the word that way, because State and local governments know what they spend on an annual basis to fulfill mandated programs, and so taking their percentage share of it would be relatively easy.

Has anybody ever done that, I mean, areas with respect to the Clean Water Act, this whole TMDL set of rules that they have with EPA? States, governments, local governments have spent huge quantities of money complying to find out that the National Academy of Sciences in a report issued a little over a year ago said that is not the best science to utilize with respect to the streams and the creeks and the rivers in the country. And, so has anybody ever looked at that particular issue, unfunded mandates' cost to State and local governments?

Dr. GRAHAM. You're raising, I think, an excellent question, and I have to say I'm not fully satisfied with where we are at OMB in our current ability to quantify all of those unfunded mandates and attribute them to specific agencies and to specific agency programs.

In the final report last year, which we released, we do describe in some detail qualitatively all of the rules—major rules that we were able to identify that did involve an unfunded mandate, and we also looked closely at how well agencies are doing their job of consulting with Governors and mayors before they engage in this practice of an unfunded mandate.

But, I think that it's fair to say, we have a lot more work to do in that area, and it's something that I think that encouragement from you would only be helpful, sir.

Mr. JANKLOW. What about the area of mandates on the Federal Government? Have you ever looked at that? I mean, certain studies and analyses, regulatory fulfillment that the Federal Government does with respect to itself, have you ever looked—are those costs reflected in the costs that you've set forward in your reports?

Dr. GRAHAM. If those regulations—even if they are affecting the Federal Government itself, if they are a major regulation as defined in the discussion we had earlier with the chairman, they should be included in that report. But, budgetary costs per se, as I mentioned, would typically be analyzed and dealt with predominantly on the budget side of OMB.

Mr. JANKLOW. But, if that happens, we'll never know the real cost.

Dr. GRAHAM. Because you're saying it's not—it is included in the budget—in the appropriation as part of the budget process——

Mr. JANKLOW. Right, but it's hidden—there you can't find it. I mean, it's not on an item, it's not on a line.

Dr. GRAHAM. Well, I think it would be an excellent idea to have a more specific accounting within agencies of both how much the agencies are spending on rulemaking activities themselves and how much in Federal budgetary dollars are induced by that.

Mr. JANKLOW. I'm familiar—for example, on the Missouri River with the Army Corps of Engineers, they've been working about 16 or 17 years on rewriting a master manual that should have been done 15 years ago. I believe they spent—at this point they reported over $23 million, and they're not done. That's in compliance with requirements that they have in the way they carry out their mission.

There just has to be a better way. If we're smart enough to screw it up that badly, we ought to be smart enough to figure out how to straighten it out. We don't even take incremental steps to straighten it out, but we just have people like me that complain about it. The net result is nothing is being done, but money is being spent.

What does it take to fix problems like this? In your estimation, sir, what does it take to fix—I mean, obviously we've reached the point of almost gridlock in America with respect to every major issue. What's it going to take to fix these little areas? Maybe if we fix the little stuff, we can head to the big stuff later.

Dr. GRAHAM. Well, I think—I don't know the answer to your question, and I don't know the specifics, quite frankly, of the example that you're referring to with the Army Corps of Engineers. And, I'd like to learn more about it, because we are in dialog with all the agencies, including the Corps, about specific steps that we can take at OMB to insist upon a more efficient and deliberative process. We agree with the observations that oftentimes this process of developing analyses and doing rulemakings is often too slow, and we need to work on making the rulemaking process itself more efficient, less costly, more timely, at the same time that it's competent and open to the public.

Mr. JANKLOW. Can you do what you just said within the framework of the existing authority?

Mr. OSE. Your time is expired. We'll go around and come back.

I want to note that we have been joined by the gentleman from Tennessee Mr. Cooper, who has requested either a couple minutes to gather himself or would like to proceed.

Mr. COOPER. I think I'm ready.

Mr. OSE. OK. The gentleman is recognized for 5 minutes.

Mr. COOPER. I'm interested, Mr. Chairman, in actuarial assumptions leading to valuation of human life. It's my impression that EPA, OIRA differ, in that OIRA assumes that everybody who dies prematurely only had 5 more years to live, is that correct; whereas, EPA prefers an estimate that assumes that everyone has 15 more years to live. Is that correct, or am I being given bad information?

Dr. GRAHAM. I don't think it's accurate, sir. I don't think it's accurate. I think that you're referring to the way in which EPA is developing their benefit estimates for reducing the human health harm from exposure to air pollution. What EPA has done is they have presented one set of estimates that uses what's called the lives-saved approach, and then they presented an alternative set of estimates that used the life-year-saved approach. And, I believe the 5-year number that you're referring to is correct with respect to the life-year-saved approach. I'm not aware that they have estimated a number of life-year-saved for the lives-saved approach, because by its inherent nature, it measures the benefits in terms of number of lives saved.

Mr. COOPER. What is the best study or comparison that would compare those two approaches so that the average Member of Congress could understand that?

Dr. GRAHAM. Boy, that is a great question.

Mr. COOPER. It may be impossible to——

Dr. GRAHAM. I'll recogitate on that, but I'll send you a few things.

Mr. COOPER. That would be helpful.

Dr. GRAHAM. Yes.

[The information referred to follows:]

24. RANKING REGULATORY INVESTMENTS IN PUBLIC HEALTH [1]

An essential role of government is to protect citizens from risks to human health, safety and the environment. Since the nation does not possess enough resources to eliminate all risks, an important performance goal for government is to deploy risk-management resources in a way that achieves the greatest public health improvement for the resources available—that is the most "cost-effective" allocation of risk-management resources. In this chapter, we demonstrate how cost-effectiveness ratios can be used to compare the payoffs from different regulatory investments in public health. We also discuss the promise and limitations of the use of cost-effectiveness analysis to inform decisions at regulatory agencies.

Using Cost-Effectiveness Ratios to Construct League Tables

A widely used tool for ranking purposes is the "league table," first used by the English to rank their soccer teams by point standings and later to rank their schools by student achievement scores. More recently, league tables have been used to rank programs, technologies, regulations and therapies aimed at saving lives and improving public health. There is a significant academic literature on the use of league tables in public health that began in the 1960s and continues to grow. OMB believes that government and the public can benefit from the insights generated by league tables.

The OMB first published a league table with the Budget in 1992. In this table, 50 risk-reducing regulations were ranked using cost per life saved as the measure of investment performance. The information in that table was based on analyses by Federal agencies and others in the 1970s and 1980s. The monetary resources required to save one "statistical" life ranged from several hundred thousand dollars to billions of dollars.

In Table 24–1 below, OMB presents a league table of 10 risk-reducing regulations based on information developed by three Federal agencies (DOT, OSHA, and EPA) in the 1995 to 2000 period. Our purpose in presenting this table is to illustrate how cost-effectiveness analysis of public health has changed over the last decade and what technical and policy issues are raised by presentation of league tables. [2]

Table 24–1. COST PER LIFE-YEAR SAVED FOR TEN SELECTED REGULATIONS

Regulation	Health or Safety	Net Costs ($2001)	Life-years saved	Cost per life-year saved ($2001)
Petroleum Refining NESHAP (EPA)	Health	<0	<10 per year	<0
Powered Industrial Truck Operating Training (OSHA)	Safety	<0	146 per year	<0
Head Impact Protection (DOT)	Safety	$390 to $516 million per year	8,360 to 10,007 per year	$50,00 to $53,000
Reflective Devices for Heavy Trucks (DOT)	Safety	$65 million (PV)	946 (PV)	$69,000
Child Restraints (DOT)	Safety	$54 to $112 million per year	370 to 515 per year	$105,000 to $331,000
Rail Roadway Workers (DOT) [a]	Safety	$227 million (PV)	434 (PV)	$523,000
Interim Enhanced Surface Water Treatment (EPA) [b]	Health	<0 to $95 million per year	140 to 640 per year	<0 to $679,000
NOx SIP Call (EPA) [c]	Health	$1265 million in 2007	1590 to 3390 per year	$373,000 to $714,000
Methylene Chloride (OSHA) [d]	Health	$112 million per year	96 per year	$1.16 million
Stage I Disinfection By-Products (EPA) [e]	Health	<0 to $764 million per year	0 to 5130 per year	<0 to infinite

Note: Net costs were calculated by subtracting from compliance costs an estimate of any non-fatality benefits such as a reduction in injuries or morbidity. PV = Present Value.

[a] The estimate does not include possible increased capacity of rail lines and improved worker morale.

[b] The estimate doe not include reduced risks from the pathogens (in addition to cryptosporidiosis) and avoided costs of averting behavior from a well-publicized outbreak.

[c] The estimate does not include a variety of potential benefit categories including possible reductions in ozone-related mortality, acute and chronic respiratory damage, nitrogen deposition in estuarine and coastal waters, damage to ecosystems and vegetation.

[d] The estimate does not include a variety of potential adverse health effects including: cancers resulting from dermal contact, central nervous system effects, and eye, nose, etc. irritation.

[e] The estimate does not include possible reductions in colon and rectal cancer and possible reductions in adverse reproductive and developmental effects.

[1] This chapter is prepared pursuant to Section 624 of the Treasury and General Government Appropriations Act, 2001, also known as the "Regulatory Right to Know Act," Public Law 106–554 (Dec. 21, 2000).

[2] The technical details that support the information presented in Table 24–1, including ratios based on a "lives saved" metric, can be found at *www.whitehouse.gov/omb* under regulatory policy or upon request.

These ten rules, which are a non-random sample of risk-related rulemakings, were selected because the regulatory analyses provided sufficient information to prepare a cost-effectiveness ratio. Many agency rules, even those with a primary purpose of protecting public health, do not provide adequate information to construct a cost-effectiveness ratio. The estimates presented in the table are based on data and estimates provided by the agencies. Where the agencies did not provide estimates of life-years saved, we calculated life-years using standard assumptions about age and life expectancies. Each of the ten rules was reviewed by OMB under Executive Order 12866; five address health issues and five address safety issues.

Interestingly, the tendency for safety rules to be more cost-effective than health rules (see Table 24–1) is consistent with the insights from the early league tables published more than a decade ago. The table also illustrates a finding not evident from the earlier league tables. The range of cost-effectiveness estimates for specific rules varies substantially. For example, the cost per life-year saved for EPA's disinfection by-products rule ranges from less than zero to infinite. The table suggests that we need to do a better job at both refining estimates of the cost-effectiveness of regulatory proposals and setting priorities for the use of the nation's limited resources to protect citizens from health, safety, and environmental risks.[3]

Which Rules Should Be Compared?

In constructing a league table, many issues arise about which rules to include. League tables are most useful if based on information about potential or proposed rules, since the decision makers can consider reallocating resources to those rulemaking opportunities that rank the highest in cost-effectiveness. The challenge is ensuring that league tables are generated early enough in the decision making process to inform regulatory priorities.

When league tables include only recently adopted (final) rules, the utility for policy makers is reduced. Once the agency has adopted a rule, it is difficult to reverse course based on a ranking reported in a league table. Moreover, it may be infeasible for an agency to adopt "more" of a final rule that ranks highly in a league table. Nonetheless, league tables of adopted rules can provide insight into their relative payoffs, which can provide a rough perspective to evaluate future rules.

An intra-agency league table compares only those rules within the jurisdiction of a particular agency. This type of table is appropriate in certain budgetary contexts where only matters in the jurisdiction of a specific agency are subject to comparison, ranking, and decision making. An inter-agency league table, such as Table 24–1, is more useful for synoptic purposes or for decision making by governmental entities with inter-agency responsibility (e.g., appropriations committees and OMB).

Identifying a Performance Measure

Early league tables in the public health field used the number of lives saved (premature deaths averted) as the metric of effectiveness. This metric has been criticized on the grounds that lives are never really saved, only extended. The expected number of life-years saved was developed as an alternative and continues to be used in the academic literature. "Life-years" gives relatively more credit to rules that reduce mortality rates early in the lifespan and less weight to rules that reduce mortality rates late in the lifespan. Although it is sometimes argued that "life-years" discriminates against the elderly, there are strong arguments that "life-years" is a better measure than "lives" of the effectiveness of regulatory alternatives.

Which Costs Should be Counted?

If one were only concerned about impacts on the Federal budget, then the only regulatory costs that would be counted would be those incurred (or saved) by a Federal agency. To reflect the full effect of a regulation, all costs to society—whether Federal, State, or private costs—should be counted when cost-effectiveness ratios are computed. This "societal perspective" on cost estimation is already embraced in OMB guidance and is widely practiced by Federal agencies and academic analysts.

Rulemakings may also yield cost savings (e.g., energy savings associated with using new technologies). It is generally accepted that the numerator in the cost-effectiveness ratio presented in a league table should be based on net costs, defined as the total cost incurred in meeting the requirements minus any cost savings. Similarly, the denominator of the ratio should reflect net life-years saved if the rule has both beneficial and adverse impacts on public health, such as the side effects of a vaccine.

Should Future Costs and Health Effectiveness be Discounted to Their Present Value?

Analysts generally agree that future costs and health effects should be discounted at the same rate, but there is a range of opinion about the appropriate rate of discount (e.g., 3 to 7 percent). If future health savings were discounted at a lower rate than future costs, then it can be shown that it always makes sense to delay adoption of a cost-effective rule. We have generally used 7 percent in our calculations, but following EPA's practice we have used a 5 percent discount rate in calculating life-years for EPA rules.

Limitations of League Tables

Generally, league tables are most helpful for comparing a set of government actions with the same primary outcome (e.g., a reduction in premature mortality risk or acres of wetlands saved). Where an action yields a variety of beneficial outcomes, the comparison be-

[3] OMB set forth its program to improve regulatory outcomes in *Making Sense of Regulation: 2001 Report to Congress on the Costs and Benefits of Regulations and Unfunded Mandates on State, Local, and Tribal Entities* (OMB 2001) available on our website at *www.whitehouse.gov/omb/inforeg/costbenefitreport.pdf* or upon request.

comes more problematic because these multiple benefits all need to be considered. Where the agency analysis provides a monetary estimate for these other benefit categories, we have subtracted the value of these benefits from the aggregate cost estimate to yield a net cost estimate. In some cases, the resulting net cost estimate for the rule is negative—that is, the other (non-mortality) benefits exceed the cost of the rule. Where the agency analysis fails to provide estimates for key benefit categories, the cost-effectiveness ratio may be overstated substantially, and thus, the regulatory action may be a more attractive candidate than suggested by the league table. For rules that have significant ecological as well as public health benefits, it is not clear how to construct a league table. Ecological benefits deserve serious consideration, but it is infeasible to express them in the same units as public health benefits. Finally, in some cases, the mortality reduction benefits may be largely ancillary to the overall effect of the rule, and the opportunity for realizing cost-effective improvements in risk reduction may be limited because the risk reduction gains are relatively small.

One of the most common ancillary benefits of life-saving rules is a reduction in morbidity—i.e., the number of cases of nonfatal illness or injury. To account for such benefits, OMB is considering the use of new effectiveness measures that combine information on mortality and morbidity. Two such measures are already in widespread use in the academic literature. The "quality-adjusted life-year" (QALY) measure rates each year of life on a 0 to 1.0 scale based on an expert panel or patient assessment of the quality of life associated with different health states. The QALY measure is widely used in the medical literature in both the USA and Europe and has recently been recommended for use by an expert panel assembled by the U.S. Department of Health and Human Services. A close cousin to the QALY, the disability-adjusted life-year (DALY) measure, is widely used in the developing world and has been promoted by the World Health Organization and the World Bank. While the QALY measure values equally all healthy years of life, the DALY measure gives the greatest weight to healthy life-years in the prime of life, since these years—whether through work or child rearing—make a major contribution to societal production.

Strictly speaking, ranking regulatory investments based on cost-effectiveness ratios focuses on economic efficiency. Decision makers may desire (or be required) to consider other values as well (e.g., various notions of fairness and equity). There is no accepted approach to incorporating equity considerations into a league table. However, there is broad consensus that a qualitative description of equity and fairness concerns should be presented to regulators in a rulemaking process and such considerations are clearly authorized for consideration under E.O. 12866.

Taking Steps Toward Cost-Effectiveness in the Regulatory Process

OMB is in the process of taking modest steps toward greater use of cost-effectiveness and league tables in decision making. First, OMB has issued government-wide guidelines on information quality that will promote greater transparency and consistency in agency analyses of health and safety risks. The development of league tables as an analytical construct depends on achieving a degree of analytical consistency across agency evaluation of health and safety risks. Second, OMB has committed to update periodically its guidelines for regulatory analysis, which are used when OMB reviews agency rulemakings. OMB intends to use guideline revision as a vehicle to consider the analytic measures of effectiveness and performance used by agencies and the informational burdens associated with moving toward greater analytic consistency in agency practices. This multi-year process will involve analysts from multiple agencies and will include opportunities for public comment and peer review.

While this approach has been more fully developed in the public health and medical literature, it can be applied to other types of programs. One of the key challenges in extending this analysis into other areas, of course, is developing a suitable measure of the effectiveness of disparate programs directed toward enhancing other aspects of the nation's welfare (e.g., recreational opportunities). OMB encourages agencies to develop objective measures of program effectiveness that can facilitate cost-effectiveness analysis.

Attachment

This attachment presents a summary of our calculations for each of the ten regulations included in the Analytical Perspectives Chapter. Each of the ten rules was reviewed by OMB under Executive Order 12866; five address health issues and five address safety issues. These ten rules – a non-random sample of risk-related rulemakings – were selected because the regulatory analyses provided sufficient information to prepare a cost-effectiveness ratio. The estimates presented in the table are based on data and estimates provided by the agencies.

To reflect the full effect of a regulation, all quantified costs to society – whether Federal, State, or private costs – were included in calculating the cost-effectiveness ratios. It is generally accepted that the numerator in the cost-effectiveness ratio should be based on net costs, defined as the total cost incurred in meeting the requirements minus any cost savings and other non-mortality benefits.

The league table in the Analytical Perspectives Chapter uses life-years saved as the measure of "effectiveness" of these several regulatory initiatives. Where the agencies did not provide estimates of life-years saved, we calculated life-years using standard assumptions about age and life expectancies. For purposes of sensitivity analysis, we also developed a calculation of the cost per life saved for each of these rules and we have included a Table presenting the costs per life-saved.

Where the timing of the benefits and costs differ, we have generally used a 7 percent discount rate in our calculations, but following EPA's practice we adopted a 5 percent discount rate in calculating life-years for EPA rules. In addition, EPA used a 6 percent discount rate in the NO_x SIP Call in developing an annualized cost stream for the required capital expenditures for electric generating units.

Head Impact Protection

The National Highway Traffic Safety Administration (NHTSA) estimated the cost of the rule to be $640 million/year (NHTSA: FMVSS No. 201 Upper Head Impact Protection Final Economic Assessment (FEA), June 1995, p. 2). The benefits were estimated to range from 873 - 1045 fatalities and 675 - 768 serious injuries avoided per year once the entire on-road fleet is in compliance (FEA, p1). Since the benefits occur over the lifetime of a vehicle but the costs are borne when the vehicle is produced, the benefit estimates need to be discounted before they can be compared with the cost estimates. We used a 7 percent discount rate and assumed the benefits were distributed over the vehicles' lifetime in accordance with miles traveled. The corresponding present value estimates are 611 - 732 fatalities and 473 - 538 injuries annually. We valued injury reductions using estimates contained in Table A-1 of 1996 NHTSA report, "The Economic Cost of Vehicle Crashes, 1994." The resulting value of injury reductions ranges from $220 - $324 million/year. Subtracting this from the $640 million/year cost estimate yields a net cost ranging from $316 - $420 million/year. The average age of highway fatality victims is about 40 years old. A 40-year-old has a remaining life expectancy of about 39 years. Discounting these life-years (at 7 percent) to the time of the fatality yields an estimate of approximately 13.3 discounted life years of benefit per fatality avoided. Thus, the discounted number of life-years associated with fatalities avoided by this rule would range from 8,360 to 10,007. Dividing the corresponding net cost estimates by these estimates results in cost per life-year ranging from $40,000 - $43,000. Adjusting for inflation, the cost per life-year expressed in 2001 dollars is between $50,000 and $53,000. The corresponding cost per life saved estimate ranges from $665,000 to $705,000.

Child Restraints

NHTSA estimated the cost of the rule to be $152 million/year (NHTSA Office of Regulatory Analysis Plans and Policy: FMVSS No. 213 Child Restraint Systems Final Economic Assessment (FEA), February 1999, p.2, Table S-2) The benefits were estimated to range from 36 - 50 fatalities and 1,235 - 2,939 injuries avoided per year once the entire on-road fleet is in compliance (FEA, Table S-1). Since the benefits occur over the lifetime of a vehicle but the costs are borne when the vehicle is produced, the benefit estimates need to be discounted before they can be compared with the cost estimates. We used a 7 percent discount rate and assumed the benefits were distributed over the vehicles' lifetime in accordance with miles traveled. The corresponding present value estimates are 25 - 35 fatalities and 865 - 2057 injuries annually. We valued injury reductions using estimates contained in Table A-1 of 1996 NHTSA report, "The Economic Cost of Vehicle Crashes, 1994." The resulting value of injury reductions ranges from $44 - $104 million/year. Subtracting this from the $152 million/year cost estimate yields a net cost ranging from $48 - $108 million/year. The average age of fatality victims for this rule is about 3 years old. A 3-year-old has a remaining life expectancy of about 75 years. Discounting these life-years (at 7 percent) to the time of the fatality yields an estimate of approximately 14.3 discounted life years of benefit per fatality avoided. Thus, the discounted number of life-years associated with fatalities avoided by this rule would range from 370 to 515. Dividing the

corresponding net cost estimates by these estimates results in cost per life-year ranging from $93,000 - $292,000. Adjusting for inflation, the cost per life-year expressed in 2001 dollars is between $105,000-$331,000. The corresponding cost per life-saved estimate ranges from $1.5 million to $4.9 million.

Conspicuity Retrofits for Heavy Trucks

The Federal Highway Administration (FHWA) estimated the cost of the rule to be $228 million over two years and benefits of $360 million over the first 10 years discounted to the time the costs are incurred (Federal Highway Administration, Costs and Benefits of Requiring Conspicuity Retrofits Regulatory Evaluation, March, 1999, p. ES-1 Table ES-1). FHWA monetized all benefits, including injuries and fatalities avoided. The benefits included 71 discounted statistical fatalities avoided which FHWA valued at $2.7 million per fatality for a total of $192 million. Thus, the value of all other benefits was $168 million and the net cost of the rule (not counting fatalities) was $60 million/year. The average age of a highway fatality victim for this rule is about 40 years old. A 40-year-old has a remaining life expectancy of about 39 years. Discounting these life-years (at 7 percent) to the time of the fatality yields an estimate of approximately 13.3 discounted life years of benefit per fatality avoided. Thus, the discounted number of life-years associated with fatalities avoided by this rule is about 946. Dividing the corresponding net cost estimates by these estimates results in cost per life-year of about $63,000. Adjusting for inflation, the cost per life-year expressed in 2001 dollars is about $69,000. The corresponding cost per life-saved is about $920,000.

Roadway Worker Protection

The Federal Railroad Administration estimated the cost of the rule to be $229 million discounted over the first 10 years and benefits to be $88 million discounted over the same period. (61FR65973), Office of Safety: Roadway Worker Protection Final Rule Regulatory Impact Analysis, September, 1996, p. 3). FRA monetized all benefits, including injuries and fatalities avoided. The benefits included 32.6 discounted statistical fatalities avoided which FRA valued at $2.7 million per fatality for a total of $62 million discounted over 10 years. Thus, the value of all other benefits was $26 million and the net cost of the rule (not counting fatalities) was $203 million (or $227 million in $2001). The average age of a fatality victim for this rule is about 40 years old. A 40-year-old has a remaining life expectancy of about 39 years. Discounting these life-years (at 7 percent) to the time of the fatality yields an estimate of approximately 13.3 discounted life years of benefit per fatality avoided. Thus, the discounted number of life-years associated with fatalities avoided by this rule is about 434. Dividing the corresponding net cost estimates by these estimates results in a cost per life-year of about $468,000. Adjusting for inflation, the cost per life-year expressed in 2001 dollars is about $523,000. The corresponding cost per life-saved is about $7.0 million.

Exposure to Methylene Chloride

OSHA estimated the benefits of this rule to be 34 lives saved per year at a net cost of $101 million/year, in 1997 dollars. [62FR1566]. Those who contract cancer from exposure to methylene chloride contract cancer after an average of 20 years. Assuming that the average worker is 40 upon first exposure, then their premature death robs them of 21.5 years of additional life, according to the life expectancy tables published by the CDC. Discounting these 21.5 life-years saved twenty years into the future at 7 percent results in a savings of 2.83 discounted life years of benefit per fatality avoided. Thus, the discounted number of life-years associated with fatalities avoided by this rule is 2.83 ·34, or approximately 96 per year. Dividing the corresponding net cost estimates by these estimates results in cost per life-year of about $1.05 million, which is $1.16 million in 2001 dollars. The corresponding cost per life-saved estimate is $12.7 million.

Powered Industrial Truck Operator Training

The Department of Labor (DOL) estimates that the benefits of this rule are $136 million per year, and the costs to be $16.9 million dollar per year, in 1993 dollars [63FR66264]. This does not include a monetized estimate of the value of loss of life or pain and suffering of injured workers. DOL estimated that this rule would prevent 11 fatalities per year. We assume that the average age of a fatality victim for this rule is about 40 years old. A 40-year-old has a remaining life expectancy of about 39 years. Discounting these life-years (at 7 percent) to the time of the fatality yields an estimate of approximately 13.3 discounted life years of benefit per fatality avoided. Thus, the discounted number of life-years associated with fatalities avoided by this rule is about 146 per year. Since the monetized non-mortality benefits exceed the costs by a considerable margin, the net costs are negative and the net cost per year of life-saved is less than zero.

Stage 1 Disinfectants/Disinfection By-Products (DBPs)

EPA estimated annual costs for this rule at $701 million in 1998 dollars. EPA also provided a range of quantified annual benefits estimates of 0 to 513 avoided fatal bladder cancer cases, and 0 to 1,719 avoided non-fatal cases [63FR69441]. EPA used a value of $587,000 for non-fatal cases. At the upper end of the range, the value for non-fatal cases alone would be about $1 billion. Since this exceeds the costs of the rule, the cost per life year saved would be negative in the most favorable situation. In the least favorable situation, the cost per life year would be infinite, since no lives would be saved if the link turns out not to be causal.

Interim Enhanced Surface Water Treatment Rule

EPA estimated annual costs of $307 million in 1998 dollars. EPA also estimated a range of 110,000 to 463,000 non-fatal cases and 14 to 64 fatal cases of cryptosporidiosis avoided per year [63FR69499]. EPA valued the non-fatal cases at $2,000 per case. At the low end, this gives a total valuation of $220

million for the non-fatal cases, leaving a net cost of $87 million for fatal cases. At the high end, the value of the non-fatal cases alone would be $926 million, which exceeds the costs of the rule, leaving a negative cost per life-saved for the fatal cases. EPA did not provide an estimate of the number of life-years per avoided fatal case. Cryptosporidiosis (a severe case of stomach flu) is generally not fatal, only in rare cases involving the elderly or persons with compromised immune systems (such as AIDS or chemotherapy patients) is it likely to be. It is probably reasonable to assume that such people would have a relatively short life expectancy even without contracting cryptosporidiosis. Using the "low-end" benefits assumption of 14 life years per case (or about 10 life years discounted), which primarily affects the elderly population, yields about 140 life years, or an upper bound of $621,000 per life year. Adjusting for inflation, the cost per life-year expressed in 2001 dollars is roughly $680,000. The corresponding cost per life-saved is about $6.8 million.

NO_x SIP Call

EPA estimated that the NO_x SIP Call would impose annual costs of $1.66 billion per year in 2007. (U.S. Environmental Protection Agency (USEPA), Regulatory Impact Analysis (RIA) for the NO_x SIP Call, FIP, and Section 126 Petitions, Office of Air Quality Planning and Standards, Research Triangle Park, N.C., December 1998; Table ES-2) EPA also estimated that the resulting NO_x reductions would yield monetized benefits of $730 million per year associated with a variety of other health and welfare related endpoints.[1] (U.S. EPA, RIA for the NO_x SIP Call; Tables 4-9, 4-10 and 4-30) After subtracting these health and welfare benefits from the cost estimate, the net cost of the projected reduction in premature mortality is $0.93 billion per year.

EPA calculated that the expected reduction in NO_x emissions would yield a reduction of 370 premature deaths a year. EPA assumed that there would be a lag in realizing the full change in the risk of premature mortality, with 25 percent of the projected reduction in premature deaths occurring in the first year, 50 percent in the second year, and an additional incremental increase in the reduction of premature mortality of 16.7 percent in each of the subsequent three years (reaching 100 percent of the projected reduction in the fifth year). (U.S. Environmental Protection Agency, Benefits and Costs of the Clean Air Act (CAA), 1990 TO 2010, Office of Air and Radiation (1999), p.58) This lag structure coupled with a five percent discount rate yields a reduction of 342 deaths per year as an annualized stream. EPA also reports that the average number of life-years lost in PM-related premature deaths in

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[1]The monetized benefit categories include: a reduction in the incidence of a variety of other health effects (e.g., chronic bronchitis, minor restricted activity days, hospital admissions), agricultural crop benefits, reductions in household soiling, commercial forest benefits, and improved visibility in Southeastern Parks. This estimate does not include monetized benefits estimates for reductions in nitrogen deposition in estuaries and premature mortality associated with exposure to ozone. EPA's Science Advisory Board raised serious concerns with these estimates and EPA did not include these as a part of its preferred estimates in more recent RIA's.

the United States is on the order of 14 years. (USEPA, Benefits and Costs of the CAA, Appendix I, p.I-25) Using a discount rate of 5 percent converts the 14 life-years to 9.9 discounted life years. Thus, the increase in life-years associated with the projected reduction in PM exposure associated with the NO_x SIP Call would yield 3390 additional life-years per year.

The cost per life-year saved is given by the following calculation: the net cost of $1660 million minus $730 million (from other monetized benefit categories) divided by 3390 life-years yields a cost of $274,000 per life year (1990$). Adjusting for inflation, the cost per life-year expressed in 2001 dollars is roughly $373,000.

The upper end estimate is based on EPA's estimate that the expected reduction in NO_x emissions would reduce short-term PM-related mortality by 152 premature deaths a year or about 1590 life years. All other assumptions and calculations are the same as outlined above for the lower end estimate. The cost per life-year for this alternative estimate is about $714,000. The corresponding cost per life-saved estimate ranges from $3.7 million to $8.3 million.

Petroleum Refining

The cost per life-year saved estimate for the Petroleum Refining NESHAP is <$0 because the non-mortality benefits of the associated VOC reductions exceed the costs of the rule.

EPA estimated the reduction in VOC emissions associated with the rule. Based on a benefit transfer value of $727 per ton, EPA estimated that the benefits of the rule ($109 million per year, 1992$) exceed the costs of the rule ($80 million per year, 1992$). EPA used a benefit transfer value of $727 per ton -- an estimate of the acute health benefits from VOC reductions in ozone nonattainment areas -- taken from a reported range of $23 to $1430 per ton of VOC from a 1989 study by the Office of Technology Assessment. (60 FR 43245) EPA calculated the benefits of VOC reductions by multiplying the average value by the expected reduction in VOC emissions from petroleum refineries located in ozone nonattainment areas. (60 FR 43245 and 43246)

EPA identified a variety of potential adverse health effects associated with the emissions from petroleum refineries, ranging from cancer (benzene, cresols), polyneuropathy (n-hexane), cataracts (naphthalene), anemia in children (naphthalene), and a variety of ozone-related health effects associated with VOC emissions. The non-cancer health effects from the HAPs typically occur at higher levels of exposure than estimated for the baseline level of emissions. (60 FR 43245) In terms of its effect on premature mortality, EPA reported that the mortality incidence associated with baseline emissions was less than one life per year. As a result, EPA determined that the cancer benefits associated with this rule were small and decided that they would not be quantified as a part of the analysis. (60 FR 43245) Therefore, we conclude that the reduction in premature mortality associated with this rule is small -- a fraction of one cancer per year.

Cost Per Life Saved For Ten Selected Regulations				
Regulation	**Health or Safety**	**Net Costs ($2001)**	**Lives saved**	**Cost per life saved ($2001)**
Petroleum Refining NESHAP (EPA)	Health	<0	<1 per year	<0
Powered Industrial Truck Operating Training (OSHA)	Safety	<0	11 per year	<0
Head Impact Protection (DOT)	Safety	$390 to $516 million per year	611-732 per year	$665, 000 to $705,000
Reflective Devices for Heavy Trucks (DOT)	Safety	$65 million (PV over 10 years)	71 (PV over 10 years)	$920,000
Child Restraints (DOT)	Safety	$54 to $122 million per year	25-35 per year	$1.5 million to $4.9million
Interim Enhanced Surface Water Treatment (EPA)	Health	<0 to $95 million per year	14-64 per year	<0 to $6.8 million
Rail Roadway Workers (DOT)	Safety	$227 million (PV over 10 years)	32.6 (PV over 10 years)	$7 million
NO_x SIP Call (EPA)	Health	$1265 million in 2007	152-342 per year	$3.7 - 8.3 million
Methylene Chloride (OSHA)	Health	$112 million per year	8.8 per year	$12.7 million
Stage I Disinfection By-Products (EPA)	Health	<0 to $764 million per year	0-402 per year	<0 to infinite

Notes: Net costs were calculated by subtracting from compliance costs an estimate of any non-fatality benefits such as a reduction in injuries or morbidity. PV = Present Value. Lives saved are discounted and/or annualized to enable comparability with the corresponding net cost estimates.

Mr. COOPER. It's my understanding that OIRA was heavily involved in developing the benefits analyses for the administration's Clear Skies proposal.

Dr. GRAHAM. Correct.

Mr. COOPER. And, I assume if you worked on the benefits, you also worked on the costs, or just the benefits?

Dr. GRAHAM. Both.

Mr. COOPER. I have been told that the assumptions underlying the modeling for that assume that it's less important to save the lives of elderly people because they have less long to live than it would be to save the lives of young people. Is that a fair characterization of what was done?

Dr. GRAHAM. No. I don't think so. Actually, if you look closely at the benefit estimates that are in what I refer to as the alternative estimate in my answer to the previous question, the life-year-saved approach, they assume that each year of life after age 70 is valued at $250,000 of savings, a rather substantial investment. And, for each year of life saved for those under age 70, it's at roughly $163,000.

So once you're in the life-year-saved approach, you face the difficult and sensitive issue of how do you value each of those years of life within the life span, and that is the approach that EPA used in the alternative estimate.

Mr. COOPER. Perhaps I need to review that document that I was requesting earlier, but it's my impression that the administration's Clear Skies proposal assumes that lives of people who are younger than 70 years of age are worth about $3.7 million each, whereas lives over age 70 are worth considerably less.

Dr. GRAHAM. Actually, the administration's Clear Skies proposal presented two sets of estimates. One assumed that all lives saved are equally valuable at roughly $6 or $7 million per life saved, and then the alternative estimate used the life-year approach, and it assumed that, for senior citizens, because they have relatively few life years remaining, that the valuation of each of their remaining life years is greater than for those younger than age 70.

Mr. COOPER. I thank you.

I have no more questions, Mr. Chairman. Thank you.

Mr. OSE. I thank the gentleman.

I want to go back to something that Governor Janklow brought up, if I could, Dr. Graham. He was asking about whether or not any consultation has been done between State and local interest groups or the National Governors Association. I was unclear on the answer relative to the impact on Federal rules and the paperwork imposed on State and local and tribal governments.

So, the question directly is, has any contact been made with State or local governments or tribal groups regarding the impact of Federal rules and paperwork imposed on them?

Dr. GRAHAM. Our final report, our 2002 report, describes for a variety of the agencies the activities of consultation that are being undertaken, and I don't have the specific groups at my fingertips right now, but there is a substantial amount of consultation described in that report.

Mr. OSE. Is that by regulation or by agency or both?

Dr. GRAHAM. I think it's done by regulation. They describe a variety of different regulations and what the different approaches are to consulting State and local officials. Is it the Governor's office? Is it the State agency? Is it the legislature and so forth?

Mr. OSE. OK. And—but there hasn't been any—again, those are individual rules. It hasn't been an agency kind of approach, if you will? You have to take the individual rules and aggregate them to get the agency information?

Dr. GRAHAM. Right. And quite frankly, there's variability within agencies on how well they exercise that responsibility. I would be reluctant to generalize across a whole agency.

Mr. OSE. We go back to that—about the quality of the information—or the assumptions underlying the conclusions.

The next question I have has to do with the manner in which this information is delivered. This year the accounting statement with great appreciation came out at the same time as the President's budget. It came out in the Federal Register. What is the likelihood of pairing it with the President's budget? Is there any positive or negative to be gained by putting the other accounting statement with the President's budget, or is there something to be gained by leaving it separate? I'm curious about that particular question.

Dr. GRAHAM. I think it's a good question, and I think, quite frankly, the utility of that to Members of Congress and the appropriators is something that I think we would be interested in their judgment on that question.

The one cautionary remark I would make is, we have released our draft report in the Federal Register at the same time as the budget. It is not our final report. It has not been peer reviewed. It has not been subject to public comment. And, consequently, we would be a little reluctant to put a document like that in the budget documents themselves.

Mr. OSE. Because of its draft nature?

Dr. GRAHAM. Yes.

Now, the statute requires that we get peer review, public comment and interagency review before we go final, and, if you back up to allow the appropriate time for that activity, as a practical matter, we would probably have to trail a year to put this in the Federal budget documents.

Mr. OSE. I don't want to go that way.

Dr. GRAHAM. So, I think that there are some practical problems with that idea.

Mr. OSE. All right. I appreciate the feedback.

The other thing you've been struggling with, which I just find amazing, and Governor Janklow brought this up earlier, is that when the agencies submit to you their information, sometimes it comes in with what I'm going to call a hodgepodge of standards and timeframes and what have you. Do you support or do you not support a requirement that this regulatory accounting statement use the same 7-year timeframe from agency to agency to agency?

Dr. GRAHAM. The 7-year timeframe, as I understand it, comes from the tradition on the budget side of how they present information, and that is not currently the way in which we develop and present information for regulatory costs and benefits.

For example, if you were to put a new piece of pollution control equipment on a heavy diesel-powered truck, we would estimate the costs and benefits over the expected lifetime of the truck. OK? And, we would not want to cut that off after 7 years, and not count the operating costs that are higher after 7 years or the benefits that are gained after 7 years.

Now, one possibility would be to somehow collapse all that information into the 7-year period, but then you have an arbitrary allocation of that to the 7 years.

Mr. OSE. Or you end up discounting the future value of it.

Dr. GRAHAM. What we do currently is we discount all of those future costs and benefits to their present value, but we express those as an annualized value, like a mortgage payment, over that horizon of the investment. So, it's not clear to us how this 7-year exercise would be accomplished in this case, but we're open to a suggestion on whether that would really be useful.

Mr. OSE. I want to come back to this, but my time is expired. The gentleman from South Dakota.

Mr. JANKLOW. Thank you very much, Mr. Chairman.

Dr. Graham, OMB currently uses what they call an information collection budget; is that correct?

Dr. GRAHAM. Yes, sir.

Mr. JANKLOW. And, managing the paperwork that needs to get done, do you support a pilot test to do regulatory budgeting to see if this would help OMB and the other agencies rank their risks and establish the priorities, make the choices they have to make?

Dr. GRAHAM. Well, let me start with the premise of the question. While we do have what's called an information collection budget, it is not one where either we or Congress imposes on each agency a limited amount of paperwork that they're allowed to do, and then they can choose which paperwork burdens to impose and which not to impose. We review each paperwork burden request based upon its rationale, without any cap on the total amount. Congress has not imposed a cap. We at OMB don't feel we have the authority to impose that cap. We do have the responsibility to review each request on its own merits.

But having admittedly quibbled with the premise of your question a little bit, I want to get to the heart of the question, which is would it be a good idea to do a pilot project of some form to experiment with the idea of the regulatory budget? And I do think that there would be some significant advantages to such a pilot.

Mr. JANKLOW. Do you have the legal authority to do that now?

Dr. GRAHAM. I'd have to confer with counsel on that subject, as I'm not certain about it.

But, the point I would like to make is that I think that, in order to give the concept of a regulatory budget a fair experiment that is going to give a good indication of what it would actually be like if it were done more substantially, I think it should be done on a very modest basis, probably within a particular agency, and one where we think we have readily available information to operationalize the comparison of risks, the number of lives saved and different programs and so forth. Something like the National Highway Traffic Safety Administration might be an example of

that, with responsibility for the safety of the highways, the safety of automobiles and so forth.

Mr. JANKLOW. Sir, absent that, is there a better way to do it than we're doing it? In your opinion, is there a better way to do it than we're doing it?

Dr. GRAHAM. Well, I think we have a lot of work we can do better at analyzing the specific regulatory packages that are submitted to it. We don't for a minute want to suggest that we're doing all we can at the present time. We realize we have to work harder at what we're doing.

Mr. JANKLOW. How do we fix that? How do we get you to work harder?

Dr. GRAHAM. Well, I think that these hearings are helpful. As evidenced today, what happened this year compared to last year is clear evidence that we do try to be responsive to what the subcommittee feels is critical, and we definitely work in that direction.

But I think, in reaction to your question, I think that it is a constructive idea. We would have to sit down and work out the operational details of how such a pilot might be launched, whether it requires legislation, whether it doesn't require legislation. But we're open to that. We think that's a constructive idea.

Mr. JANKLOW. Thank you.

Thank you, Mr. Chairman.

Mr. OSE. The gentleman from Tennessee.

Mr. COOPER. Thank you, Mr. Chairman.

I'd like to return to the value of human life question. It's my impression from reading the newspaper that the government's smallpox inoculation program has adopted procedures from an old Policeman's Compensation Act that values a life at about $260,000 each. You know, say you died as a result of having the inoculation. The government's liability would be limited to that amount.

There are other examples of government attempts to value human life, and you might turn toward an environmental regulation that said you had to clean up all the dirt in the brownfields and spend hundreds of millions of dollars doing it so that, if you ate the dirt, you wouldn't get sick, and you could impute a value, many millions of dollars, to a human life saved in that instance.

Is there any study that you're aware of that looks across government agencies to see how different agencies treat the value of human life? For example, the compensation fund in New York City for victims of September 11th. The administrator of that fund is trying to figure out how much to pay each beneficiary for their family, and part of that calculation is their earnings potential over an estimated future life span, and that calculation, you know, varies widely between individuals. Janitors get paid less than investment bankers. Are you aware of any consistent effort for the government to look at these different valuations or approaches, because it's human beings involved in every case?

Dr. GRAHAM. It's something that we're concerned about at OMB, that different agencies—when they do cost-benefit analysis or even when they do compensation programs of various sorts—have differences in what types of numbers they're using, and we're not always fully clear on what the rationale is for why the numbers are different in one agency than they are in another agency.

One of the reasons we're encouraging the public and academic experts and others to participate in the process of OMB's new regulatory analysis guidelines is because that issue is on the table, whether there should be some consistency across agencies or whether we should be allowing agencies to do different things in different situations. So, now is a time for that comment, because those guidelines are now open.

Mr. COOPER. How long will the comment period last?

Dr. GRAHAM. I think it runs—is it early April, I believe Mr. Chairman noted at the beginning of the hearing.

Mr. COOPER. I think there's a professor at Harvard Law School who is quite an outspoken researcher in this area, and it's a very controversial area. He's been denounced when he makes public appearances for even raising the topic. But, I don't know if he submitted a comment yet. I may—at least one of the experts that I'm aware of in the field as we try to go through this thing. I take it you didn't meet him while you were at Harvard?

Dr. GRAHAM. Is this Professor Viscusi?

Mr. COOPER. Yes.

Dr. GRAHAM. Yes. We are expecting comments, and we are in communication with him.

Mr. COOPER. Well, I hope he will weigh in with the debate.

I thank the Chair.

Mr. OSE. I thank the gentleman.

Dr. Graham, the purpose of this when we set out was to try and find a way whereby Congress took an active role each year in how the regulatory burden that is placed on the American public by virtue of our actions gets allocated. Is it too high? Is it too low? Is it just right? Where do we want more, where do we want less and what have you? Now, that leads me to ask, as I did with Dr. Miller in an op-ed last year, whether or not it's appropriate to develop a—what I refer to as a regulatory appropriations process. Now, that would necessarily mean that we quantify the burden, we quantify the benefit, we quantify the cost, and then to make a decision, a conscious decision as we do in the fiscal appropriations process, as to whether or not we want to place this burden in exchange for the benefit on the American public. And, it would mirror, if you will, the appropriations process for a fiscal side almost exactly.

What is your view of the utility of such a regulatory appropriations process?

Dr. GRAHAM. I can only start by saying that I think the question you just asked is closely related to the question about the pilot project on the idea of a regulatory appropriation or a regulatory budget. I guess my starting point would be, while there is some good conceptual writing in the literature on the merits of this idea, and there are people on the panel who will follow me who know these issues certainly better than I do, my instincts are that we should lead with pilot project development of experience rather than jumping directly in. And, there are some concerns about that kind of idea that we need to get addressed.

For example, we feel strongly that not only the costs of regulation should be considered, but the benefits of regulation should be considered, and how exactly that would emerge in this process of a regulatory appropriation. And, we understand on the budget side

that they look primarily at the budgetary allocation, but maybe they don't always look as carefully as they need to at certain types of benefit issues. So, it's something we're very sensitive to and think it's important to keep track of.

So, I guess you'd say in a cautionary way we're optimistic about the idea, but we'd like to proceed incrementally.

Mr. OSE. I think that's what brings home to me the importance of the work that you do. When you interact with the different agencies and the like, asking them to, in effect, measure their costs and benefits of this and that program and submit them for a regulatory accounting purpose, it then will allow those of us who have the duty, if you will, to allocate resources and make decisions to prioritize A, B, C, if we can save 100 lives here or we can save—or remove 35 tons of carbon monoxide there and so forth and so on.

The question I have is then—kind of to pile on—is a little bit broader in the sense that are you making progress with the different agencies in terms of standardizing the format under which they report to you so that apples are apples and oranges are oranges, and that the decisionmakers' use of this information leads to, frankly, good decisions? So my question is, is that happening? Are we making progress?

Dr. GRAHAM. Well, I'm sure we could do better, but the guidelines which are now open for comment are the instrument by which OMB lays out its expectations for what agencies will supply to us in the analytic process. But, just to support the general premise and line of thinking that is behind your question, we're hearing a lot in the news today about concerns about the safety of sport utility vehicles, of light trucks and so forth. It would be useful to know how many lives could be saved through different approaches through improving the safety of sport utility vehicles. Some of these ideas are very expensive, but some are very basic things like people should wear safety belts, we should enforce safety belt laws. It turns out 70 to 80 percent of the people killed in SUV rollover crashes were not wearing safety belts. So, before we get into very grandiose schemes for how we're going to address that problem, it would be useful, I think, to look at the more basic and straightforward approaches.

Mr. OSE. My time has expired. The gentleman from South Dakota. The gentleman has no further questions. The gentleman from Tennessee.

Mr. COOPER. I have no further questions, Mr. Chairman.

Mr. OSE. The gentleman has no further questions. I want to thank you for coming. We are going to leave the record open in the event there are written submittals and we appreciate your timely response to them. That will be for a period of 10 days from today. As always, it's great to have you come visit with us to see us making marked progress, in other words, measurable progress forward in correlating the benefits with the costs of regulation. These standards that we're going to use that are out for comment right now, I think this is at the heart of our next leap forward, and I encourage your pursuit of that. I appreciate your coming.

Dr. GRAHAM. Thank you, Mr. Chairman.

Mr. OSE. We're going to take a 5-minute recess to allow the second panel to come forward.

[Recess.]

Mr. OSE. We're going to reconvene. This is the second panel of today's hearing. As we reviewed in the first panel, first I want to welcome the witnesses today for joining us. We appreciate your taking the time to come down and testify. There are five of you. Each of you have submitted significant statements. Those statements, I mean, I've read them. Trust me, I've read them. The staff has read them. We have had the opportunity to review them. We appreciate your submitting them. However, given the length of some of them, we're going to constrain your summaries of them to 5 minutes each, and we'll just move from my left to right as it relates to that. Then we'll go to questions from Members.

Now, as indicated in the earlier panel, we routinely swear in our witnesses here. So if all five would rise.

[Witnesses sworn.]

Mr. OSE. Let the record show that the witnesses answered in the affirmative. Today on the second panel are Dr. James C. Miller III, who is the former Director of OMB and now with CapAnalysis group. Dr. Robert Hahn who is the director of the AEI-Brookings Joint Center for Regulatory Studies. Dr. Jim Tozzi who is a former Deputy Administrator for the OIRA over at OMB and an advisory board member for the Center for Regulatory Effectiveness. We have Lisa Heinzerling—am I saying that correctly?

Ms. HEINZERLING. Yes.

Mr. OSE. OK. Who is a professor of law at Georgetown and Rabbi Daniel J. Swartz who is the executive director at Children's Environmental Health Network.

Thank you all for coming. Dr. Miller, you are going to be first for 5 minutes.

STATEMENTS OF JAMES C. MILLER III, FORMER DIRECTOR, OFFICE OF MANAGEMENT AND BUDGET, CHAIRMAN, CAPANALYSIS GROUP; ROBERT HAHN, DIRECTOR, AEI-BROOKINGS JOINT CENTER FOR REGULATORY STUDIES; JIM TOZZI, FORMER DEPUTY ADMINISTRATOR, OFFICE OF INFORMATION AND REGULATORY AFFAIRS, OFFICE OF MANAGEMENT AND BUDGET, ADVISORY BOARD MEMBER, CENTER FOR REGULATORY EFFECTIVENESS; LISA HEINZERLING, PROFESSOR OF LAW, GEORGETOWN UNIVERSITY LAW CENTER; AND RABBI DANIEL J. SWARTZ, EXECUTIVE DIRECTOR, CHILDREN'S ENVIRONMENTAL HEALTH NETWORK

Dr. MILLER. Thank you, Mr. Chairman. I have the report and thank you for admitting that into the record.

[NOTE.—The information can be found at www.omb.gov and is on file with the subcommittee.]

Dr. MILLER. I'll try to be very brief. I will make the point that the OMB report this year is of better quality than last year. There are some deficiencies. It's a draft report rather than a final report. There are a lot of inconsistencies in the data that are presented. By and large, though, I make the same point I made last year. This I think is attributable to the agencies not responding with the tem-

plate that OMB has requested. OMB might be more aggressive in insisting on the agencies providing the information in a consistent fashion, and perhaps that will be the case next year. Technically, I think the work is quite good. The draft guidelines incorporate some of the best, I think, very high-quality standards. I think that's very important.

Second, the vast majority of the information that reaches OMB for this report comes from the agencies. Now, I know the agencies realize that there are biases in the information they receive. People who advocate regulations tend to overstate the benefits. People who oppose regulations tend to overstate the costs. But, by and large, the raison d'etre of the agencies is to issue regulations. So, if there is a bias, I think the bias is that they tend to overstate benefits and understate costs.

Third, independent agencies don't report their information under the Executive orders. I remember very vividly talking with then-Vice President George Herbert Walker Bush about this, and he made the decision not to extend President Reagan's Executive Order 12291 to the so-called independent agencies.

I would urge you to consider extending this requirement and the requirements of regulatory reporting statutes to the so-called independent agencies. Few of them really do the benefit-cost analysis to support the rules and those that do tend to fall short, in my judgment, of the kind of standard that OMB outlines in its guidelines.

Fourth, there are a lot of cases where regulatory agencies are explicitly forbidden to follow the kind of analysis that we all are looking for. That is to say, sometimes Congress says no matter what the cost, you must do it this way. Sometimes it says you must follow some kind of engineering standards rather than performance standards. These really raise cost—or in the alternative, with the same costs you could realize substantially greater benefits.

I really urge you to have OMB do a study of this or to initiate a study some other way in order to find out the nature of this.

Finally, even if the OMB report were perfect, you still don't have a process for evaluating regulations, applying restraints on costs, and prioritizing. OMB does a good job, I think, but they can only go so far, and I really think Congress should have a regulatory appropriations process—the idea we—Mr. Chairman, you and I—wrote about last year.

So I urge you to talk with your colleagues about that. I urge you and your colleagues to urge the agencies to respond to OMB more completely and in a more expeditious manner, and a more complete manner, and in a manner that's more consistent across agencies and regulations.

And, by the way, I want to respond to your question. I think OMB should issue this report, a final version, at the same time the budget comes out. It ought to be a regulatory budget.

Twenty years ago, when I was OIRA Director and Jim Tozzi was Deputy Director of OIRA, we talked about having a regulatory budget. We didn't get it done, but surely somebody can get it done, and if you put the pressure on OMB and the agencies, I think you can do it. I think you would have a much better handle on total regulation. The administration can do it on its own if it wants to

take the initiative, and I would encourage you and encourage other people in the administration, such as John Snow, the Secretary of Treasury to work with on this. Snow is an economist, very well-trained, thoughtful guy, and he could lead an effort in this regard. Thank you, Mr. Chairman.

Mr. OSE. Thank you, Dr. Miller.

[The prepared statement of Dr. Miller follows:]

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STATEMENT OF JAMES C. MILLER III

before the

SUBCOMMITTEE ON ENERGY POLICY, NATURAL RESOURCES

AND REGULATORY AFFAIRS

of the

COMMITTEE ON GOVERNMENT REFORM

U.S. HOUSE OF REPRESENTATIVES

on

MARCH 11, 2003

Mr. Chairman and Members of the committee: thank you for inviting me to comment on the Office of Management and Budget's (OMB's) report on regulatory activity and how to improve compliance with the statutory requirement for an accounting by agencies and their programs on the impacts of Federal rules and paperwork requirements.[1] I am Chairman of The CapAnalysis Group, an affiliate of Howrey Simon Arnold & White, an international law firm which specializes in antitrust, intellectual property, and complex litigation.[2] I have a particular interest in the matters before you today, having been a Director of OMB (1985-1988) and having been the very first Administrator of OMB's Office of Information and Regulatory Affairs (OIRA; April-October, 1981).[3]

I'd like to make, then elaborate on, two points. First, the OMB's draft report: while it is draft, not final, and while in many ways it is incomplete, the major problem lies not in OMB's procrastination, but in the unwillingness of the agencies to comply fully with OMB's request for relevant information.

[1] See U.S. Office of Management and Budget, Draft 2003 Report to Congress on the Costs and Benefits of Federal Regulations, Federal Register, February 3, 2003, pp. 5492-5527.

[2] Neither The CapAnalysis Group nor Howrey Simon Arnold & White receive any funding from the federal government.

[3] A brief resume is found at Attachment A to this statement. I'd like to thank Loren Zadecky, an Analyst at CapAnalysis, for assistance in the preparation of this statement.

CAP ANALYSIS

Second, even if the OMB report were perfect in every respect, Congress would not have in place a process for making appropriate decisions about regulatory action. As we explored at a comparable hearing last year, and which, Mr. Chairman, led to our publishing an op-ed in the Washington Times (copy found at Attachment B to this statement), I believe Congress should institute a regulatory appropriations process patterned after the fiscal appropriations process.

The OMB Report

OMB should be commended for the technical quality of its work and for its perseverance in getting agencies to improve their regulatory performance. Appendix C to its report (the "Draft Guidelines") in particular shows great sophistication and adherence to the latest and best research on the benefits and costs of regulation. In the main body of the report, OMB works hard to make agency reports comparable and includes important admonitions and caveats about drawing unwarranted conclusions from the various agency analyses – a deficiency, in part, the guidelines are meant to address. For example, not all agencies have bothered to estimate benefits and costs of their proposed regulations, and those that do have not provided consistent estimates for their various activities. Across agencies, especially, there are differences in the time periods for discounting benefits and costs, the discount rates employed, the value placed on probabilities of reductions in premature deaths and injury, et cetera. OMB can solve some of these problems, but most of the deficiency arises from a lack of enthusiasm agencies have for meeting such requirements. As I did last year, I urge you to work with your colleagues who have more direct responsibility for the regulatory agencies, to encourage them to insist that the agencies comply with OMB's requests for information needed to compile its annual report to Congress.

Let me make a few observations and make a few specific suggestions raised by the report. First, from the data, it appears that regulations have been better in more recent years, in the sense that estimates of benefits tend to be higher uniformly than estimates of costs. It would be hoped that all the reform efforts – enactment of the Paperwork Reduction Act, the establishment of OIRA (and work of its predecessors), efforts pursuant to the "Regulatory Right-to-Know Act," and other reform activities would have improved regulatory performance. It may also imply that the more recent regulations, by nature, are closer calls (reflecting an appropriate ordering of regulatory initiatives – the more important earlier). But it may also imply a systematic bias in the benefit and cost estimates of prior regulatory initiatives.

Second, it's important to understand that the vast majority of the information on which the analyses of costs and benefits are made come from the agencies, not OMB. As is well known, when pressed to provide estimates, the agencies have a bias to show high benefits and low costs of their work. It is also

well known that there are biases in the information available to the agencies – proponents have a tendency to overstate the benefits, and those directly bearing the costs, primarily business enterprises, tend to overstate the costs. On the whole, however, since the final determinations are made by the agencies, the agency bias tends to dominate – that is, to inflate estimates of benefits and deflate estimates of costs. OMB should be given a stronger role in policing this bias by replacing agency reports of benefits and costs with more objective estimates where warranted.

Third, as you know, independent agencies don't report estimates of benefits and costs through Executive Order 12866. Some of the independent agencies, such as the Securities and Exchange Commission, do provide estimates of benefits and costs in some of their rulemakings, but my impression, based on a selective review, is that such analyses fall far short of meeting the standards employed by OMB. Let me suggest that you include these so-called independent agencies under the perview of Executive Order 12866 (or its equivalent), the Regulatory Right-to-Know Act, and other regulatory reporting and review requirements.

Fourth, although I have not made a study of this, based on my experience at OIRA and elsewhere, there are a myriad of cases where a regulatory agency is forbidden explicitly from declining to promulgate a regulation that patently falls far short of meeting any reasonable benefit-cost test, or is forced to promulgate a regulation that is patently cost-ineffective. It may by a congressional mandate to promulgate a regulation "regardless of costs." It may be a mandate to promulgate a regulation based on any showing of adverse effect no matter how low the level of exposure. Or, it may be a mandate to promulgate a regulation based on specific engineering controls rather than a performance standard dealing with actual exposure. The potential for lowering overall regulatory costs, or for the same cost increasing regulatory benefits, could be quite large. I urge you to direct OMB to undertake, and the agencies to cooperate with, a study of such phenomena, and to report back to Congress in a timely fashion.

Regulatory Appropriations Process

Let me now turn to a matter we discussed last year and one, Mr. Chairman, you have asked your colleagues to consider. I refer, of course, to the notion of a regulatory appropriations process.

As you and I wrote in the piece attached to this statement, there is a crying need for Congress not only to be informed about agencies' regulatory performance, but to play a more active role in setting limits and establishing priorities. Just consider: reasonable estimates place the annual cost of federal regulations at about half total fiscal outlays – or more than total discretionary outlays. In other words, the cost of federal regulation exceeds the (fiscal outlay) cost of the Departments of Defense, Justice, State, Interior, Transportation,

Labor, Commerce, and others put together. Yet, I doubt the attention given by Congress to the budgets of each of those agencies just mentioned exceeds the attention given to the whole of federal regulatory activity.

Congress should remedy this oversight by establishing a systematic way of reviewing regulatory activity and giving more direction to the regulators. In fact, the need for such a comprehensive process is suggested by OMB in its draft report:

> OMB's examination of the benefits and costs of Federal regulation supports the need for a common-sense approach to modernizing Federal regulation that involves the expansion, modification, and rescission of regulatory programs as appropriate.[4]

With the establishment of the type of regulatory appropriations process we suggest, Congress could address the appropriate size and scope of the regulatory enterprise, encourage agencies to be cost-effective in the regulations they promulgate, and prioritize more efficiently by providing an incentive for agencies to annul or improve regulations which are no longer needed or which are imposing unwarranted costs in relation to benefits.

None of us would argue that the present (fiscal) appropriations process is perfect. But, warts and all, it far exceeds the efficiency and comprehensiveness of the current regulatory process.

[4] OMB, Draft Report, ibid., p. 5495.

ATTACHMENT B

The Washington Times

PAGE A16 / WEDNESDAY, JULY 24, 2002 ★

JAMES MILLER / DOUG OSE

Regulation could stand more oversight

Every year, Congress goes through an elaborate process of appropriating money to run federal agencies and to finance many of their programs. In each chamber, there is a full appropriations committee and 13 separate subcommittees, the chairmen of which are referred to as "the College of Cardinals." Representatives fight with each other to get one of the 65 seats on the committee. Subcommittees fight with each other to get bigger shares of the appropriations pie.

Congress' approach to regulation is very different. The regulatory agencies' authorization committees occasionally hold hearings, as do a few oversight committees. But Congress' attention to regulation is a shadow of its preoccupation with spending.

This imbalance is curious. The Bush administration forecasts that during fiscal year 2002 federal spending from appropriated accounts will be $688 billion (or about 6.6 percent of gross domestic product). Professor Mark Crain of George Mason University and Dean Thomas Hopkins of the Rochester Institute of Technology estimate that the annual cost of federal regulation will be at least $881 billion in 2002 (or about 8.5 percent of GDP). Thus, the costs the federal government imposes through regulation far exceed the costs it imposes (implicitly) through the appropriations process.

Congress needs to address regulation more explicitly and more comprehensively. We recommend a regulatory appropriations process. It won't be easy to develop or to implement. One problem is lack of information. Although recent legislation requires the Office of Management and Budget to submit a compilation of regulatory costs and benefits, by agency, along with the president's budget, this requirement has yet to be fully met.

Understandably, the agencies and proponents of their programs are reluctant to put a price tag on regulatory efforts, seeing this as a ploy to shut them down. But finding that a regulation is "costly" is no more an indictment than drawing the same conclusion about some health, education or defense expenditure program. The relevant question is whether the regulation or program in question generates benefits greater than costs — and whether the benefits might be achieved in a less costly way or whether greater benefits might be achieved at the same cost. This is not ideology. This is common sense.

Of course, it may be more difficult to measure the benefits of regulation than to measure the costs. But that goes for spending programs as well. For example, the costs of a federal job-relocation program may be straightforward, but the benefits may be hard to determine. The problems in measuring, or estimating, the benefits of regulatory programs are little different than measuring, or estimating, the benefits of spending programs. Each time a congressman or senator votes on an appropriation measure or a regulatory initiative they reveal their assessment of benefits as well as costs.

The spending appropriations process is not perfect, but it is familiar and works well as a model. Here is what we propose. First, the congressional leadership would establish a regulatory appropriations committee, comprised of members with interest and expertise in regulatory matters. The committee then would divide itself into several subcommittees — perhaps environmental (including EPA), other health and safety (FDA, OSHA, NHTSA, USDA, etc.), and economic (FCC, FTC). The goal would be a logical grouping of regulatory goals and approaches, and covering the whole gamut of federal regulatory efforts.

Each year, along with the spending budget, the administration would send Congress a proposed regulatory budget, detailing the major programs and the costs it proposes the federal government impose for the fiscal year, by agency. Congress then would establish, by concurrent resolution, an overall limit for regulatory costs, and then divide this total among the regulatory appropriations subcommittees. Like their spending counterparts, these subcommittees would approve regulatory appropriations for consideration by the full committee and then by the respective chambers and the president.

If this sounds awkward or otherwise difficult, it makes far more sense than the chaotic regulatory process we have today. Prior to 1921, the federal agencies operated without central budget oversight. They simply took policy leadership from Congress and the president, and spent whatever they thought appropriate from available funds. When total federal spending accounted for less than 7 percent of GDP, perhaps having such lack of control and lack of accountability didn't matter very much. But only a fool would argue that we return to such a scheme. Yet, that is precisely what we have in the regulatory process today.

James C. Miller III, a former director of the Office of Management and Budget, is chairman of the CapAnalysis Group of Howrey Simon Arnold & White. Rep. Doug Ose, California Republican, is chairman of the House subcommittee on Energy Policy, Natural Resources and Regulatory Affairs.

Mr. OSE. Dr. Hahn for 5 minutes.

Dr. HAHN. Thank you, Mr. Chairman. My testimony was jointly written with Dr. Robert Litan of the Brookings Institution, and we ask that the written remarks be submitted into the record.

Mr. OSE. Without objection.

Dr. HAHN. Coming to testify here is an honor, but it reminds me a little bit of what Yogi Berra said some time ago that this feels like deja vu all over again. I've been studying regulation and the cost and benefits of regulation for over a quarter of a century now. My sense is that the debates over regulatory policy have often been highly partisan and ill-informed, and I think that it's important to look for mechanisms to try to depoliticize the process.

Too often, legislators and agencies find it in their interest to highlight the benefits of regulation without also noting the costs. We believe it's important to highlight both and that the public has a right to know how and why regulations are implemented. One of the things that economists generally agree on is that there is significant waste in the current regulatory system. This work is supported by the AEI-Brookings Joint Center, including a recent analysis of the rule on corporate average fuel economy, which is not found to pass a benefit-cost test.

And, in addition, Dr. Graham has also done some work when he was at Harvard that suggests we could get a lot more bang for our regulatory buck.

In the testimony that you have, we offer 10 recommendations, 5 directed at OMB and 5 directed at Congress for improving regulatory accountability and transparency. I want to focus on three of them right now.

The first, and Dr. Miller touched on this, is that we think it's really important in the analysis that's done for regulations to put a good summary in front of it. So someone like you, who is very busy, can look at it very quickly and see what the agency says about costs, benefits, and whether this regulation passes a benefit-cost test?

So, we argue very strongly for a template, a kind of standardized summary table that would give you a very good idea of what's contained in that 300 or 400-page document.

Second, we believe that OMB should publish available estimates on the cost and benefits of regulations from independent agencies; but we also, in line with the recommendation made by Dr. Miller, would go further and request that independent agencies provide annual assessments of the costs and benefits of each of their major regulations.

Why do I say that? Well, if you read the newspaper, you probably are aware of the fact that the FCC had a fairly controversial decision recently about the extent to which the regional Bell operating companies should be regulated, the extent to which they should share their broadband services and the local loop. I think that having the FCC do an analysis of that multi-million, if not billion, dollar issue would be good in terms of helping the commissioners make a reasonable decision and good in terms of making the process more transparent.

Finally, I'd like to suggest that Congress should create a congressional office of regulatory analysis, or at least a separate agency

outside of the executive branch, to independently assess important regulatory activity occurring at all Federal regulatory agencies.

I can see that I'm running out of time; so I'm not going to make a lengthy case for this, but I merely want to note that there was an opportunity to do this in the 106th Congress. It would have cost $500 million for a pilot project that would have resided at GAO. My colleague and I thought that was an incredible bargain given the upside potential associated with this investment. One of the problems that OIRA has is that it can't always be honest about what it thinks politically because it has to tow the administration line. This agency could do that. Let me conclude, because I see that I'm out of time. Thank you.

Mr. OSE. Thank you Dr. Hahn.

[The prepared statement of Dr. Hahn follows:]

JOINT CENTER
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Recommendations for Improving Regulatory Accountability and Transparency

Robert W. Hahn and Robert E. Litan*

Testimony before the
House Government Reform Committee
Subcommittee on Energy Policy, Natural Resources and Regulatory Affairs

March 2003

*Robert W. Hahn and Robert E. Litan are the directors of the AEI-Brookings Joint Center for Regulatory Studies. A copy of this testimony can be obtained from the Joint Center's web site: www.aei.brookings.org. The authors would like to thank Randall Lutter for helpful comments and Ro Malik and Lisa Hazelbaker for excellent research assistance. The views expressed here represent those of the authors and do not necessarily reflect those of the institutions with which they are affiliated.

Executive Summary

This testimony identifies current and future regulatory reforms that could help improve the quality of regulatory analysis and the quality of regulatory decisionmaking. We review research from the AEI-Brookings Joint Center on regulatory impact analyses, and provide recommendations to the Office of Management and Budget and Congress on improving regulatory transparency and accountability. We believe that many of our recommendations could be implemented with bipartisan support.

The recommendations include: making regulatory impact analyses publicly available on the Internet; providing a regulatory impact summary table for each regulatory impact analysis that includes information on costs, benefits, technical information, and whether the regulation is likely to pass a benefit-cost test; establishing an agency or office outside the executive branch to independently assess the economic merits of existing and proposed federal rules; requiring that the head of a regulatory agency balance the benefits and costs of a proposed regulation; requiring that all regulatory agencies adhere to established principles of economic analysis when doing a regulatory impact analysis; and requiring that independent agencies perform regulatory impact analyses for key regulations.

Recommendations for Improving Regulatory Accountability and Transparency

Robert W. Hahn and Robert E. Litan

I. Introduction

We are pleased to appear before this subcommittee to provide our views on improving regulation and the regulatory process. We have studied and written about regulatory institutions for over two decades. Five years ago, we organized a cooperative effort between the American Enterprise Institute and the Brookings Institution to study regulation. The result was the AEI-Brookings Joint Center for Regulatory Studies.[1]

A primary objective of the center is to hold lawmakers and regulators more accountable by providing thoughtful, objective analysis of existing regulatory programs and new regulatory proposals. The Joint Center has been at the forefront of outlining principles for improving regulation, enhancing economic welfare, and promoting regulatory accountability.[2]

Our testimony proceeds in four parts. First, we provide a brief overview of regulation. Second, we present some results from research undertaken at the Joint Center, which reviews the implications of economic analyses of regulation performed by the federal government. Third, in line with the focus of today's hearings, we offer some comments on the recent draft report on the costs and benefits of regulation from the President's Office of Management and Budget (OMB).[3] Finally, we offer some suggestions for reforming

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[1] All publications of the Joint Center can be found at www.aei.brookings.org.

[2] *See* Arrow et al. (1996).

[3] We understand that the committee also is interested in addressing a study by Crain and Hopkins (2001). The study addresses the impact of regulation, and specifically regulatory costs, on small firms. We think this is an important area of inquiry. Theory would suggest the regulatory cost per worker could be higher for small firms than for large firms because of fixed costs associated with complying with regulation. The authors offer some empirical support for this finding. The study shows how compliance cost estimates vary across firms of different sizes, and in different industrial sectors, and across different types of regulation. See Tables 1, 5, 9A, 9B, 10A, and 10B.

regulation to improve both the quality of analysis and the quality of regulatory decisionmaking.

II. Regulation and Oversight

Although regulations often have no direct fiscal impact, they pose real costs to consumers as well as businesses. Regulations aimed at protecting health, safety, and the environment alone cost over $200 billion annually or about 2% of GDP.[4] Yet, the economic impacts of federal regulation receive much less scrutiny than the budget.[5]

To encourage the development of more effective and efficient regulations, all Presidents beginning with President Reagan have directed agencies to perform analyses of major regulations that show whether a regulation's benefits are likely to exceed the costs, and whether alternatives to that regulation can achieve the same goal for less money. They also have attempted to increase agency accountability for decisions by requiring that OMB review all major regulations. In recent years, Congress inserted accountability provisions and analytical requirements into laws such as the Safe Drinking Water Act Amendments of 1996, the Small Business Enforcement and Fairness Act of 1996, and the Unfunded Mandates Reform Act of 1995.[6,7]

The most prominent and far-reaching of these regulatory reform efforts are President

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[4] See Arrow et al. (1996) and OMB (2002a). OMB estimates the total annual monetized costs of social regulations as between $181 to 277 billion dollars. Cost figures are in 2001 dollars. See Table 11, OMB (2002a, 15037).

[5] See Joint Economic Committee Study (1998).

[6] Some examples of accountability mechanisms include regulatory oversight, peer review, judicial review, sunset provisions, regulatory budgets, and requirements to provide better information to Congress. Analytical requirements include mandates to balance costs and benefits, consider risk-risk tradeoffs, and evaluate the cost-effectiveness of different regulatory alternatives. See Hahn (2000).

[7] The Government Performance and Results Act (GPRA) of 1993 and the Paperwork Reduction Act of 1995 also set accountability requirements for agencies. For information on GPRA, see General Accounting Office (1996); for information on the Paperwork Reduction Act, see OMB (1995).

Reagan's Executive Order 12,291 and President Clinton's Executive Order 12,866. Both require executive agencies to prepare a Regulatory Impact Analysis (RIA) for all major federal regulations.[8] Agencies have prepared RIAs for almost twenty years in accordance with the executive orders and guidelines for economic analysis provided by OMB.[9]

III. What Do the Government's Economic Analyses of Regulations Tell Us?

The Joint Center has been engaged in conducting a systematic review of regulatory impact analysis since its inception. We wish to focus on three different efforts: one provides a comprehensive assessment of the costs and benefits of federal regulatory activities; a second examines the extent to which the costs and benefits of regulations are reported in the *Federal Register*; and a third assesses the quality of regulatory impact analyses.[10]

To assess net benefits of final regulations between 1981 and mid-1996 the Joint Center reviewed 106 RIAs. On the basis of the government's own numbers, these regulations are estimated to yield net benefits of close to $2 trillion.[11] The analysis also shows that the government can significantly increase the net benefits of regulation. Less than half of final regulations pass a neutral economist's benefit-cost test. Net benefits could increase by

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[8] President Reagan coined the term *regulatory impact analysis* in Executive Order 12,291, *see* 3 C.F.R. 128 (1981). President Bush also used Executive Order 12,291. President Clinton's Executive Order 12,866 changed the term *regulatory impact analysis* to *assessment, see* 3 C.F.R. 638 (1993). Executive Order 12,866 maintains most of Reagan's requirements but places greater emphasis on distributional concerns. Executive Order 12,866 also directs agencies to show that the benefits of the regulation "justify" the costs, whereas Reagan's executive order required agencies to show that the benefits of the regulation "outweigh" the costs. *See* Exec. Order No. 12,291, 3 C.F.R. 128 (1981–1993); Exec. Order No. 12,866, 3 C.F.R. 638 (1993–2000), *reprinted in* 5 U.S.C. § 601 (1994).

[9] See OMB (1996).

[10] See Hahn (2001), Hahn (1999), and Hahn et al. (2000).

[11] See Table 3-4, Hahn (2001, 42). The net benefits estimate does not include two rules on stratospheric ozone that, according to the Environmental Protection Agency, have net benefits in the trillions of dollars. Those rules would have a large impact on the overall estimate of net benefits (taking the government numbers as given), but not on the fraction of rules that pass a benefit-cost test.

approximately $300 billion in present value terms if agencies rejected such regulations.[12] Net benefits could also increase if agencies replaced existing regulations with more efficient alternatives, or if agencies substantially improved regulatory programs. While one could argue with the particular interpretation of the numbers provided in this study, we feel comfortable saying that a significant fraction of the government's final regulations would not pass an economist's benefit-cost test using the government's own numbers. That suggests that the executive orders requiring a careful weighing of costs and benefits have not been taken very seriously.[13]

A second strand of research examined how the government used the *Federal Register* to convey important information on the impacts of regulation.[14] The *Federal Register* was selected because it is a key repository of information on regulation within the government.

Joint Center researchers examined seventy-two final rules promulgated by regulatory agencies from 1996 through February 10, 1998, that were subject to review by the OMB. Each rule was scored on pertinent information related to alternatives considered, costs, cost savings, benefits, and other essential economic information.[15] Two important conclusions emerge from that analysis. First, *Federal Register* notices that present regulatory analysis currently exhibit a great deal of variation in the kind of information that is presented.[16] Second, with some key changes in the requirements for including and presenting information, the content of those notices could be improved dramatically.

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[12] See Hahn (2001, 4).

[13] An alternative interpretation is that those numbers were carefully weighed and then dismissed for other reasons, for example, because they left out important aspects of the problem.

[14] See Hahn (2000).

[15] Once each *Federal Register* notice was reviewed, the data were entered into a database. Each notice was then reviewed a second time to check for accuracy.

[16] For example, there was little consideration of alternatives. For all seventy-two rules, thirty-one (43 percent) considered alternatives; only nineteen (26 percent) discussed specific alternatives; and eight (11 percent) quantified them. See Hahn (2000, 935).

Further insight into the extent to which the government's analyses of regulations provide an adequate basis for decisionmaking can be found in a Joint Center study of regulatory impact analyses.[17] That study provides the most comprehensive evaluation of the quality of recent economic analyses that agencies conduct before finalizing major regulations.

Joint Center researchers constructed a dataset of final rules that includes analyses of forty-eight major health, safety, and environmental regulations from mid-1996 to mid-1999. That dataset provides detailed information on a variety of issues, including an agency's treatment of benefits, costs, net benefits, discounting, and uncertainty. The dataset was used to assess the quality of recent economic analyses and to determine the extent to which they are consistent with President Clinton's Executive Order 12,866 and the benefit-cost guidelines issued by the OMB.

The research revealed that economic analyses prepared by regulatory agencies typically do not provide enough information to make decisions that will maximize the efficiency of a rule. "The study of regulatory impact analyses shows that agencies only quantified net benefits—the dollar value of expected benefits minus expected costs—for 29 percent of the forty-eight rules...The agencies also did not adequately evaluate alternatives to the proposed regulation, another element of the Executive Order. Agencies failed to discuss alternatives for 27 percent of the rules and quantified the costs and benefits of alternatives for only 31 percent. In addition, the agencies often failed to present the results of their analysis clearly. Agencies provided executive summaries for only 56 percent of the rules."[18]

Taken together, this body of research illustrates four key points. First, many major

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[17] See Hahn et al. (2000).
[18] See Hahn et al. (2000, 861-862).

regulations are not likely to pass a standard benefit-cost test using the government's own numbers. Second, the quality of analyses is generally poor, though there is a great deal of variation in quality. Third, many analyses are not readily accessible to the general public. Finally, useful summaries of the analyses are not readily available to the general public.

IV. Recommendations for Improving the Recent OMB Draft Report on the Costs and Benefits of Regulation

This is the sixth report OMB has drafted on the costs and benefits of regulation. A recently released study from the AEI-Brookings Joint Center provides a comprehensive evaluation of the first five reports. The authors find that, "by and large, the reports represent a significant step forward in providing insights into the regulatory process..."[19] This finding also holds true for the sixth report.

The draft report represents an improvement over previous reports in some ways; however, some improvements in last year's report are not in this year's report. Improvements over previous reports include expanding the time frame of analysis to ten years, aggregating costs and benefits for regulatory programs, and presenting OMB estimates separately from agency estimates.

While there has been progress, some useful innovations are not in this draft. Unlike last year, OMB does not list the antiterrorism regulations by agency, summarize the status of return and prompt letters, or provide information on turnaround time for reviewing rules.

We offer the following five recommendations for OMB related to this year's report:

1. OMB should publish available estimates of the costs and benefits of regulations from independent agencies. It should also request that independent agencies provide

[19] The report, by Robert W. Hahn and Mary Beth Muething, is attached as appendix A.

annual assessments of the costs and benefits of each of their major regulations;[20]

2. OMB should provide information on regulations aimed at addressing terrorist threats;

3. OMB should issue a scorecard assessing the extent to which regulatory analyses comply with its economic guidelines;[21]

4. OMB should provide more information about its regulatory oversight activities, including return letters, prompt letters, and turnaround time; and

5. OMB should list regulations and programs for reform and elimination.[22]

[20] Executive Order 12,291 and Executive Order 12,866 do not apply to independent agencies. The recent Federal Communications Commission decision regulating the regional Bell operating companies demonstrates the lack of independent agency accountability. A divided FCC ruled that the Bells will no longer have to share their high-speed fiber lines with broadband competitors but would have to continue to share their local voice copper lines. See Hahn and Muething (2003) for a discussion of independent agency accountability.

[21] This scorecard would cover all major regulations and differ from the regulatory impact summary table discussed below. The agency would fill out the regulatory impact summary table. OMB would issue the scorecard discussed here.

[22] We will discuss these issues in more detail in our formal comments, which will be submitted to OMB.

V. Recommendations for How Congress Could Improve Regulation

A complete discussion of improving regulation is beyond the scope of this testimony.[23] Here, we wish to focus on a few key policies that will either promote economic welfare (broadly understood) or promote greater regulatory accountability. We believe these recommendations would receive bipartisan support. We also believe that proposals that are viewed as more far-reaching, such as requiring that a regulation pass a broadly defined benefit-cost test, are unlikely to be implemented in the near future because the political support will not be there.

> Recommendation 1: Congress should require that agencies make each regulatory impact analysis and supporting documents available on the Internet before a proposed or final regulation can be issued.

Discussion: If the RIA is expected to inform the decision process, the analysis must precede the decisions themselves. Making such analyses widely available is an important first step in holding lawmakers and regulators more accountable for proposed and final regulations. Some agencies, such as the Department of Health and Human Services and, increasingly, the Environmental Protection Agency, are moving in that direction by eventually putting the regulatory impact analysis on the Internet.

> Recommendation 2: Each regulatory impact analysis should include an executive summary with a standardized regulatory impact summary table that contains information on costs, benefits, technical information, and whether the regulation is likely to pass a benefit-cost test based on the best estimate of quantifiable benefits and costs.

Discussion: The executive summary, regulatory impact summary table, and the requirement of standardization would all promote greater regulatory accountability. The standardization and summary will make it easier for the public, interest groups, and academics to obtain information on the government's views of the benefits and costs of

regulation.

The information identified in the regulatory impact summary table is similar to that required by Executive Order 12,866, the Unfunded Mandates Reform Act, and the Regulatory Flexibility Act. Congress should simply consider passing an amendment requiring that the information be summarized and produced in the form suggested here. The cost would be trivial, and the benefits could be potentially quite large.

We present an example of a regulatory impact summary table in Table 1. That information should be standardized across agencies to enable Congress and stakeholders to make comparisons when setting regulatory priorities.

> Recommendation 3: Congress should require that all regulatory agencies do a regulatory impact analysis for major regulations that adheres to established principles of economic analysis.

Discussion: Note that this recommendation does two things. It would extend the requirement of doing an RIA for major regulations to all federal regulatory agencies, including independent agencies.[24] It would also require that such analyses be based on sound economics.

It is clear from a careful review of regulatory impact analyses that agencies are currently not taking the guidelines imposed by the executive branch very seriously in carrying out regulatory analyses. To add political weight to those guidelines, Congress should consider adopting the kinds of principles contained in the OMB economic guidelines. It should also consider requiring that an agency, such as OMB, enforce those guidelines. Congress also could help to enforce those guidelines by holding hearings. An obvious

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23 See, e.g., Breyer (1993) and Litan and Nordhaus (1983).

24 For a discussion of independent agency accountability, see Hahn and Muething (2003), at 17: "Regulations from independent agencies should receive the same level of scrutiny that is applied to regulations from executive agencies. If OMB is not allowed to review regulations from independent

question is how far Congress would be willing to go in providing methods for enforcement. One possible mechanism that deserves consideration is not allowing agencies to move forward on regulations unless an oversight agency, such as OMB, determines that the guidelines are met.[25]

Recommendation 4: Congress should require all agencies to balance the benefits and costs of major regulations.[26]

Discussion: While the Reagan and Clinton executive orders have encouraged agencies to consider the benefits and costs of regulations, executive orders do not have the authority of statutes. Executive orders are difficult to enforce in part because they are not judicially reviewable, and agencies cannot be sued for noncompliance. Congress should therefore require agencies by statute to comply with requirements similar to those in the executive orders and in the OMB's implementation guidance for the executive orders. Although some statutes already require agencies to balance the benefits and costs of regulation, these statutes apply to only a small number of major regulations and agencies often do not comply with the requirement. Other statutes either do not require benefit-cost analysis or actually restrict its use. The Clean Air Act, for example, precludes the consideration of costs for certain regulatory decisions. A congressional requirement to balance benefits and costs will increase the transparency of the regulatory process by forcing

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agencies, then Congress should develop an alternative mechanism for review that is similar to the OMB oversight process."

[25] For a study on agency's compliance with OMB's economic guidelines, see GAO (1998), finding that "5 of the 20 analyses did not discuss alternatives to the proposed regulatory action, 6 did not assign dollar values to benefits, and 1 did not assign dollar values to costs—all of which are practices recommended by the guidance... Finally, only 1 of the 20 analyses received an independent peer review." GAO (1998, 3). Congress may also want to consider taking similar steps related to improving information quality. See OMB (2002b), which provides an explanation of what agencies should be doing to ensure information quality. These guidelines can be expected to improve the quality of information submitted to OMB by a regulatory agency to the extent that they promote independent, external, expert peer review of an agency's data and reproduciblitity of significant agency information. See OMB (2002b, 8459, 8460).

[26] We would actually go further and suggest that Congress require that all new regulations costing more than $100 million annually pass a broadly defined benefit-cost test. See Crandall et al. (1997, 12).

agencies to provide high-quality analyses that the courts could review in the event of significant controversy.[27]

> Recommendation 5: Congress should create a congressional office of regulatory analysis (CORA) or a separate agency outside of the executive branch to independently assess important regulatory activity occurring at *all* federal regulatory agencies.[28]

Discussion: The 106th Congress passed important regulatory reform legislation, the Truth in Regulating Act, which was signed into law by President Clinton in October 2000. The TIRA established a three-year pilot project at GAO, which was supposed to begin in early 2001. The cost of the pilot project was budgeted at $5.2 million per year.[29] We thought that was an incredible bargain, given the upside potential associated with this investment.[30]

Requiring that a separate agency outside the executive assess important regulation is sound for three reasons. First, because it is likely to serve as an independent check on the analysis done in the executive branch by OMB and the agencies. Second, it will help to make the regulatory process more transparent. Third, Congress can use the independent analysis to help improve regulation and the regulatory process. Fourth, CORA could help provide a more complete picture of the regulatory process if given appropriate statutory authority.

OMB's Office of Information and Regulatory Affairs (OIRA) faces inherent limits in the scope of its review of individual regulatory proposals. OIRA is headed by a political appointee chosen by the same administration that appoints the heads of the regulatory agencies. There is likely, therefore, to be some implicit understanding that the head of OIRA

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[27] If a balancing requirement is seen as problematic, then Congress should consider passing an amendment that does not preclude agency heads from explicitly considering costs and benefits in regulatory decisionmaking.
[28] See Hahn and Litan (1999) for a discussion of how the agency should be related to the Congressional Budget Office and the General Accounting Office. For the importance of addressing regulation at both independent and executive agencies, see, e.g., Hahn and Sunstein (2002).
[29] "There are authorized to be appropriated to the General Accounting Office to carry out this Act $5,200,000 for each of fiscal years 2000 through 2002." Truth in Regulating Act of 2000 (P.L. 106312, § 5).

is not to press the agencies excessively hard because he or she is on the same team as the agency heads. Even if the head of OIRA were given authority to challenge regulations, the basis for those challenges is not often made public and the scope of those challenges is likely to be limited.

The constraints on the OMB are manifested in its annual report, in which it has, so far, simply accepted the benefits and cost estimates compiled by the agencies instead of providing any of its own assessments. CORA would not face those constraints but instead would be able to provide its independent analysis, much as CBO has done in the budget arena.

CORA could help provide a more complete picture of the regulatory process, especially in areas that OMB has not examined carefully. For example, we only have a very incomplete understanding of the benefits and costs of regulatory activities at independent agencies.[31] Our understanding of the impacts of smaller regulations and regulatory guidance is also quite limited, although these may be used as substitutes for larger regulations that would fall under OMB review.[32]

Finally, CORA could help Congress implement its recent legislation, such as the Small Business Regulatory Enforcement Fairness Act. CORA could also aid Congress in periodically assessing the need to modify its own regulatory statutes. As it is now, if and when Congress chooses to do so, it will have to rely on the agency's own estimates of the impacts of a rule and on any other data that interested parties may or may not have submitted in the rulemaking record. Significantly, Congress now has no *credible, independent source of*

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[30] Potential benefits include higher quality assessments of the likely impacts of specific regulations as well as identification of opportunities for effective reform.

[31] See Hahn and Muething, at 17.

information upon which to base such decisions. That is analogous to the pre-CBO Congress, which had to make budget and appropriations decisions based solely on the information developed by the executive branch. If Congress and the White House are serious about regulatory reform, they must cooperate to enforce the regulatory impact analysis requirement. Successful enforcement requires high-level political support, statutory language requiring all agencies to adhere to established principles of economic analysis, and rigorous review of agency analyses by an independent entity. If lawmakers are willing to exert the political muscle, real reforms that enhance regulatory accountability and transparency could be achieved.

[32] Hahn (2001) and Furchtgott-Roth (1996) find that regulatory agencies provide very little information on the economic impacts of a large number of regulatory activities in which they are engaged.

Table 1

Regulatory Impact Summary	
I. BACKGROUND ON RULE AND AGENCY	
AGENCY AND DEPARTMENT/OFFICE NAME	
CONTACT PERSON	TELEPHONE NUMBER
TITLE OF THE RULE	
RIN NUMBER	DOCKET NUMBER
TYPE OF RULEMAKING (FINAL/INTERIM/PROPOSED/NOTICE)	TYPE OF RULE (REGULATORY/BUDGET IMPACT)
STATUTORY AUTHORITY FOR THE RULE	RULEMAKING IMPETUS
BRIEF DESCRIPTION OF THE RULE	
II. OVERALL IMPACT	
1. Will the rule have an impact on the economy of $100 million or more? ☐ Yes ☐ No 2. Best estimate of the present value of quantifiable benefits of the rule. $_____ 3. Best estimate of the present value of quantifiable costs of the rule.[116] $_____ 4. Do the quantifiable benefits exceed the quantifiable costs? ☐ Yes ☐ No 5. Report the dollar year of costs and benefits. _____ 6. Report the discount rate used in the calculations for costs and benefits. _____ If more than one discount rate was used in calculations, please explain why. _____ 7. Discuss level of confidence in the benefit-cost estimates and key uncertainties. Include a range for costs and benefits._____ _____ _____ _____ _____ 8. Identify benefits or costs that were not quantified. _____ _____ _____ _____ _____ _____	

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III. COSTS AND BENEFITS

Estimated Incremental Costs

1. Costs and breakdown of quantifiable costs by type.

	Annual	Years in Which Costs Occur	Present Value
Total Costs			
Compliance Costs			
Administrative Costs			
Federal Budget Costs			
Local/State Budget Costs			
Other Costs			

Notes: _____

2. Give a brief description of who will bear the costs. _____

Estimated Incremental Benefits

1. Benefits and breakdown of quantifiable benefits by type.

	Annual	Years in Which Benefits Occur	Present Value
Total Benefits			
Health Benefits			
Pollution Benefits			
Other Benefits			

Notes: _____

2. Give a brief description of who will benefit. _____

IV. ALTERNATIVES TO THE REGULATION

1. List and briefly describe the alternatives to the rule that were considered and why they were rejected, including a summary of costs and benefits of those alternatives. If no alternatives were considered, explain why not.

Source: Table 4, Hahn and Sunstein (2002, 1519).

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Mr. OSE. Dr. Jim Tozzi for 5 minutes.

Dr. TOZZI. Thank you, Mr. Chairman and distinguished members of the committee. I'm very pleased to appear here today, first of all, because of the leadership this committee has given historically to OMB's regulatory office. Without this committee and its movement under the Paperwork Act, there would not be any regulatory office at OMB, and the more things change in Washington, the more they stay the same because I still see Congressman Brooks looking down at me after 35 years.

I'm here to speak on a very specific issue, and the issue is on a regulatory budget. Notwithstanding my pleasant personality, I was asked because of only one thing. I developed the first regulatory budget when I was the Assistant Director of OMB, and I was appointed by President Carter at that time, and we developed a regulatory budget for EPA. The numbers, the facts and data are here. It's been given to your committee's staff, and it's also on the Center's Web site. I think it's real numbers, real regs, real process, and it's there.

Mr. OSE. Would you like us to make it a part of the record?

Dr. TOZZI. Yes, sir please.

Mr. OSE. Without objection.

[NOTE.—The information can be found at www.thecre.com and is on file with the subcommittee.]

Dr. TOZZI. Now, we could go over all the details of that but I don't think this is the right time. Basically, when we looked at the regulatory budget, one of the important things that we had to do was get adequate cost information, and so being younger and more, what would you call, idealistic, we drafted a Regulatory Cost Accounting Act of 1980. I would like that introduced in the record if the Chair——

Mr. OSE. Without objection.

Dr. TOZZI. And, a section-by-section analysis of the regulatory cost accounting——

Mr. OSE. Hearing no objection, that will be done.

[The information referred to follows:]

REGULATORY COST ACCOUNTING ACT OF 1980

Section-by-Section Analysis

TITLE I - FINDINGS AND PURPOSE

The Act would establish a system to measure the costs of the more important Federal regulations and annually report those measurements to the Congress, together with the President's recommendations for changes in regulatory statutes and reorganization or consolidation of regulatory programs.

Title I bases this action on two broad factual considerations. First, in recent years, Federal rules and regulations have expanded greatly in number and scope. Second, while Federal regulation provides benefits to the Nation, it also imposes large costs, the magnitude and character of which are understood very imperfectly. Title I contains a finding by the Congress that, in these circumstances, Federal regulation can be made responsive to the concerns of the Nation and the excessive burdens of regulation can be eliminated only if there is available systematic information on the costs of Federal regulation. Accordingly, the purpose of the Act is to establish a procedure to account for the costs of regulation and to report these costs to the Congress.

TITLE II - FEDERAL REGULATORY COST ACCOUNTING SYSTEM

This title amends chapter 1 of title 31 of the United States code by adding a new subchapter (designated subchapter III) which

creates a Federal Regulatory Cost Accounting System and provides for the implementation of that System.*/

The new subchapter III is divided into five sections.**/ The first two of these (Sections 27 and 28) respectively define several terms used in the subchapter and exclude from its provisions some types of rules. Section 29 contains the provisions which together constitute the basis of what is called the Federal Regulatory Cost Accounting System. Two interagency committees to advise the Director of OMB on aspects of the System are provided for in Section 30 and the final section requires the President to submit annually to the Congress a report on the costs of Federal regulation and associated recommendations.

Section 27. Definitions

(1) The term agency is defined by reference to the definition in 5 USC 551(1). As defined there, "agency" means ". . . each authority of the Government of the United States, whether or not it

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*/ Chapter 1 of 31 USC (together with several other sections of title 31) may be cited as the Budget and Accounting Act of 1921, which created the basic features of the Federal budgetary system as it currently exists. Subchapter I of chapter 1 defines several terms. Subchapter II deals with the budget, including the organization of the Office of Management and Budget, and the present subchapter III is the statutory basis of the General Accounting Office. Title I of the Regulatory Cost Accounting Act of 1980 would redesignate the present subchapter III as subchapter IV and, as indicated, add a new subchapter III.

**/ The sections are numbered 27 through 31 to conform with the numbering of the existing subchapter II. Because the present subchapter II ends with section 26, and the present subchapter III begins with section 41, it is not necessary to provide for a renumbering of the sections of the latter.

is subject to review by another agency. . .", with certain exceptions the most important of which are the Congress and the Federal courts.

(2) The term rule is defined to include both rules and regulations issued by agencies. However, the definition provides that for the purposes of the subchapter, closely related or substantially similar, sets of rules are to be treated together. This provision is important because it offers a reasonable and practical way of handling regulatory policies or programs which are affected through a large number of individual rules. In these cases, analyses of compliance costs should focus on the policy or program at issue, rather than on the many specific decisions by the agency. It also should be noted that, while "rule" is defined very broadly, later sections exclude some classes of rules from the requirements of the subchapter and provide a mechanism for exempting individual rules and sets of rules from these requirements.

(3) For agencies that are a constituent part of a cabinet department, "agency head" is defined as the Secretary of the department. This definition is prompted by the fact that most of the cabinet departments contain several component organizations which carry on different but related regulatory functions. In these cases, the work on measurement of compliance costs of the various units of the department should be coordinated and, for this reason, "agency head" must be defined as the Secretary of the department. For an agency headed by a multimember commission (or board) "agency head" is defined as the chairman of the commission.

(4)-(8) Paragraphs (4) through (8) provide definitions of several terms that designate components of the costs of complying with Federal regulations. The key distinction embodied in these definitions is that between "direct" and "indirect" costs of compliance. Effectively, "direct costs of compliance" is defined as expenditures (made by persons, nonprofit organizations, and governmental units, other than the Federal Government) directed to activities required or objectives sought by the rule. "Indirect costs of compliance" is defined as the costs caused by the rule, minus direct costs of compliance and Federal expenditures associated with the rule. Implicit in this definition is the notion that the indirect costs of a rule are those costs due to effects of the rule,[*] apart from expenditures directly made in compliance with the rule.[**]

Two components of direct costs of compliance are distinguished --capital costs of compliance (paragraph 4) and operating costs of compliance (paragraph 5)--with direct costs of compliance defined

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[*] For example, environmental rules can lead firms to locate new plants at sites where costs are higher than they would be at sites chosen in the absence of such rules. The added costs due to effects on locational decisions would, then, be a component of the rules' indirect costs.

[**] Direct and indirect costs of compliance are intrinsically similiar in that both represent (in monetary terms) commitments of real resources. However, the distinction between direct and indirect costs of compliance is important because direct costs of compliance can be measured through conventional reporting techniques, while indirect costs must be inferred from various sorts of data using what will often be complex economic models.

as the sum of these two components (paragraph 6). No such distinction is made for indirect costs of compliance, which are defined (in paragraph 7) as indicated above. The "total costs of compliance" and "compliance costs" are defined as the sum of direct and indirect costs of compliance (paragraph 8).

(9) The term Director is used in the subchapter to refer to the Director of the Office of Management and Budget.

Section 28. Applicability

Section 28 exempts several classes of rules from the provisions of the subchapter. In particular, the following are exempted:

- rules issued with respect to a military or foreign affairs function of the United States;
- matters related to agency management or personnel;
- rules related to Federal Government procurement; and
- rules issued in response to an emergency or which are governed by short-term statutory or judicial deadlines.

Section 29. Regulatory Cost Reporting Requirements

Section 29 is divided into five subsections. Subsection (a), which simply designates the reporting requirements and procedures of the entire subchapter as the "Federal Regulatory Cost Accounting

System" requires no discussion. The last of the four substantive subsections (e) requires agencies to report annually to OMB measures of compliance costs of designated rules. The two preceding subsections (c and d) direct agencies to create an accounting system capable of meeting these requirements; provide for the implementation of these systems; and contain a mechanism for designating the rules to which the reporting requirements apply. Subsection (b) contains provisions designed to insure that agencies will use substantially the same definitions, accounting conventions and standards in compiling the required data on compliance costs. There follows an elaboration of these points, with the order of the discussion reversed; i.e., running from subsection (b) to (e).

(b) System Manual: Section (b) confronts a circumstance implicit in the decentralized nature of the accounting system that the subchapter would establish. Under the provisions of the subchapter, agencies would be required to create a system to measure the compliance costs of regulations designated in a proscribed manner and to report those cost measurements to OMB, which is charged with preparing a consolidated regulatory cost report to be submitted by the President to the Congress. Clearly, in the absence of a coordinating mechanism, the cost estimates prepared by various agencies and reported to OMB would often be incompatible with one another because of differences in definitions, measurement procedures and assumptions.*/

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*/ For example, agencies might select different discount rates to transform a capital expenditure into a stream of annual capital costs.

Subsection (b) is designed to provide the necessary coordinating mechanism. This is done (in paragraph 1) by requiring the Director of OMB to prepare a "Federal Regulatory Cost Accounting System Manual," which would contain guidelines for the measurement of direct costs of compliance and for the analysis of indirect costs of compliance, along with accounting conventions, definitions, procedures, and standards. The role that the System Manual would play in coordinating and directing the agency's work in measuring compliance costs is specified in later sections [esp. subparagraph (B)(ii) of subsection (d)(1) and subparagraph (A) of subsection (d)(2)]. Paragraph (2) of section (b) recognizes that changes in the System Manual will be necessary as experience reveals the details of the problems of definition, measurement and analysis that must be addressed and that the System Manual should be revised to incorporate advances in statistical technique, accounting practice and economic analysis. Accordingly, this paragraph authorizes the Director of OMB to revise the System Manual to improve the System and requires the Director to revise the System Manual in response to changes in relevant economic and social circumstances and advances in the branches of knowledge pertinent to the System.

(c) Agency Systems: Paragraph (1) of this subsection requires each agency subject to the provisions of the subchapter to establish an Agency Regulatory Cost Accounting System capable of meeting the reporting requirements imposed by a later subsection (esp. subsection (e)). The other three paragraphs of the section deal with features

that the Agency Systems must possess (paragraph (2)) and the coverage of the Agency Systems in terms of rules included (paragraphs (3) and (4)).

Paragraph (2) requires each of the Agency Systems to include:

- procedures, cost categories, definitions and standards for measuring the capital and operating costs of compliance of designated rules (paragraph (2)(A); and
- procedures for analyzing the effects of designated rules, and the indirect costs of those effects (paragraph (2)(B)).

Paragraph (2)(C) requires each agency subject to the Act to establish an office responsible for the conduct or oversight of the Agency System. Agencies can, then, either choose to centralize the regulatory cost accounting work in a single office or, have this work conducted by various parts of the agency, subject to the oversight of an office charged with this function. Moreover, paragraph (2) leaves agencies with wide flexibility in how the Agency System is structured. The language of paragraphs (2)(A) and (2)(B) simply requires agencies to give some explicit form to various elements of the required Agency System.

Paragraph (3) requires the head of the agency to designate (subject to the concurrence of the Director of OMB) the rules of the

agency that will be included in the Agency System. It is only these designated rules for which compliance costs must be measured. Paragraph (4) states criteria which the head of the agency is required to consider in designating rules for inclusion in the System. In general, these criteria identify rules with large direct compliance costs, large indirect effects, or large impacts on particular regions of the Nation or individual sectors of the economy.

(d) Implementation of the Agency Systems: Subsection (d) deals with the implementation and revision of the Agency Systems and review by the Director of OMB of designations made by agency heads of rules to be included in the various agency systems.

Paragraph (1) requires heads of agencies to submit to the Director of OMB, by October 1, 1981, a plan for establishing a Regulatory Cost Accounting System for the agency. The plan is required to provide the agency head's designations of rules to be included; a description of the procedures, definitions, and accounting conventions that the agency proposes to adopt in meeting its responsibilities to measure the compliance costs of the designated rules; and a description of the office responsible for the conduct or oversight of the Agency System. The Director of OMB is also authorized to request from the agency such other information permitted by law as he requires to evaluate the reasonableness of the agency's plan.

The Director is authorized to alter (in accord with the criteria in paragraph (4) of subsection (c)) the designations of

rules to be included in the Agency System and authorized to require change necessary to bring the Agency System into conformance with the System Manual. The plan becomes final on its acceptance by the Director.

As new rules are promulgated, circumstances change and experience is gained, there will be a need to revise the Agency Systems and the rules designated for inclusion in those Systems. Such changes can be initiated by the head of the agency. In addition, paragraphs (2) and (3) authorize the Director of OMB to review the Agency Systems, and the rules designated for inclusion in the Systems, from time to time and to require certain changes. In particular, paragraph (2) authorizes the Director to require:

- changes necessary to bring Agency Systems into conformance with the Systems Manual; and
- such changes as reasonably increase the usefulness of the data on compliance costs provided by the Agency Systems.

Paragraph (4) authorizes the Director to review the designations of rules included in the Agency System and to alter those designations in accord with criteria stated in paragraph (4) of subsection (c).

(e) Reporting Requirements: Paragraph (1) of this subsection requires the head of each agency to submit annually (beginning with

1983) to the Director of OMB an Agency Regulatory Cost Report. This Report is required to contain certain cost data and analysis for:

- all rules designated for inclusion in the Agency System; and
- subject to possible exemptions identified below, all rules for which the agency plans to issue an advanced notice of proposed rulemaking, a proposed rule or a final rule during the upcoming fiscal year.

For each rule or class of rules covered, the Agency Cost Report is required by paragraph (2) to contain:

- estimates of the capital and operating costs of compliance with the rule for each of the upcoming three fiscal years; and
- analysis of the effects of the rule, including to the extent reasonable and practicable, quantitative estimates of the indirect costs of compliance of the rule.

In addition, paragraph (3) authorizes the Director to require that an agency submit such other information permitted by law as he requires to evaluate the reasonableness of the Agency Regulatory Cost Report.

The Director of OMB is authorized by paragraph (4) to exempt from these reporting requirements advanced notices of proposed rulemaking, proposed rules and final rules that are of a routine or repetitive character or are of minor economic importance. Such an exemption could be granted specifically for a particular rule or proposed rule, or exemptions could be granted categorically. As an alternative to exemption, paragraph (4) authorizes the Director to consolidate rules and proposed rules for reporting purposes.

Section 30. Regulatory Cost Accounting Standards and Procedures

This section provides for the establishment of two interagency committees, each of which would serve the Director of OMB in an advisory capacity. The Regulatory Accounting Standards Committee (subsection (a)) would advise the Director of OMB on questions of definition, reporting and procedure as they bear on the preparation of Agency Cost Reports. Subsection (b) provides for a Regulatory Cost Report Review Committee. At the request of the Director, this Committee would review the professional quality and completeness of Agency Regulatory Cost Reports.

Section 31. The Annual Report to the Congress on the Costs of Federal Regulation

Section 31 provides for the annual submission by the President to the Congress of a Federal Regulatory Cost Report. Subsection (a) requires this report to contain:

Dr. TOZZI. And, Mr. Chairman, as most Tozzi-proposed legislation, it didn't get out of the administration, but in any event, it was subjected to interagency review and it set up a regulatory cost accounting system governmentwide. I must say, it was opposed across the board by virtually all agencies, including some of my colleagues at OMB; so it was not a winner.

But, where are we now? I'll get to the bottom line. We could say there's a lot of problems with the concept of regulatory budget, but by and large, we still don't have a way, even if we look at individual regs, of looking at their total cost to society and they're—I would suggest Dr. Miller's and Dr. Hahn's and Dr. Graham's and any other doctors who testified, view on the fact that's the right way to go.

But let me say that there's one thing, before we invent a new wheel, we have a regulatory budget right now without numbers, and it's this thing called the Unified Agenda of Federal Regulations. It comes out every 6 months. Your committee was the leadership in requiring all the agencies to do it. It has every major regulation issued by the government, and, if you want to start the work on a pilot study, I would look at converting this document into a regulatory budget. President Reagan signed Executive Order No. 12498 that took the first steps toward a regulatory budget where OMB reviewed all the regs before they went out and debated them with the agencies. Many of these regs are costed out, so all you have to do is start putting numbers on it and develop some algorithms.

Finally, in terms of regulations, if Dr. Hahn would yield 1 minute of his time that he didn't use, I have two recommendations. The first recommendation is——

Mr. OSE. Dr. Tozzi, Dr. Hahn used all of his time, so I'm sorry——

Dr. TOZZI. Oh, I'm sorry. Mr. Chairman, I notice your mathematical ability and I will never question it again. I have 60—68 seconds.

What I would recommend is two things. When I was at OMB we had 100 staff. They're down to 50. So if you're going to lay any new requirement, I know this committee's not in favor of unfunded mandates, and so, if you lay this requirement on them, it's an unfunded mandate without increasing their staffing.

Second, if you're going to move toward a regulatory budget, I would make a rebutable presumption in favor of moving this document into a regulatory budget before I started a brand new reporting system. Thank you.

Mr. OSE. Thank you, Dr. Tozzi.

[The prepared statement of Dr. Tozzi follows:]

Center for Regulatory Effectiveness

STATEMENT OF JIM J TOZZI

BEFORE

THE COMMITTEE ON GOVERNMENT REFORM

SUBCOMMITTEE ON ENERGY POLICY, NATURAL RESOURCES AND REGULATORY AFFAIRS

March 11, 2003

Mr. Chairman and distinguished members of the committee,

Background

I am pleased to appear before the Committee. I have been asked to speak on a very specific topic, the eventual utility of a regulatory budget. I was asked to speak on this issue because I was the OMB official in charge of putting together a regulatory budget for the Environmental Protection Agency during the Carter Administration. A regulatory budget is a mechanism for placing a ceiling on the costs imposed on non-federal entities by the federal government.

Appended to my testimony as Attachment 1 is the document prepared by OMB, entitled "A Working Paper on the Cost of Federal Regulation." An earlier version of this paper was entitled "Towards a Regulatory Budget".

The attached paper consists of nearly one hundred forty pages of text divided into ten chapters. The purpose of the paper was to: 1) develop as detailed a regulatory budget as possible based on available data; and 2) have a number of experts critique the work product. The paper and subsequent evaluation was to serve as a basis for assessing the merits of implementing a regulatory budget on a government-wide basis.

Remember, this paper was written more than twenty years ago. At that time, OMB was going through a transformation which involved examining regulatory programs with the same scrutiny as they accorded to programs receiving appropriated funds.

OMB was not the only entity involved in the debate, the Congress was considering a number of bills ranging from legislation to require cost-benefit analysis of rules to allowing a Congressional veto of rules. Our task was to explore whether the Executive Branch could develop and implement a regulatory budget – both with and without explicit statutory authority. The ultimate objective was to determine if the President could exert the same degree of managerial control over regulatory programs as he did over programs discharged through appropriated funds.

Our first job was to determine whether there was sufficient cost information available to develop a regulatory budget.

On a government-wide basis there was insufficient data. However, we determined that there might be enough information if we limited our efforts to one area – environmental programs within EPA. EPA had one of the richest databases because of the requirements set forth in the Quality of Life Review initiated by the Nixon Administration. In this process, EPA was required to perform detailed analyses of their regulations. Consequently, EPA was not chosen because it was doing a poor job but instead because it was doing a good job.

Cost Information

EPA programs had considerable cost data. With the passage of each environmental statue, there was often a requirement to report on the total costs of the programs. Thus, there were a number of reports dealing with the cost of clean air and clean water regulations. Remember, at that time, a number of the current EPA programs were not in place.

In addition to the EPA reports, the Bureau of Economic Analysis had performed a number of sectoral cost studies and updated them each year. Consequently, as the result of the above reports, we had some idea as to the total costs environmental programs on a national basis, albeit with considerable uncertainties. For the purpose of the exercise, we assumed the cost information we had was accurate.

As to the other actions that had to be taken to establish a regulatory budget, one of the most basic was to define what a regulatory budget did and did not do.

Consequently, Chapter 3 of the attached report delineates a number of options. Was the regulatory budget to be strictly informational, i.e., an after the fact description of the costs, or was it going to be advisory in the terms of no binding ceilings, or was it going to be controlling through the use of binding budget ceilings?

A complete set of other questions had to be addressed. For example, what type of costs were to be included? Options included the cost of new regulations, the cost of existing regulations, direct compliance costs and/or indirect costs. Also, decisions would have to be made with respect to which agencies were to be included, environmental , economic, and/or social? Furthermore decisions had to be made with respect to the structure of the budget, was it going to developed by agency or by program type across a number of agencies. This last decision would be guided, in part, by the availability of cost data.

Management of a Regulatory Budget

Some one had to manage the preparation of the regulatory budget. Therefore, regulatory budget offices would have to established in each agency, cost analysis procedures would have to be developed and reporting mechanisms would need to be established. This part of the exercise was particularly telling because of the resource requirements to carry out these tasks.

Of particular interest was how the regulatory budget would fit into macroeconomic policies. After all, with appropriated funds, we have an idea if we were overspending, but what did overspending mean in the context of a regulatory budget? These were difficult questions that needed to be addressed.

Legal Foundations

Any establishment of a regulatory budget would need to be developed and implemented in accord with existing law. One of the first questions was whether the independent agencies would be covered. After all, they impose costs comparable to those of the environmental and social agencies, why should they not be included? Clearly the regulatory budget would have to recognize explicit Congressional mandates on specific agencies.

The Regulatory Budget for EPA

Given all of the above issues and conditions, a regulatory budget was developed for EPA and is set forth in Attachment 1. The document is also available on the CRE website and can be viewed at http://thecre.com/ombpapers/regbudget.html. I will not go into all the details, but suffice it to say it had considerable room for improvement.

Notwithstanding the inaccuracies and data limitations, the regulatory budget as presented in the report did demonstrate the fact that we were simply adding regulatory costs upon regulatory costs without any program for controlling the total.. Furthermore, even with the best economic analyses on a regulation-by-regulation basis, we had no idea what the total costs were, what the optimum level of the budget was and we did not have even a clue as to the macro benefits.

Regulatory Cost Accounting

The heart of any regulatory budget is the underlying cost information. Having prepared the regulatory budget for EPA, it was very evident that more accurate and comprehensive cost information was required. Consequently, OMB worked to delineate the types of cost information which would be needed to implement a regulatory budget in an orderly and continuing fashion.

Once that delineation of needed cost information was completed, OMB drafted the Regulatory Cost

Accounting Act of 1980. This proposed legislation had three components:

1. Regulatory Cost Accounting Manual. OMB was required to develop a cost accounting manual that would set forth general guidelines for measuring direct and indirect costs.

2. Agency Procedures. Agencies, based on the OMB manual, would prepare detailed, agency-specific, regulatory cost accounting procedures. The agencies would also develop a plan and time schedule for generating the needed cost information.

3. Reporting to OMB. Agencies, per a specific time schedule, would generate regulatory cost information for their particular programs and report such information to OMB.

The draft Regulatory Cost Accounting bill was put through the OMB legislative review process. Thus, the draft legislation was given to all Executive Branch agencies for review and comment. Virtually, all agencies opposed the legislation. The agencies cited a number of reasons for their opposition. First, they stated that the time and funds needed to implement the program were too great. Second, they stated that the believed the cost accounting program was of marginal utility since it was uncertain as to both what the cost information would mean by itself and to what additional information would be needed to establish budget levels.

The proposed Regulatory Accounting Act of 1980, and its attendant section-by-section analysis, can be found on the CRE website, www.TheCRE.com, at http://thecre.com/pdf/Carter_ProposedBill.PDF and http://thecre.com/pdf/Carter_SectionBySectionAnal.PDF.

Unresolved Issue

Not withstanding the lack of success in moving forward with a regulatory cost accounting bill, the issue that sparked the drafting on the bill remained; we were continuing to promulgate regulations on a case-by-case basis, imposing substantial costs on the public, state and local governments, and small, medium and large businesses, with no idea as to their total cost to the economy.

Some argued that there was no reason to be concerned since, if each regulation were judged on its merits, the sum total of all regulatory actions would be beneficial. Others argued that such an approach is completely counter to the thrust of fiscal budgeting, i.e, even though there are many potentially beneficial programs, priorities must be established given that we have finite resources.

Proponents of a regulatory budget argued that it was fiscally unwise to continue promulgating regulations without any control on the total costs being imposed on society. Furthermore, they argued that there was no other attempt whatsoever to even move in the direction of addressing the

issue.

I personally agree that there is little need to develop a regulatory cost accounting system if ultimately it is not going to be used to implement a regulatory budget.

The Utilization of the Semi-Annual Agenda: A Middle Ground

The issue of setting limits on the total cost of federal regulations never went away. While think tanks gave scant attention to the matter, the issue was kept alive in OMB since the underlying issue, not having a mechanism for understanding and controlling total regulatory costs, remained unresolved. On the one hand, we were aware of the formidable difficulties in implementing a regulatory budget, but on the other hand we knew we were vulnerable in not having an answer to why there was no attempt to control the total cost of regulations.

At the same time these discussions concerning a regulatory budget were underway, the statutory requirement that agencies develop semi-annual regulatory agendas was beginning to bear fruit. More specifically, every six months agencies had to report all the regulations they were working on to OMB. Furthermore, they had to report the time frames for each rule as well as the statutory authority for the rule and, on some occasions, discuss the alternatives they were going to examine. The agenda described all rules under consideration including Advance Notices of Proposed Rulemaking, and rules in their final stage of development. The current edition of each agency's semi-annual agenda is available at, http://thecre.com/quality/rudba.html.

A detailed review of the semi-annual agenda provided a way to look at an agency's regulatory program in total which provided an opportunity to set priorities. Thus, the agenda allowed consideration of issues such as what regulations were most significant, whether there was a statutory mandate for the regulation and how could the regulation be developed to reduce cost?

Consequently, President Reagan issued Executive Order 12498. This Executive Order required:

1. Agencies to submit their regulatory agenda, including a description of all significant planned actions, to OMB for review.

2. That OMB, in conjunction with the agencies, agree on the elements of the agenda.

3. That anytime an agency wanted to add or delete an item from the agenda, they needed to receive OMB approval.

Clearly, the semi-annual agenda was not a regulatory budget. However, equally clear was that the agenda could be used to accomplish some but not all of the objectives of a regulatory budget. First, it provided a basis for establishing priorities. Second, it provided an opportunity to shape the

development of a regulation, from the alternatives to be considered to the acceptable level of costs. Overall, the agenda in conjunction with OMB review and oversight gave you some idea, although not quantified, of the regulatory burden imposed by an agency. What the agenda could not do was give you a cumulative total of the burden being placed on society by federal regulations.

Executive Order 12498 was rescinded by the Clinton Administration.

Recommendations

1. Resource Requirements. Legislation should not be enacted prior to appropriations committees adding additional personnel for OMB to oversee the process. OMB's Office of Information and Regulatory Affairs has already had a nearly 50% reduction in staff over the past twenty years. During this time, OMB has been assigned a number of new responsibilities. They would not be able to address the regulatory budget issue without adequate staff resources.

2. Pilot Program. Implementing a regulatory budget would require considerable resources. Consequently, if a regulatory budget program is to proceed, it should do so on a pilot basis. It is questionable whether a regulatory budget should even be tested on an agency-wide basis. Instead, it should be implemented in one or more select program areas in a particular agency.

3. Independent Agencies. Independent agencies should be included in any pilot program for a number of reasons. First, they are generally not subjected to much regulatory scrutiny and, therefore, imposition of a regulatory budget or cost accounting system would be a step forward. Second, they are smaller than Cabinet size agencies and could be examined in with fewer resources.

4. Use of the Semi-Annual Agenda as a Regulatory Budget. OMB, in conjunction with each agency, should review the semi-annual agenda. As part of their review, they could assess which regulations should be developed, in what time frame they should be developed, what alternatives should be considered, and what detailed cost analyses should be prepared. In essence, OMB would be re-implementing Executive Order 12498.

Thank you.

Mr. OSE. Ms. Heinzerling, you are recognized for 5 minutes.

Ms. HEINZERLING. Thank you. I have four points I'd like to make today. First, OMB's demand that agency rules pass OMB's test of cost-benefit analysis violates many existing laws. Second, if the assumptions embodied in OMB's current style of cost-benefit analysis were put to a vote in Congress, I believe they would fail. Third, as Dr. Graham indicated this afternoon, clean air regulation represents one of the best regulatory bargains around, even according to the strict terms of cost benefit analysis. Yet, OMB has mysteriously singled out this kind of regulation for particularly penetrating scrutiny, and even for deregulatory action.

Fourth, OMB's intention expressed in this draft report and in interviews recounted in an article in the New York Times this morning, to subject even more of the values we hold dear, including privacy and freedom itself, to cost-benefit analysis is a project doomed to failure, and it is one that flouts our country's founding commitment to adhere to certain basic principles regardless of the monetary tradeoffs that might be involved in adhering to them. This commitment is indeed a basic premise of the Bill of Rights itself.

First, most Federal laws do not require, and many do not even allow agencies to use OMB-style cost-benefit analysis in developing regulatory policy. In its new guidelines for cost-benefit analysis, however, OMB appears to encourage, or even to require, agencies to circumvent statutory directives when they conflict with OMB's cost-benefit agenda. These guidelines effectively put OMB rather than Congress in charge of defining the scope of agency authority. This is not OMB's role under the law.

Second, the assumptions embodied in OMB's current style of cost-benefit analysis would not, I believe, be enacted into law if they were put to a vote in this body. I limit myself to one example. In recent cost-benefit analyses, as discussed already this afternoon, OMB has estimated the value of life based on an assumption that the elderly are worth less than younger people. They start with an assumption that the elderly are worth $2.3 million and younger people are worth $3.7 million. Is it unreasonable to believe this assumption would fail to be enacted into law if considered by this body? I think not.

Third, the positive cost-benefit profile of clean air regulations should make it the darling of today's OMB. That it is not, that it has been subject to deregulatory activity, and to especially heightened scrutiny without the corresponding cost-benefit analysis that is applied to regulatory actions, reveals, in my opinion, the political bias that lies at the heart of OMB's oversight activities.

Fourth, and finally, in an administration in which life, health, and the environment all have been given a price, albeit a heavily discounted one, I suppose it should not surprise us that it is now proposed that privacy and freedom itself also be given a dollar value. The explanation, as I understand it, is that, if privacy and freedom are not stated in monetary terms, if they are not given a price, then they will not count for anything when they are threatened. It seems to me just the opposite is the case. Once we say that

privacy and freedom have a precise and finite monetary price, once we allow them to be traded away for money, then we have cheapened these values deeply and perhaps irremediably. Thank you.

Mr. OSE. Thank you, Ms. Heinzerling.

[The prepared statement of Ms. Heinzerling follows:]

Testimony of

Lisa Heinzerling

Professor of Law
Georgetown University Law Center

Vice-President
Center for Progressive Regulation

Before the
SUBCOMMITTEE ON ENERGY POLICY,
NATURAL RESOURCES
AND REGULATORY AFFAIRS
Committee on Government Reform
U.S. House of Representatives

Hearing on

Regulatory Accounting

March 11, 2003

TESTIMONY OF

LISA HEINZERLING

PROFESSOR OF LAW,
GEORGETOWN UNIVERSITY LAW CENTER

VICE-PRESIDENT,
CENTER FOR PROGRESSIVE REGULATION

BEFORE THE SUBCOMMITTEE ON
ENERGY POLICY, NATURAL RESOURCES AND
REGULATORY AFFAIRS
COMMITTEE ON GOVERNMENT REFORM
U.S. HOUSE OF REPRESENTATIVES

MARCH 11, 2003

Thank you for the opportunity to testify before you today. My name is Lisa Heinzerling. I am a Professor of Law at the Georgetown University Law Center. I have also been a visiting professor at the Harvard and Yale Law Schools. I am a graduate of the University of Chicago Law School, where I served as editor-in-chief of the University of Chicago Law Review. After law school I clerked for Judge Richard Posner on the U.S. Court of Appeals for the Seventh Circuit, and then for Justice William Brennan of the U.S. Supreme Court. I was an Assistant Attorney General in the Environmental Protection Division of the Massachusetts Attorney General's Office for three years before coming to Georgetown in 1993. My expertise is in environmental and administrative law. I am also the Vice-President of the Center for Progressive Regulation.

The Center for Progressive Regulation is a nonprofit research and educational organization of university-affiliated academics with expertise in the legal, economic, and scientific issues related to regulation of health, safety, and the environment. CPR supports regulatory action to protect health, safety, and the environment, and rejects the conservative view that government's only function is to increase the economic efficiency of private markets. Through research and commentary, CPR seeks to inform policy debates, critique anti-regulatory research, enhance public

understanding of the issues, and open the regulatory process to public scrutiny.

My testimony today concerns the Office of Management and Budget's Draft 2003 Report to Congress on the Costs and Benefits of Federal Regulations [hereinafter "Draft 2003 Report" or "Report"], 68 Fed. Reg. 5492 (Feb. 3, 2003). This draft report raises issues in four broad areas; briefly, the report:

1) proposes new guidelines for cost-benefit analysis of federal regulation;

2) provides estimates of the costs and benefits of federal regulation for the period 1992-2002;

3) seeks guidance on improving cost-benefit analysis of regulations related to homeland security; and

4) invites commentators to discuss and critique current approaches to regulation of emerging risks.

My specific conclusions about the Draft Report can be summarized as follows:

1) OMB's new proposed guidelines for cost-benefit analysis encourage agencies to skirt the laws under which they act; create onerous new analytical burdens for agencies, particularly agencies whose mission is to protect health, safety, and the environment; and further entrench economic methodologies that systematically undervalue health, safety, and environmental protection.

2) The Draft 2003 Report's estimates of the costs and benefits of federal regulation are unreliable, arbitrary, confusing, and highly skewed against regulations designed to protect health, safety, and the environment.

3) OMB's new solicitation of comments on cost-benefit analysis of homeland security serves as an example of OMB's overweening ambitions for this methodology as a means of evaluating public policy.

4) OMB's solicitation of comments on the regulatory system's approach to emerging risks reflects OMB's current bias against precautionary legislation that aims to prevent health, safety, and environmental problems before they cause harm.

Far from using cost-benefit analysis as a neutral tool to evaluate public policy (which, as will be made clear below, it is not in any event capable of being), OMB instead uses cost-benefit analysis to attack regulations the administration does not like, and has so far declined to deploy cost-benefit analysis to evaluate policies (such as those reducing regulatory requirements and handing out agricultural subsidies) that the administration desires on other grounds. This is not to say we think cost-benefit analysis should be used more often, but it is to say that using it in a politically biased fashion belies the objective purposes OMB has asserted in defending this type of analysis. Given the biases evident in OMB's draft report, OMB's ritualistic invocations of principles of "sound science" must be taken with a large grain of salt.

I. OMB's Proposed Cost-Benefit Guidelines

OMB's proposed guidelines for cost-benefit analysis are chock-full of new analytical requirements for regulatory agencies, requirements that can be expected to slow down the already-ossified rulemaking process and to impose significant new burdens on resource-starved agencies. More specifically, OMB's proposed guidelines encourage agencies to skirt congressional directives in favor of following OMB's cost-benefit agenda; they require a kind of analysis – cost-effectiveness analysis – for health and safety regulation that, when combined with discounting, produce biased and misleading results; they inappropriately require the quantification of uncertainty and eschew precautionary approaches to risk assessment; they further entrench OMB's misguided efforts to translate human lives and health into monetary terms; and they also further entrench OMB's trivialization of future harms through the technique of discounting.

In the proposed guidelines, OMB requires extensive analysis of regulatory alternatives, along with the alternatives' comparative costs and benefits, by the administrative agencies. Even so, remarkably, OMB does not explain why or how its resource- and time-intensive new analytical requirements will achieve better regulatory results than the existing cost-

benefit guidelines. OMB does not explain, in other words, why the "significant investments of agency staff and resources" (Draft 2003 Report, at 5498) required by its new guidelines are justified, except in the most conclusory terms. Nor does OMB explain why, throughout the cost-benefit guidelines, health, safety, and environmental regulation is singled out for special new analytical requirements, even though OMB's own estimates of the costs and benefits of regulation would suggest that air pollution regulation, for example, is one of the best regulatory investments we have made. Why hobble a thoroughbred? OMB does not explain.

A. Dismissing Statutory Directives

OMB's cost-benefit review of major agency rules will, even after its new cost-benefit guidance goes into effect, still take place under Executive Order No. 12866. (Draft 2003 Report, at 5513.) In its "Statement of Regulatory Philosophy and Principles," Executive Order No. 12866 asserts:

> Federal agencies should promulgate only such regulations as are required by law, are necessary to interpret the law, or are made necessary by compelling public need, such as material failures of private markets to protect or improve the health and safety of the public, the environment, or the well-being of the American people. . . . [I]n choosing among alternative regulatory approaches, agencies should select those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach. (E.O. 12866, Regulatory Planning and Review, 58 Fed. Reg. 51735 (Oct. 4, 1993).)

In the existing guidance on cost-benefit analysis of agency rules, OMB states that agency analysis should discuss whether the agency is addressing a market failure or other compelling public need. OMB then states: "If the proposed action is a result of a statutory or judicial directive, that should be so stated." (Executive Analysis of Federal Regulation Under Executive Order 12866 (January 11, 1996), available at www.whitehouse.gov/omb/inforeg/riaguide.html.)

OMB's proposed new guidance on cost-benefit analysis takes a quite different attitude to statutory directives. No longer, it appears, is it enough if the statute under which an agency operates directs it to take action that might

be in tension with cost-benefit principles. Under the proposed guidance, agencies will be required to "demonstrate that the proposed action is necessary" because of a market failure or other compelling problem. (Draft 2003 Report, at 5514.) Only after OMB tells agencies to identify the need for action does OMB admit that a statute might speak to the question at hand. Even here, however, OMB seems anxious to preserve as much room for executive departure from congressional directives as possible: "If your regulatory intervention results from a statutory or judicial directive, you should describe the specific authority for your action, the extent of discretion available to you, and the regulatory instruments you might use." (Draft 2003 Report, at 5514.)

Later in the Draft Report, OMB again invites agencies to do their best to skirt statutory directives when they conflict with OMB's cost-benefit principles: "You should also discuss the statutory requirements that affect the selection of regulatory approaches. If legal constraints prevent the selection of a regulatory action that best satisfies the philosophy and principles of Executive Order No. 12866, you should identify these constraints and estimate their opportunity cost." (Draft 2003 Report, at 5518.)

Most federal laws do not require, and many do not even allow, agencies to use OMB-style cost-benefit analysis in developing regulatory policy. In its new guidelines for cost-benefit analysis, however, OMB appears to encourage, or even require, agencies to circumvent statutory directives when they conflict with OMB's perspectives on regulatory policy. These guidelines thus effectively put OMB, rather than Congress, in charge of defining the scope of agency authority. This is not OMB's role, either under federal statutes or under the federal Constitution.

B. Requiring Cost-Effectiveness Analysis for Health and Safety Rules

Another new feature of OMB's proposed guidelines is the requirement that agencies issuing rules "for which the primary benefits are improved public health and safety" conduct cost-effectiveness analysis. (Draft 2003 Report, at 5516.) That is, OMB proposes to require agencies to state the costs per unit of regulatory benefit produced. In the simplest case, this would mean that agencies protecting public health and safety would report the costs per life saved of their rules, in addition to conducting cost-benefit analysis where possible.

This new requirement is less benign than it might appear. There are two large problems with the kind of cost-effectiveness analysis OMB envisions.

First, although OMB states that "[c]ost-effectiveness analysis provides a rigorous way to identify options that achieve the most effective use of the resources available without requiring you to monetize all of the relevant benefits or costs" (Draft 2003 Report, at 5516), it is important to recognize that cost-effectiveness analysis, as practiced by OMB, nevertheless requires agencies to value human lives and health, even if not in monetary terms. This is so because OMB requires agencies to use discounting, a technique that results in a much lower value for lives saved in the future than for lives saved in the near term. Moreover, surprisingly, the lack of monetization, when combined with OMB's approach to discounting, can produce results even less favorable to health, safety, and environmental protection than cost-benefit analysis, properly conducted, would.

This conclusion requires some explanation. OMB insists on discounting life-saving benefits that accrue in the future, such as the saving of lives from long-latency diseases like cancer, even for purposes of conducting cost-effectiveness analysis. (Draft 2003 Report, at 5523.) In this setting, the lives saved, rather than the monetary value of the lives saved, are discounted. Suppose EPA proposed a regulation that would save 100 people from a type of cancer that has a latency period of 20 years. OMB would require EPA to discount these 100 lives over 20 years before calculating the cost-effectiveness of this rule. Through the "magic" of discounting at OMB's preferred discount rate of 7 percent, these 100 lives would be converted to 25.84 lives. In conducting cost-effectiveness analysis after discounting, EPA would divide the estimated costs of its rule by a number reflecting only about one-quarter of the actual lives saved by the rule, thus greatly enlarging the perceived costs per life saved of the rule.

This combination of cost-effectiveness analysis and discounting has a long and troubled history in regulatory circles. Commonly circulated tables purporting to show that health and environmental protection costs hundreds of millions, or even billions, of dollars for every life saved use this methodological combination. Without discounting, the costs per life saved reflected in these tables drops by orders of magnitude. (See Lisa

Heinzerling, Regulatory Costs of Mythic Proportions, 107 Yale L.J. 1981 (1998).)

Moreover, because in cost-effectiveness analysis regulatory benefits are presented as, say, human lives, rather than as dollars, discounting loses any theoretical foundation it might otherwise have. Human lives cannot be put in the bank; they do not earn interest; they do not compound the way money does. It is inappropriate and deeply misleading to suggest that a rule saving 100 lives in 20 years from now, as in the example cited above, will actually save 25.84 lives.

Discounting benefits such as lives saved for purposes of cost-effectiveness analysis undervalues such lives in another way as well. Where human lives are translated into monetary terms, it is appropriate to increase their monetary value over time due to expected increases in income, as there is good evidence that the willingness to pay for decreased risk increases with income. But such increases in value will not be reflected in cost-effectiveness analysis, since no one has ever (to my knowledge) proposed compounding lives themselves to reflect income growth. Thus, while future lives are discounted according to the prevailing rate of return on financial investment, as though they were money, future lives are not compounded to reflect income growth. Yet the logic of discounting depends on economic conditions that would themselves lead to growth in income. The failure to account for this fact in cost-effectiveness analysis understates the benefits of life-saving regulation.

A final problem created by cost-effectiveness analysis of health and safety regulation is the selection of the measure of effectiveness. In its official policy statements, OMB has appeared to embrace a preference for measuring the effectiveness of life-saving regulation according to the number of life-*years* saved by the regulation, rather than according to the number of *lives* saved. (OMB, Ranking Regulatory Investments in Public Health, Analytical Perspectives on FY 2003 Budget, available at http://www.whitehouse.gov/omb/inforeg/spec24.pdf.) Tellingly, in its cost-benefit practices as applied to individual policies, OMB appears to *insist on* assessing the wisdom of life-saving policies according to the number of life-years they save. (Consider, again, the cost-benefit analysis of the "Clear Skies" initiative, available at http://www.epa.gov/air/clearskies/tech_adden.pdf, at pp. 35-37.) In OMB's

hands, rules that save the elderly become less cost-effective – and thus less justified – than rules that save younger people.

C. Quantifying Uncertainty

Another significant innovation in OMB's proposed guidelines is the requirement that agencies conduct a formal probabilistic analysis for rules with "economic effects that exceed more than $1 billion per year," and also for other rules where possible. (Draft 2003 Report, at 5523.) This requirement adds significantly to the analytical burdens of agencies charged with protecting health, safety, and the environment.

OMB's new analytical requirement also incorporates OMB's hostility to the precautionary principle which is embedded in many of our laws concerning health, safety, and the environment. OMB suggests, for example, that where uncertainty about regulatory consequences arises from a lack of data, an agency "might consider deferring the decision ... pending further study to obtain sufficient data." OMB also warns agencies that their analysis "should not reflect any unstated or unsupported preferences, even for such worthy objectives as protecting public health or the environment." (Draft 2003 Report, at 5523.) In these passages, OMB signals an intent to dismantle the precautionary approach that has been embraced by health, safety, and environmental agencies, based on their statutory mandates, for decades.

D. Translating Lives Into Dollars

In these proposed guidelines, OMB continues and deepens its misguided efforts to translate human lives into dollars.

OMB adds numerous new analytical requirements for agencies that seek to "transfer" estimates of benefits from one setting to another. (Draft 2003 Report, at 5519-5520.) These requirements will add significantly to the already-existing analytical burdens of the agencies, without any explanation from OMB about why such requirements are necessary or about whether they respond to some specific problem OMB has encountered. These requirements also, in some cases, threaten to prevent agencies from using well-documented, peer-reviewed economic studies in their regulatory analyses.

For example, without elaboration, OMB forbids "benefits transfer" in some contexts, advising agencies that they "should not use a value developed from a study involving small marginal changes in a policy context involving large changes in the quantity of the good." (Draft 2003 Report, at 5520.) A careful student of OMB's previous cost-benefit reports will recall that OMB has, in the past, severely criticized EPA's retrospective analysis of the costs and benefits of the Clean Air Act on precisely this ground. EPA's peer-reviewed report concluded that clean air regulation had produced at least $22 trillion in net benefits from 1970-1990. (EPA, The Benefits and Costs of the Clean Air Act, 1970 to 1990, at ES-8 (Oct. 1997).) This sunny conclusion about a regulatory program has always been too much for OMB to bear. Thus, in previous reports which (unlike this year's report) reviewed regulations issued prior to 1992, OMB included estimates from EPA's Clean Air Act report but assiduously surrounded these estimates with skeptical arguments about why the report likely overestimated the benefits of cleaning the air. One of the most prominent of these arguments was that the health risks from breathing polluted air were much higher than the workplace risks analyzed in the studies upon which the value of a statistical life used in EPA's report was based. OMB thought it unlikely that people exposed to the high risks from polluted air would be able to pay as much to avoid those risks because the amount they would have to pay would represent an appreciable portion of the average income. (OMB, Report to Congress on the Costs and Benefits of Federal Regulations, at 32 (1998).) Thus, perversely, OMB would give a lower value to more serious risks. In its proposed cost-benefit guidelines, OMB appears to entrench this strange approach by forbidding benefits transfer in the situation described here.

In instructing agencies how to translate lives into dollars, OMB also appears to lean heavily in favor of evidence based on a "willingness to pay" (WTP) framework rather than a "willingness to accept" (WTA) framework. The difference is that in the first case, the "consumer" of risk must pay to avoid it, while in the latter case, she is given the ability to decide whether to participate in the market for risk at all. Empirical evidence documents that when people are given the freedom to decline to participate in markets for risk, they often do so. OMB asserts, without elaboration, that WTP is superior because it "provide[s] a more conservative measure of benefits." (Draft 2003 Report, at 5518.) While it may be true that WTP yields *lower* estimates of regulatory benefits (because WTP is so heavily limited by a person's capacity to pay), this does not mean that the estimates it yields are therefore more "conservative" or even more reliable.

Indeed, the great irony is that the most commonly used studies of "willingness to pay" in matters of risk are, in fact, studies of "willingness to accept" money in exchange for increased risk: they are studies of the wage premium workers in the 1970s purportedly received in return for taking on increased risk in the workplace. Yet OMB suggests that the values derived from these studies are, if anything, too *low*. (Draft 2003 Report, at 5519.) Nowhere does OMB come to terms with this internal consistency in its report.

In discussing monetization of lives, OMB also asks agencies to provide monetary estimates of both lives and life-years. (Draft 2003 Report, at 5521.) As OMB acknowledges, providing estimates of the monetary value of life-years implies that there may be a difference in the monetary value of lives depending on the age of the people being saved. (Draft 2003 Report, at 5521.) OMB also hedges on this point, however, suggesting that perhaps the elderly place a high value on reducing risks to themselves, after all. (Draft 2003 Report, at 5521.)

In analyses conducted in less public settings, however, OMB has not been so reticent about the relative value of the old and the young. In several analyses of the benefits of air pollution regulation, for example, OMB has insisted upon including different monetary values for people whose lives are saved by this regulation, depending on whether they are under or over 70 at the time they are saved. (See, e.g., http://www.epa.gov/air/clearskies/tech_adden.pdf (valuing lives of people under 70 at $3.7 million, and lives of people over 70 at $2.3 million).)

Finally, OMB does not instruct agencies how they might adjust monetary values for life and health upward in situations where the lives and health are protected from future harm. Although, as discussed in the next section, OMB spends a great deal of time justifying its decision to require agencies to *discount* future benefits, OMB does not tell agencies to *increase* future benefits to account for the income growth that OMB itself expects to occur in the future.

E. Discounting

OMB's proposed guidelines also further entrench another problematic analytical technique – the technique of discounting future regulatory benefits, including lives saved.

As a general matter, the use of discounting systematically and improperly downgrades the importance of environmental regulation. While discounting makes sense in comparing alternative *financial* investments, it cannot reasonably be used to make a choice between preventing harms to present generations and preventing similar harms to future generations. Nor can discounting reasonably be used even to make a choice between harms to the current generation; choosing between preventing an automobile fatality and a cancer death does not turn on prevailing rates of return on financial investments. In addition, discounting tends to trivialize long-term environmental risks, minimizing the very real threat our society faces from potential catastrophes and irreversible environmental harms, such as those posed by global warming and nuclear waste.

OMB's proposed guidelines add two new features to this problematic exercise. First, OMB asks agencies to consider "the time lag between when a rule takes effect and when the resulting physical improvements in health status will be observed in the target population" – a time period it calls the "cessation lag." (Draft 2003 Report, at 5522.) This new analytical requirement is burdensome without being helpful. OMB cannot even tell us whether the "cessation lag" is different from the latency period for human disease. (Draft 2003 Report, at 5522.) This requirement threatens to waste agency resources without providing any meaningful information about regulatory policy. As with many of OMB's analytical requirements, however, the concept of a cessation lag does have the "benefit," when employed, of reducing the apparent benefits of health, safety, and environmental protection.

Second, OMB includes in its proposed guidelines a discussion of discounting regulatory benefits to future generations. Despite the unstable methodological foundations of such a practice (no one suggests we can ask the yet-to-be-born what their willingness to pay for reduced risk is), and despite the ethical problems associated with discounting the well-being of future generations, OMB forges ahead with this practice. OMB blithely explains that since future generations are likely to be wealthier than we are, discounting is appropriate. (Draft 2003 Report, at 5522.) Nowhere does OMB come to terms with the fact that if future generations are indeed

wealthier than we are, they will likely be willing to pay more to reduce risk than we are, and thus it is not at all clear that their lives should be discounted relative to ours. Nor does OMB acknowledge the possibility that large-scale social, political, and environmental upheavals could lead to greater, rather than less, poverty in future generations.

OMB does try to justify discounting the utility of future generations by saying that great uncertainty exists with respect to the appropriate discount rate over very long time intervals – but OMB acknowledges, at the same time, that this justification merely supports the lowering of the discount rate applied to benefits accruing to future generations. (Draft 2003 Report, at 5523.) It does not support the use of discounting in the first place, in the context of future generations. So the only argument we are left with for discounting benefits accruing to future generations is that they are likely to be richer than we are.

It is hard to overstate the effect of discounting on benefits that will accrue to future generations. In the year 2100, the Census Bureau predicts, the population of the United States will be approximately 571 million people. At OMB's 7 percent discount rate, saving the entire population of the United States one century from now becomes equivalent, in cost-benefit terms, to saving about 658,000 people today. With the magic of a calculator, over 570 million lives simply disappear.

II. OMB's Estimates of the Costs and Benefits of Federal Regulation

The aggregate estimates of the costs and benefits of federal regulation in the Draft 2003 Report are so pervaded by biases, and so riddled by error, that they are virtually worthless as an indicator of the general wisdom of current approaches to federal regulation. These biases and errors surface in OMB's estimates of costs and benefits; in OMB's decisions about what types of federal programs to exclude from cost-benefit review; in OMB's choices about which federal regulations to exclude from its cost-benefit tables; and in OMB's commentary on these estimates. Finally, the tables presenting OMB's estimates are so confusing as to be almost indecipherable to anyone not willing to devote many hours to decoding them; even then they are hard to fathom.

A. OMB's Underestimation of Regulatory Benefits

OMB uses a myriad of approaches to make regulatory benefits look as minuscule as possible. I will rest with one important example. OMB goes out of its way to present alternative estimates of the costs and benefits of three rules issued between October 2001 and September 2002. (Draft 2003 Report, at 5501, Table 8.) Included in this analysis is EPA's rule controlling emissions from large nonroad engines. Whereas OMB first reports that this rule will produce $410 million per year in reduced engine operating costs and $900 million to $7.88 billion in air quality benefits in the year 2030 (Draft 2003 Report, at 5496, Table 4), OMB later opines that the rule will produce from $913 million to $4.8 billion in annual benefits. (Draft 2003 Report, at 5501, Table 8.) What accounts for the difference in these two estimates?

At the high end, it is simply not clear how OMB has managed to reduce annual benefits so dramatically. That is all I can say.

At the lower end, however, it is all too clear (if one reads deeply enough into documents outside OMB's report). OMB managed to estimate that the benefits of the nonroad engine rule could be as "low" as $913 million per year only through a bizarre and implausible analytical technique whose only justification, so far as I can tell, is to make regulatory benefits appear smaller than they are. This strained methodology is noteworthy because it tackles air pollution control, an area of environmental protection where health benefits are both clear and widespread.

OMB's strange new analytical technique (which appears in this Draft Report, in the economic analysis of the administration's Clear Skies initiative, and in the economic analysis of the nonroad engine rule) begins with four steps. First, reduce the value of statistical life by considering only "contingent valuation" studies (surveys), not studies of actual market behavior (in contradiction of OMB's preference, expressed elsewhere, for the latter over the former). Second, assign a lower monetary value to the lives of the elderly than to those of younger people. Third, by looking at average life expectancy, determine the number of life-years remaining to these two populations. Fourth, divide the monetary value you have used by the number of remaining life-years. These calculations will produce an estimate of the monetary value per life-year saved for elderly and younger populations, respectively. Oddly enough, despite the initial assumption that the lives of the elderly are worth less in monetary terms, this strange calculation has the effect of making them worth more in the end: because

they have fewer life-years left to live, each life-year is worth relatively more when the value of life is fixed in advance. (OMB has not yet come to terms with the internal inconsistency of this new approach.)

After these calculations, assume that air pollution regulation saves five years of life, no matter how old the person who is saved is. Next, multiply the number of life-years saved (five) by the monetary value you have calculated for a life-year in the relevant population. Now, you once again have arrived at a monetary value for a statistical life: but the beauty of this approach is that this value has magically shrunk through the strange calculations described above. (To see this bizarre analysis in action, see, for example, EPA's cost-benefit analysis of the "Clear Skies" initiative, available at http://www.epa.gov/air/clearskies/tech_adden.pdf, at pp. 35-37.)

What is the theoretical or empirical justification for this strange new methodology, beyond its capacity to shrink regulatory benefits? OMB does not say.

B. OMB's Arbitrary Exclusion of Deregulatory Actions from Cost-Benefit Review

One looks in vain in this year's draft report for any evidence of some of the most high-profile agency activities of the past two years: that is, actions taken to reduce regulatory requirements for private industry. It is as if EPA had not, for example, changed the New Source Review program of the Clean Air Act. By subjecting regulatory actions to cost-benefit review, but allowing deregulatory actions a free pass, OMB exhibits its clear bias toward deregulation and against government intervention.

C. OMB's Arbitrary Exclusion of So-Called "Agency Transfer Rules" from Cost-Benefit Review

The Draft 2003 Report does not report the costs and benefits of what it calls "agency transfer rules," or rules that transfer money from the federal government to private parties. Indeed, the Report does not even list such rules if they were issued prior to October 1, 2001; it lists such rules only if they were issued subsequent to that date. (Draft 2003 Report at p. 5497, Table 5.) For the "agency transfer rules" issued between October 1, 2001, and September 30, 2002, OMB provides only a brief description of the rules without any estimate whatsoever of their economic costs or benefits. In its

2002 Report to Congress, "Stimulating Smarter Regulation: 2002 Report to Congress on the Costs and Benefits of Regulations and Unfunded Mandates on State, Local, and Tribal Entities" [hereinafter "Stimulating Smarter Regulation"], OMB explained in a footnote why it had not analyzed the costs and benefits of transfer rules: "Rules that transfer Federal dollars among parties are not included because transfers are not social costs or benefits. If included, they would add equal amounts to benefits and costs." (OMB Final 2002 Report, at p. 36 n. 30.)

The "transfer rules" listed in the Draft 2003 Report include many very expensive government programs. The money spent on these programs is not available for other purposes. The expenditures associated with these programs are therefore opportunity costs in the classic sense; if, for example, the federal government were not going to spend an estimated $1.3 billion to pay peanut farmers to buy out their government quotas (see fourth item on Table 5, Draft 2003 Report at 5497; for cost estimate, see http://www.ewg.org/farm/peanuts/faq_peanuts.php, citing Congressional Budget Office estimate of program costs), it would presumably have that $1.3 billion to spend on something else. Elsewhere in the Draft 2003 Report, OMB states that one of its purposes in conducting cost-benefit analysis is to assess the opportunity costs of federal government programs. (Draft 2003 Report, at 5518.) In addition, in its proposed new guidelines for cost-benefit analysis, OMB explicitly requires agencies to the distributional effects of transfer payments. (Draft 2003 Report, at 5524.) OMB's complete and utter failure to consider the opportunity costs and distributional consequences of the "agency transfer rules" in Table 5 flouts OMB's own official policy statements.

Furthermore, OMB has provided no principled definition of what constitutes a "transfer rule." Technically speaking, the transfer rules that lie outside the scope of conventional cost-benefit analysis are those rules that do not attempt to change, or have the effect of changing, the nature or level of economic goods or services provided by private economic actors. They simply transfer money from one entity to another after market actors have chosen the nature and level of goods and services to be provided.

The agency rules OMB includes within the category of "transfer rules" do not all meet this definition. For example, OMB includes as "transfer rules" agricultural subsidy programs that clearly affect the nature and level of agricultural goods provided in this country. There can be little

doubt, for example, that the agency rules associated with the 2002 farm bill's sugar program (listed in Table 5, 2003 Draft Report, at 5497) will affect the production of sugar and thus affect the primary behavior of market actors. Yet OMB provides no explanation as to why these rules are "transfer rules" rather than rules that would otherwise be subject to economic analysis. If the federal government chose to affect sugar production through more conventional regulation – such as, for example, the tightening of environmental standards for sugar production – then the costs associated with that regulation would appear in OMB's cost-benefit tables. It is purely arbitrary to characterize rules such as the sugar program rules as "transfer rules" simply because they affect market actors' behavior through subsidies rather than through government commands.

Even more fundamentally, OMB's decision not to examine the costs and benefits of transfer rules exposes the general poverty of OMB's analytical methodologies. Transfer programs – especially those in which the government takes money from general revenues and gives it to a specific person or entity – are filled with potential for waste and special-interest deal-making. They offer an opportunity, moreover, for the rich to get richer at the taxpayer's expense. In the Peanut Quota Buyout Program, for example, it is estimated that the largest peanut farmers will get the most money from the program. (For information about the program, see http://www.ewg.org/farm/peanuts.) Even if this were indeed a true transfer program – one which had no effect on the market behavior of peanut farmers – it should nevertheless be relevant, as a matter of public policy, that money is being transferred from the relatively worse off (consider the average taxpayer) to the relatively better off (the biggest peanut farmers get the most money). OMB's muteness in the face of this transfer reflects the general inability of cost-benefit analysis to take the distributional effects of government programs into account in adjudging their wisdom. Even so, to have OMB wash its hands of review of this kind of program, which in this case is predicted to cost taxpayers $1.3 billion, and to turn its steely gaze instead on air pollution rules that seem to be the best regulatory bargain of all, reflects a massive failure of OMB to set sensible priorities for its own oversight activities.

Perhaps OMB will respond by suggesting that it has no authority to question the priorities reflected in, for example, agricultural subsidies that go predominantly to the richest farmers. Here, it suffices to observe that OMB has displayed no such reticence when it comes to questioning the priorities

embodied in health, safety, and environmental legislation (a topic to which we will return in Part II, below).

At the very least, OMB should provide: (1) a clear definition of what it means by "agency transfer rules"; (2) an explanation of why the rules listed in Table 5 meet this definition; (3) a listing of the economic costs of the transfer rules it deems inappropriate for cost-benefit analysis, so that the reader of this Report might at least be able to judge the relative expense associated with the transfer rules OMB does not choose to analyze and the social regulations it does; and (4) as required by its own proposed cost-benefit guidance, an analysis of the distributional effects of these transfer rules.

D. OMB's Arbitrary Exclusion of Highly Efficacious Rules from its Estimates of the Costs and Benefits of Federal Regulations

Even where information about a rule's costs and benefits is available, OMB sometimes arbitrarily excludes this information from its estimates of the costs and benefits of federal regulation. These exclusions, though arbitrary, do serve one (illegitimate) purpose: because the rules excluded were highly efficacious, their exclusion from OMB's aggregate estimates of the costs and benefits of federal regulation makes those aggregate estimates look less favorable to regulation than they would with these programs included.

First, OMB excludes three air pollution rules – which it refers to as "mobile source" rules even though only one of the rules has to do with mobile sources – from its estimates. (Draft 2003 Report, at p. 28.) Although OMB concedes that these rules are "projected to achieve substantial reductions in [sulfur dioxide] and [particulate matter] emissions," OMB nonetheless leaves these rules out of its analysis due to "the uncertainties associated with benefits transfer." (Draft 2003 Report, at 5502, & n. 14.) This is an amazing statement. Virtually all of the monetized benefits of health, safety, and environmental rules – insofar as these benefits include reduction in risk of death – involve "uncertainties associated with benefits transfer." Benefits transfer is simply the practice of using monetary valuations obtained in one context – such as risks in the workplace – to value benefits in another context – such as environmental risks. OMB's observation that these uncertainties also arise from differences in "sources of emissions, meteorology," etc. (Draft 2003 Report, at 5502), also would

apply to any attempt to value pollution reduction according to the value per ton of pollution reduced. OMB makes no effort whatsoever to explain why these three rules, in particular, pose the problem of uncertainty to such a degree that they should not be included in its analysis.

Second, OMB also excludes analysis of the costs and benefits of other rules, but without mentioning it. For example, OMB does not discuss the costs and benefits of OSHA's ergonomics standard and the FDA's regulation of tobacco and tobacco products. In last year's report, OMB explained that it was excluding these rules because they had been overturned – in the former case by Congress, in the latter by the Supreme Court. (Stimulating Smarter Regulation, at 37, n. 32.) Yet OMB has in the past included rules subject to legal challenge in its analysis. (Stimulating Smarter Regulation, at 50, Table 9 (listing costs and benefits of roadless area conservation rule); id. at 104 (noting that the implementation of this rule had been enjoined by a federal district court).) One would think it would be useful for OMB to consider whether any of the rules that have been invalidated – either by Congress or the courts – were sensible enough to justify inquiry into whether they could be resurrected in some form. In particular, since this is a report to Congress on the costs and benefits of federal regulation, it seems reasonable to expect OMB to advise Congress as to how the one rule that Congress has invalidated under the Congressional Review Act – OSHA's ergonomics standard – would fare under OMB's current standards for cost-benefit analysis. For its part, OSHA thought the ergonomics rule would produce at least $9 billion in annualized benefits. (See GAO letter to Senator Jeffords, available at http://www.gao.gov/decisions/majrule/d01200r.htm (11/29/00).)

It appears that OMB has also excluded other major rules from this year's analysis, without saying so. For example, last year, OMB excluded the Environmental Protection Agency's (EPA) revised National Ambient Air Quality Standards (NAAQS) for ozone and particulate matter from its analysis on the ground that it thought this would prevent "double-counting." (Stimulating Smarter Regulation, p. 37, n. 32.) Yet this year, OMB says that its estimates of the costs and benefits of major rules for the period come from Chapter IV of OMB's 2000 Report. (Draft 2003 Report, at 5499.) The 2000 Report included estimates of the costs and benefits of the revised ozone and particulate matter NAAQS. It does not appear, however, that OMB included these estimates in this year's draft report, as the numbers for EPA in the draft report would be much higher – and show air pollution

regulation in an even more favorable light – if the NAAQS were included. If OMB decides to include the ozone and particulate matter NAAQS from its estimates in order to prevent "double-counting" of costs and benefits, OMB should explain how it has concluded that attaining and maintaining the revised NAAQS will involve only those air pollution control programs it has listed in its Draft 2003 Report.

In sum, OMB has arbitrarily excluded rules from its estimates of costs and benefits – and has done so in a manner that appears systematically to paint regulation in a less favorable light than if those rules were included.

E. OMB's Grudging Attitude Toward Finding Benefits From Environmental Regulation

If one merely looked at the tables in OMB's report, one would expect OMB to conclude that the best regulatory bargain around is regulation of air pollution. Time and again, OMB's numbers reflect how large the benefits of air pollution regulation are in comparison to its costs. Yet, instead of praising this kind of regulation from an economic point of view, OMB does all it can to minimize the impression that regulating air pollution has produced overwhelmingly positive results. For one thing, as noted above, OMB arbitrarily excludes effective pollution regulations from its analysis. In addition, in two different places, OMB goes out of its way to express its skepticism about the benefits of air pollution control. (Draft 2003 Report, at 5494, n. 8; 5502, n. 12.)

A less skeptical, more objective, attitude toward air pollution control would be in order if OMB were truly interested in neutrally reviewing federal regulatory programs. Such an attitude might, at the least, have led OMB to catch sooner its whopper of a mistake in last year's report: as OMB acknowledges in this year's draft report, it overestimated the costs of air pollution control by *$20 billion per year* in last year's report. (Draft 2003 Report, at 5493.) One might perhaps be forgiven for wondering whether a more neutral attitude toward environmental regulation might have caused OMB's analysts to question the magnitude of this number – and to discover the mistake it was about to make – before the 2002 report was published.

F. OMB's Tables Are Confusing and Opaque

For an office that crows about the transparency of its analysis, OMB's tables showing the costs and benefits of federal regulation are surprisingly hard to understand, to follow, and to critique. OMB should do a better job of explaining what it is doing.

First of all, OMB's report is very hard to follow if one does not, in addition to reading this report, read the many OMB reports on costs and benefits that have preceded it. OMB frequently refers to previous reports for exceedingly important points, without elaboration. For example, as mentioned above, OMB refers to its 2000 Report as the source of its estimates of costs and benefits for the years 1995-1999, yet it appears that OMB has made significant adjustments to the 2000 Report's estimates – without saying so or explaining why.

Second, OMB, confusingly, presents separate charts for different periods of time (1992-93, etc.), without ever presenting, in one place, a chart showing all of the regulations and cost/benefit estimates on which it is relying. This haphazard mode of presentation is hard to follow, and also raises questions about what exactly OMB is doing. OMB should provide its estimates in a form that allows a reader to check its work. In this regard, it would help matters greatly if OMB would describe the rules it is appraising more precisely by, for example, giving a cite from the Federal Register to each rule it analyzes in this Report.

Finally, OMB places crucial reliance on two documents that do not appear to be in the public record. In estimating the benefits of reducing emissions of nitrogen oxides from stationary and mobile sources, OMB cites a letter from Don Arbuckle to Tom Gibson, dated May 16, 2002, and a memo to EPA's NSR docket from Bryan Hubbell of EPA. (Draft 2003 Report, at 5502.) OMB relies on these documents in justifying its decision to value benefits of reducing the same air pollutant – nitrogen oxides – differently depending on whether it comes from stationary or mobile sources. (Draft 2003 Report, at 5502.) I have attempted to obtain these documents from the web or, in the case of the Hubbell memo, from Bryan Hubbell himself via an email request, but so far I have been unable to obtain them. Thus, as far as I can tell, OMB's assertions about the relative benefits of reducing pollution from stationary and mobile sources cannot be evaluated by the public. These memos should be made public – preferably on OMB's web site, so that they are easy to find when reviewing OMB's

Draft Report – so that OMB's important assumptions about the benefits of air pollution control can be analyzed.

III. Terrorism and Cost-Benefit Analysis

Last year, OMB reported that it had cleared 58 new regulations in response to the terrorist attacks of September 11. (Stimulating Smarter Regulation, at 7 & Table 1.) OMB stated that many of these rules did not have an impact of $100 million or more on the economy and thus had not been accompanied by regulatory impact statements. (Stimulating Smarter Regulation, at 11.) Even so, surely some of these rules were economically significant – yet an analysis of their costs and benefits did not appear in last year's report, nor does one appear in this year's report. OMB assures the reader that "all the rules related to September 11th received priority attention from the appropriate reviewers, and that the Administration's best solutions to respond to potential terrorist attacks were implemented" (Draft 2003 Report, at 5499), but it provides no specific analysis of these important rules.

The result is almost surreal: whereas this year's report gives us detailed analysis of rules such as the Department of the Interior's "Early Season Migratory Bird Hunting Regulations 2002-2003" and its "Late-Season Migratory Bird Hunting Regulations 2002-2003" (Draft 2003 Report, at 5495, Table 4), it provides no analysis whatsoever of the costs and benefits of the large-scale regulatory changes that have taken place after September 11. Looking at OMB's draft report, one would think our country had spent the last year absorbed in the minutiae of the bird-hunting season.

It is not that cost-benefit analysis of terrorism-related regulation will be very helpful, as discussed below. Rather, it is that OMB's apparently arbitrary selection of the rules to be included in its report on the costs and benefits of federal regulation renders the report virtually meaningless in evaluating federal regulatory policy. Attending to the costs and benefits of adjusting the bird-hunting season, without analyzing the effectiveness of all we have done after September 11, makes a mockery of OMB's pretense of expertise in priority setting.

This year's draft report does, to be sure, invite comment on how OMB might go about analyzing terrorism-related regulations. (Draft 2003 Report, at 5499.) However, it does so by asking how best to conduct cost-benefit analysis of such regulations. (Draft 2003 Report, at 5499.) It is reasonable

to predict that any such analysis of terrorism-related regulations is doomed to failure. Prevention of terrorism, like many other important social aims, is not capable of being incorporated into the narrow and rigid framework of cost-benefit analysis.

Perhaps the best evidence for this proposition comes from an effort, pre-September 11, to assess the costs and benefits of improving airline security in order to prevent terrorist attacks. Shortly after TWA Flight 800 crashed into the ocean off the coast of Long Island in 1996, Robert Hahn, now the director of the AEI-Brookings Joint Center for Regulatory Studies, tried to assess the costs and benefits of enhanced airport security. (Robert W. Hahn, The Cost of Antiterrorist Rhetoric, Regulation: The Review of Business & Government, vol. 19 no. 4 (1996).) He concluded that the costs of improved airport security were not worth the benefits. The benefits, he argued, were quite small given that, at that time, only an average of 37 people per year died in terrorist incidents. He stated that even if that number were increased ten-fold or even one-hundred-fold, the benefits of improved airport security still would not exceed the costs. September 11, of course, increased the terrorist death toll for 2001 by almost one-hundred-fold from Hahn's estimate.

Where upper-bound risks are radically uncertain, as they are in the case of terrorism (and as they often are when it comes to health, safety, and environmental problems), it defies reason to act as though they can be meaningfully absorbed into the cost-benefit framework. Perhaps the best that can be done is to ask, not whether measures to combat such risks pass the cost-benefit test, but whether the measures we have adopted are reasonably likely to reduce these risks.

IV. Inviting Criticism of the Precautionary Principle

In a new feature of its report, OMB invites commentators to discuss U.S. approaches to analyzing and managing "emerging risks." (Draft 2003 Report, at 5498-99.) Specifically, OMB asks for comment on: (1) "the ways in which 'precaution' is embedded in current risk assessment procedures through 'conservative' assumptions or through explicit 'protective' measures"; (2) examples of risk assessment approaches "which appear unbalanced"; and (3) "[h]ow the U.S. balances precautionary approaches to health, safety and environmental risks with other interests such as economic growth and technological innovation." (Draft 2003 Report, at 5499.)

The wording of this invitation for comments suggests OMB is anxious to receive comments that are hostile to the principle of precaution. Other portions of the Draft Report reinforce this interpretation. (See, e.g., Draft 2003 Report, at 5523 (cautioning against incorporation of precaution in risk assessments).) It is too early to tell what will come of this process. Given the fiascos created by OMB's previous open-ended invitations to commentators to submit criticisms of the current regulatory system (recall the "hit list" of the 2001 Report), it will be worth monitoring OMB's response to the comments it has solicited on the precautionary principle.

Mr. OSE. Rabbi Swartz for 5 minutes.

Rabbi SWARTZ. Thank you. I'm grateful for your interest in this issue and the opportunity to share our ideas with you. The Children's Environmental Health Network is a nonpartisan multidisciplinary national organization whose mission is to protect children from the environmental health hazards they face in the womb and during their growing years.

First, some context for our concerns. How are children different?

Because of normal childhood behaviors in the natural course of human development, children are often at greater risk from environmental contaminants. They eat, breathe and drink more than adults, taking in greater exposures per pound that may affect their rapidly growing bodies. That is why an exposure that for an adult has no effect may, for a child, cause life-long harm, as witness lead poisoning. Regulatory accounting has failed to adequately capture costs and benefits to children from health and other regulations, in part because of a lack of recognition of these differences.

Additional problems arise, however, due to some of the assumptions commonly used in cost-benefit analysis, including removing, or at least reducing the visibility of any benefit that could not be monetized. For example, OMB noted about EPA's nonroad rule, that EPA also lists a variety of other benefit categories which it was not able to monetize, ranging from infant mortality to damage to urban ornamental plants. I would say that preventing infant deaths is quite important, but, since EPA didn't monetize that benefit, it doesn't count.

Next, ignoring the constraints children operate under: depending on adults for their protection, not making their own choices or aware of the consequences of their actions and without the resources available to adults. These problems are compounded because children of color, or living in lower income communities often face disproportionate environmental health risks, while most cost-benefit analyses assume equal distribution of all costs and benefits across society.

This latest guidance compounds these and several other problems in a variety of ways. I'd like to just review two now: an increasing reliance on monetizing, and a rigid adherence to discounting. I'm not arguing against quantification per se, which cannot only be valuable but is possible without resorting to the often artificial, assumption ridden and far from transparent process of translating health or quality of life to dollar figures.

Instead, I'm asking, is putting a dollar value on a concept, a value, or a person, particularly a child, either useful or more fundamentally in consonance with basic American values?

As our President noted last Thursday evening, how do you measure the benefit of freedom or the immeasurable cost of lost lives, how to measure the value of a parent's love or the religious value that we place on having healthy children? Children's high value to parents is borne out by economic research. For example, one recent paper found that parents have a significantly higher willingness to pay to avoid acute illnesses affecting children than those affecting adults.

Now to discounting. In this guidance OMB acknowledges that its practice of discounting benefits in the future has been questioned,

in part because such discounting greatly reduces health benefits to children. Let me give you one example of this from last year's budget documents. For us noneconomists, it would seem that, when we prevent the death of a 3-year-old child with a life expectancy of 78 years, that we would have saved 75 life years, while preventing the death of a 40-year-old saves 39 years. With OMB's discount, however, the 40-year-old saves approximately 13.3 discounted life years. And, the 3-year-old? Approximately 14.3 discounted life years. OMB says, and we agree, "special ethical considerations arise when comparing benefits and costs across generations." But then it limits such considerations to the same fine print as that which has not been fully monetized.

Finally, this guidance also assumes that overestimated benefits are a greater concern than overestimated costs. This is not supported by real world data, which show that the actual costs of regulations are frequently below the preregulation estimate while the benefits from such regulatory decisions as removing lead from gasoline are more than an order of magnitude higher than predicted.

Finally, we agree with OMB when it says, "when important benefits and costs cannot be expressed in monetary units, then it is less useful, and it can even be misleading." Our hope is that OMB will change its guidance to put this important observation into effect.

Mr. OSE. Thank you, Rabbi Swartz.

[The prepared statement of Rabbi Swartz follows:]

Testimony Submitted to the
House Committee on Government Reform
Energy Policy, Natural Resources & Regulatory Affairs Subcommittee

Daniel Swartz
Executive Director
Children's Environmental Health Network
March 11, 2003

Thank you. I am grateful for the opportunity to share our ideas and comments with you and I appreciate the Committee's interest in this issue. The Children's Environmental Health Network commends the Committee for recognizing that the unique characteristics of children require explicit consideration by policy-makers in order to ensure that we do right by America's children. The Children's Environmental Health Network is a non-partisan and multi-disciplinary national organization whose mission is to protect the fetus and the child from environmental hazards and to promote a healthy environment. The Network's Board of Directors and committee members include numerous experts in children's environmental health who serve on key Federal advisory panels and scientific boards.

We are here today to discuss regulatory accounting and how the Office of Management and Budget (OMB) directs agencies to conduct cost-benefit analyses. We are interested in these analyses because, as currently conducted, they undervalue children and thus may lead to policy decisions that do not sufficiently protect children. To understand the source of these discrepancies, I will first describe some of children's "unique characteristics" that should be borne in mind by those conducting or utilizing such analyses.

How are children different from the standpoint of health and environment?

How are children different? Children, relative to adults, tend to eat, breathe and drink more. As a result of this increased intake, children absorb a disproportionate amount of the burden of environmental toxicants. Because children exist in a state of constant biological and social change, the development of key organs and organ systems can be thrown completely off by what might seem to be relatively minor perturbations. Thus, exposures to environmental toxicants can have truly detrimental impacts on children for the rest of their lives. That is why an exposure that for an adult may have no effect or a mild effect may, for a child, cause lifelong harm, as the impact of lead on the developing child attests.

And, of course, children, compared to adults, are likely to have more years of life before them. Actions we take (or don't take) today will influence how many, and how healthy, those years will be. Because children have more prospective years, each environmental exposure creates far more opportunities for diseases with long latency periods to develop. In summary, since they disproportionately bear the costs of these toxicants, it is with reference to children's health and well being that we as a society should seek to regulate and prevent harmful exposures.

Children pose a unique challenge to cost-benefit analyses – many analyses fail to sufficiently value children

Any efforts to measure costs and benefits of Federal regulations should not only proceed from an understanding of children's health differences, but should also include consideration of how costs and benefits to children might be different. These differences need to be identified and appropriately measured in order to prevent our children from being shortchanged by cost-benefit analyses. This has not routinely been done by most Federal agencies, including OMB.

The following examples outline some of the general design flaws that prevent current estimates, monetized or not, of the value of reducing adverse impacts on children from being comprehensive or accurate.

- Children's unique vulnerabilities, behavior and exposures are rarely specifically considered in the course of regulations. Only recently has the scientific basis for identifying the separate and sometimes more pronounced effects for children begun to be addressed in the regulatory process. Yet, even today, regulatory impact analyses generally do not identify children separately from adults, and thus potential health benefits are not accurately portrayed.

- The literature used in monetized benefit estimation often pertains specifically to adults. Relatively few valuation studies on environmental risks to children are presently available. In many cases, benefits estimates for children are based on indirect measures of parents' "willingness-to-pay," leading to flawed results, as I will discuss briefly below

- Very limited information exists about the monetary value of reducing many of the adverse effects that are specific to children, or occur more frequently in children (ranging from saved medical expenses to long-term impacts of asthma-related restrictions on childhood activities). Thus, it is likely that estimates of children's health benefits are incorrect.[1]

- The benefits derived from a regulation are based at times on lost wages or impact on productivity. Such approaches ignore benefits to those who are not earning regular wages or considered to be contributing to the economy's productivity, such as children.

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[1] November 22, 1999 Children's Health Protection Advisory Committee letter to EPA Administrator Browner

- Data that cannot be reliably quantified or monetized are not typically assigned a value in economic analyses. Quite often, effects on children would fall into this category and thus are not valued. The absence of these effects are not highlighted in the assessments and thus usually become invisible to the public and decision-makers.

- Cost-benefit analyses typically ignore the constraints children operate under: they are frequently not independent actors making their own choices, they are not informed or aware of the consequences of the choices they do make, and they often have fewer resources available, leading, for example, to child poverty rates that exceed those of adults. These problems are compounded because children of color or living in lower income communities often face disproportionate environmental health risks.

- Health effects to children from environmental health hazards often occur over a number of years, sometimes even across generations. Traditional discounting methods systemically reduce the value of such long-term benefits.

Is Monetizing Children's Health Appropriate?

Perhaps most importantly, any discussion of cost-benefit analyses must ask whether or not putting a dollar value on a concept, a value or a person, particularly a child, is either useful or, more fundamentally, in consonance with basic American values.

This is not an argument against quantification per se, though this too has its limits, as noted below. Rigorous quantification is possible, however, without resorting to the often artificial and nearly always assumption-ridden process of translating health or quality of life to dollar figures.

As our President noted last Thursday evening, "How do you measure the benefit of freedom" or the "immeasurable cost" of lost lives? How to measure the value to society for assuring that all of its children grow up healthy in a healthy environment? How to assign a dollar amount not only to a parent's love, but also to more "indirect benefits" of children, such as their value to society as a whole, or the religious value that we place on having healthy children? Even if a monetary value is assigned, this value may not consider the full range of inherent benefits of such a goal.

Furthermore, some of the approaches typically used in attempts to monetize costs and benefits are especially inappropriate for evaluating costs and benefits in relation to children. For example, is it possible to accurately judge a child's "willingness to pay," or "value of statistical life" or similar measures? Without explicit, transparent acknowledgements of such profound limitations, monetization can make analyses more obscure rather than more transparent or useful to policy makers. Some have attempted to use parental "willingness to pay" as a substitute for direct valuation and a surrogate for any possible social benefits. The current method of this approach, however, is rarely to directly ask parents their "willingness," but to extrapolate or infer from

other activities, such as how much time a woman spends buckling her child correctly into a car seat and then assigning a dollar value to that time. Having sustained several personal injuries while attempting to wrestle my toddler daughter's car seat into place, I'm not sure what such an estimate shows, as opposed to couples who willingly go deeply into debt as t hey attempt to treat infertility, or, as in our family's case, when they eagerly assume the high financial costs of adoption.

These problems are further exacerbated by OMB's insistence on discounting. Discounting may make sense when making decisions about one's retirement accounts; it does not make sense when considering people or the core principle of public health, primary prevention. For example, the usual practice of discounting of health benefits over time minimizes positive results from regulation, such as preventing damage to a child's health. What parent would say that their child is worth less in ten years than today? Yet under this guidance, our children decrease in value 7 percent per year, effectively becoming worth half as much every decade.

CEHN's experiences and OMB's 2001 Request for Comments

The Network agrees with many experts about the limitations of cost-benefit analyses, as described above. We would like to see policy-makers recognize that such analyses are limited tools to be placed in an appropriate context: as an aid to those making policy decisions, rather than as purely objective means to have policy decisions made for them. However, the Network also believes that as long as these cost-benefit analyses are used, they should be improved as much as possible.

In 2001, OMB "invite[d] commenters to suggest any other reforms to the regulatory development and oversight processes that would improve regulatory outcomes." At that time, the agency stated that it was "not aware of new information that would provide the basis for a major revision to these estimates."

In fact, a variety of exciting recent work had been published, a whole emerging category of economic and valuation research that is providing evidence that children are improperly valued -- and often grossly undervalued -- in present Federal regulatory accounting efforts.

In our response to OMB, we urged the agency to modify its guidance to reflect this new research.

One resource is the work compiled by the Children's Health Protection Advisory Committee (CHPAC) of the U.S. Environmental Protection Agency. CEHN staff participated in the CHPAC Working Group on Economic Valuation from its conception to the completion of its recommendations. CHPAC has considered how EPA can better reflect the economic value of protecting children's health in economic assessments of proposed regulations and policies, in fact, dedicating substantial time and resources investigating these issues. As a result, the committee has developed a list of policy and research recommendations.

EPA and others have built upon these efforts. The CHPAC recommendations have already led to the development of improved guidance documents at EPA to better value children. Additionally, EPA has sponsored more research in this area. The intriguing questions raised by CHPAC have also generated additional research outside of the agency.

For example, one paper that investigated the nature of parents' preferences for their own health and the health of their children found evidence countering the hypothesis of neutrality of preferences, in which child and parent health are one-to-one substitutes in the parental preference function. The report found that this hypothesis was rejected in favor of substantial parental altruism toward children, reflected in a significantly higher willingness to pay to avoid acute illnesses affecting children when compared to illnesses affecting adults.[2]

In our comments, we urged OMB to actively pursue and/or sponsor such research and incorporate its findings into standard regulatory and economic analyses across the Federal government. Furthermore, we said that the key reform OMB needed to adopt was to take account of the special needs, values, and vulnerabilities of children in a more systematic and transparent fashion.

The 2003 OMB Cost-Benefit Analysis Guidance

Unfortunately, OMB's recently-issued draft guidance does not do a better job of considering children. It does not incorporate any of the new research submitted to them. In fact, this new guidance values children even less, as well as making the cost-benefit process more cumbersome, less efficient and less transparent.

A. Minimizes intangible values and that which cannot be quantified

Though the OMB guidance includes a few statements acknowledging that "intangibles" are of importance and should be somehow incorporated into a cost-benefit analysis,[3] most such statements lie buried in the document. No real guidance of how to value such intangibles is offered. The closest statement is: "you should exercise professional judgment in determining

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[2] Dickie M and Ulery VL, "Valuing Health In The Household: Are Kids Worth More Than Parents?" presented at the Association Of Environmental And Resource Economists 2001 Workshop, "Assessing And Managing Environmental And Public Health Risks," June 2001.

[3] For example, "Many goods that are affected by regulation —such as preserving environmental or cultural amenities —are not traded directly in markets. These "non-market" values arise both from use and non-use. Estimation of these values is difficult because of the absence of an organized market. However, overlooking or ignoring these values in your regulatory analysis may significantly understate the benefits of regulatory actions," February 3, 2003 *Federal Register*, p. 5519. Also February 3, 2003 *Federal Register*, p. 5514.

how important the non-quantifiable benefits or costs may be . . ."[4] without further describing this professional judgment. Most of the discussion focuses on narrowing the valuation of such measures, rather than assuring they are fully and appropriately considered.

When listing "*What Should Go Into a Regulatory Analysis?,*"[5] no mention is made of how to handle intangibles and that which cannot be quantified. Instead, the summation is:

> "With this information, you should be able to assess quantitatively the benefits and costs of the proposed rule and its alternatives."

The clear message to regulators is that intangibles are essentially invisible. This message is also reflected elsewhere in the draft report. The various tables of the estimated costs and benefits of rules highlight first and foremost the dollar estimates. In only a few cases are other impacts noted at all. Several tables total the dollar amounts of "benefits" and "costs" and thus any other benefit that has not been assigned a dollar value is assumed to be zero. For example, in Table 4, "Summary Of Agency Estimates For Final Rules 10/01/2001 –9/30/02," it is noted about EPA's nonroad[6] rule: "EPA also lists a variety of other benefit categories which it was not able to quantify or monetize, ranging from infant mortality to damage to urban ornamental plants."[7] I would say that preventing infant deaths is quite important. But since EPA didn't quantify or monetize that benefit, it doesn't count and can't be taken into account by decision-makers.[8]

Early in the guidance, OMB states:

> "Where all significant benefits and costs can be quantified and expressed in monetary units, benefit-cost analysis provides decisionmakers with a clear indication of the most efficient alternative . . ."[9]

I have to ask: When talking about children's health or safety, is it **ever** possible for "all significant benefits and costs [to] be quantified and expressed in monetary units," or are we instead in those realms the President described as "immeasurable"? Even OMB admits, "quantifying some effects may not be feasible."

B. Increases Emphasis on Quantification and Monetarization

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[4] February 3, 2003 *Federal Register*, p. 5514
[5] February 3, 2003 *Federal Register*, p. 5514
[6] Control of Emissions From Nonroad Large Spark-Ignition Engines, and Recreational Engines
[7] February 3, 2003 *Federal Register*, p. 5496
[8] e.g., Table 7, p. 5500-1, Table 8, p. 5501, Appendix B, February 3, 2003 *Federal Register*, p. 5503
[9] February 3, 2003 *Federal Register*, p. 5514

OMB directs agencies to quantify measures whenever possible, and to monetize quantitative estimates whenever possible,[10] stating:

> "Sound quantitative estimates of benefits and costs are preferable to qualitative descriptions of benefits and costs to help decision-makers understand the full effects of alternative actions."

We disagree that quantitative estimates are always better than qualitative descriptions "to help decision-makers understand" the full effects of alternative actions. At best, quantitative estimates may be able to assist in measuring – but such measuring is not always the only or best means for understanding decisions that have health, safety or environmental impacts. Even when information can reasonably be quantified, the further step of attempting to translate such figures into dollar amounts obscures as much as it clarifies.

The ostensible purpose for these analyses is to help regulators make the best decision possible. Yet, according to OMB, even if we are dealing with issues that cannot be quantified or assigned a dollar value, monetizing is always best. Rather, the methods that convey the most important information are best, and so a variety of tools, each appropriate in different contexts, should be used to aid decision-makers. Artificially attempting to translate everything into dollars actually reduces the quantity and quality of information available to policy-makers.

C. Increases Reliance on Discounting

In this guidance, the OMB acknowledges that its practice of discounting benefits in the future, especially benefits affecting children, has been questioned. As mentioned earlier, traditional discounting methods systemically reduce the value of long-term benefits such as preventing health effects to children from environmental health hazards.

Let me give you an example from last year's budget documents[11] of the impact of OMB's discounting methods. For us non-economists, it would seem that when we prevent the death of a 3-year-old child, who has a life expectancy of 78 years, we would have saved 75 life years. If we prevent the death of a 40-year-old, we would have saved 39 years. Yet, through the beauty of the OMB's discounting methods, how many years does OMB count as saved? For the 40-year-old, "approximately 13.3 discounted life years." For the 3-year-old, her 75 saved years are valued at only one more year -- "approximately 14.3 discounted life years."

Commenters, including the Network, have urged OMB to value children more appropriately.

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[10] February 3, 2003 *Federal Register*, p. 5520

[11] http://www.whitehouse.gov/omb/inforeg/spec24.pdf

But OMB won't budge. They offer arguments justifying their decisions, such as stating: "people do prefer health gains that occur immediately to identical health gains that occur only in the future, which would justify discounting the future gains" (although existing research does not unequivocally support this assertion). But they do not address how to value "health gains" in children, how to determine the value to a child that he or she will not develop cancer or that his or her children can even have children.

As mentioned earlier, parents show significantly higher "willingness to pay" to avoid illness in children than in themselves. But discounting at 7% means that essentially zero value is given, for example, to decreasing the likelihood of one's grandchildren having a learning disability, or being infertile, or living in an environment that is not healthy.

The OMB says, and we agree:

> "Special ethical considerations arise when comparing benefits and costs across generations. Although most people demonstrate in their own consumption behavior a preference for consumption now rather than in the future, it may not be appropriate for society to demonstrate a similar preference when deciding between the well-being of current and future generations. Future citizens who are affected by such choices cannot take part in making them, and today 's society must act in their interest."[12]

But what is OMB's approach to these "special ethical considerations"? OMB says that in such cases, an agency would simply continue to use the same discounting techniques as per usual, and "supplement the analysis with an explicit discussion of the intergenerational concerns and how they will be affected by the regulatory decision."[13] In other words, the same type of deeply-buried discussion that, as described above, is all but invisible beneath the dollar amounts toted up by OMB. The reliance on discounting is maintained, a hortatory sentence or two is to be added to its report – and then everything besides discounted monetization is downplayed or relegated to footnotes.

This approach to protecting "future citizens" is wholly inadequate.

In its efforts to argue away calls for change, the OMB contends:

> "Some have argued, however, that it is ethically impermissible to discount the utility of future generations... Even under this approach, it would still be correct to discount future costs and consumption benefits . . .[The first reason is that] future generations are likely

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[12] February 3, 2003 *Federal Register*, p. 5522
[13] February 3, 2003 *Federal Register*, p. 5522

> to be wealthier than those currently living, so a marginal dollar of benefits or costs will be worth less to them than it would be to those alive today, at least on average . . .."[14]

The fact that OMB offers the unprovable -- and, at least in retrospect, occasionally disproved -- assertion that someday we will all be wealthier as the foundation for its policy indicates that it is more interested in maintaining the status quo than in truly improving its guidance.

The agency says that another reason for discounting the benefits and costs accruing to future generations at a lower rate "is increased uncertainty about the appropriate value of the discount rate, the longer the horizon for the analysis."[15] Thus, where OMB recognizes the fact that it is difficult to predict the future, its response is to use this reality as a reason to emphasize, rather than limit, discounting. Why? Uncertainty about the future is not a logical reason to minimize the estimated value of future generations.

The bottom line is that OMB has not improved its approach to discounting. Agencies now have to provide two analyses, based on two discount rates (3% and 7%), and, "If benefits and costs are expected to last beyond the current generation, the proposal permits (emphasis added) additional sensitivity analysis with discount rates as low as 1 percent."[16]

D. Changes Methodology to Value Children Less

OMB not only uses calculations that minimize the number of life years saved through discounting, but also has changed how it calculates the dollar value assigned to these years saved. Tucked into some recent rules, such as the EPA's non-road engine rule, are new interpretations that indicate that the "value of a statistical life year" for those under age 65 is less than the "value of a statistical life year" for those age 65 and over.[17] I am not arguing that those who are older should be valued less. I raise this change to point out the arbitrary and irrational nature of these types of calculations, especially in light of other OMB decisions that reduce the value of saving the lives of the elderly.

E. Ignores Congressional Direction

The guidance written by OMB includes a section titled "Why Regulatory Action is Needed."[18]

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[14] February 3, 2003 *Federal Register*, p. 5522
[15] February 3, 2003 *Federal Register*, p. 5523
[16] February 3, 2003 *Federal Register*, p. 5498
[17] EPA "Control of Emissions from Nonroad Large Spark-ignition Engines, and Recreational Engines (Marine and Land-based)" Final Rule, Chapter 10, p. 25-26.
[18] February 3, 2003 *Federal Register*, p. 5514

I think that most individuals would, if asked, give "protecting public health" or "ensuring safety" as primary reasons justifying government action. Yet, the reason listed by OMB is "There Is a Market Failure or Other Social Purpose To Address," placing the market above all other considerations.

As we know, the reason why agencies undertake regulation is to fulfill their responsibilities under the authority delegated to them by Congress. Statutes direct agencies to promote the common good, including protection of public health and the environment. Yet OMB says:

> "Your analysis should not reflect any unstated or unsupported preferences, even for such worthy objectives as protecting public health or the environment."[19]

OMB seems to forget that "worthy objectives as protecting public health or the environment" are not a "preference," they are a charge and a responsibility placed on agencies by the Congress.

OMB states that "when there are other competing public policy objectives, as there often are, they must be balanced with efficiency objectives."[20] But there are statutes directing that decisions must be made for the public good, such as protecting health, and that agencies are **not permitted** to balance these objectives with "efficiency."

OMB offers the example: "when the uncertainty is due to a lack of data, you might consider deferring the decision, as an explicit regulatory alternative, pending further study to obtain sufficient data."[21] Unfortunately, OMB fails to consider existing statutory and policy guidance. In some cases, Congress has directed agencies to act in the face of uncertainty. Rather than "deferring the decision," the agency is required to take protective action. Thus, this guidance directs agencies to flout or to work at cross-purposes of their statutory requirements.

Even in cases where there are not specific legal requirements to act in the face of uncertainty (which, in matters of the environment and health, will always be present to some extent), a blanket preference for taking no action at all undermines our ability to protect children's health and prevent disease. And again, as our President noted, "The price of doing nothing exceeds the price of taking action if we have to."

Most importantly, the common thread in this guidance reveals a striking bias at OMB for not recognizing the main purposes for Federal involvement: to protect and improve the common good, including intangibles such as health, safety and the environment.

F. Places Additional Burdens on Agencies

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[19] February 3, 2003 *Federal Register*, p. 5523
[20] February 3, 2003 *Federal Register*, p. 5514
[21] February 3, 2003 *Federal Register*, p. 5523

In this guidance, OMB adds a raft of new requirements on agencies conducting rulemakings. OMB now requires "formal probabilistic analysis" for certain rulemakings.[22] Agencies are required to calculate benefits using at least two discount rates. If the agency is proposing to use an even lower discount rate, they must then conduct three calculations.[23] Agencies must provide not only their analysis, but "the underlying data, including mortality and morbidity data, the age distribution of the affected population, and the severity and duration of disease conditions or trauma . . ."[24]

What is the cost to all of us of the many layers of analysis required by this document? What important activities will not be done by agencies because they have to use their limited resources to conduct step after step of multiple alternative scenarios and reports? Has OMB conducted a cost-benefit analysis to show that these added hoops are worth the important agency work that will remain undone because of them?

The *Draft 2003 Report to Congress on the Costs and Benefits of Federal Regulation* reflects that the agencies have labored mightily to produce their cost-benefit analyses; furthermore, this examination of benefits and costs, even before one considers of the nonquantifiable benefits, clearly illustrates the important public benefits of Federal regulations. We have answered the question of "Are Federal regulations effective?" with a resounding yes.

We would argue it is more efficient use of scarce government resources to continue to provide public benefits, such as health and safety to the nation through programs and regulations, than it is to use those same resources in continual efforts to count the uncountable and place dollar values on the immeasurable.

G. Decreases Transparency and Clarity

In seeking comments for improving this process, OMB states:

> "We expect the guidelines to increase the transparency of the analysis of prospective regulations to both technical and nontechnical readers."[25]

Unfortunately, OMB is decreasing the transparency and clarity of the analysis.

For example, the average reader would get little helpful information from the "formal probabilistic analysis" now required.[26] Readers will also have to wade through a variety of discount rate

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[22] February 3, 2003 *Federal Register*, p. 5498
[23] February 3, 2003 *Federal Register*, p. 5523
[24] February 3, 2003 *Federal Register*, p. 5517
[25] February 3, 2003 *Federal Register*, p. 5498

calculations and understand which one was used and why and why the others were not. And even as such obfuscations come to the foreground, key issues that will have profound impacts on children's lives are hidden.

The *Draft 2003 Report to Congress on the Costs and Benefits of Federal Regulation* illustrates how little information in the end is available to the reader, other than the gross dollar estimates of costs and benefits.

It is difficult to understand what assumptions were used in each analysis or what methodology was used to monetize the lives saved or diseases prevented. The document states that OMB has imposed its own format and monetization of estimates.

> "While OIRA has attempted to be faithful to the respective agency approaches, the reader should be cautioned that agencies have used different methodologies and valuations in quantifying and monetizing effects. Thus, this aggregation involves the assemblage of benefit and cost estimates that are not comparable."[27]

In other words, this is a report of tables comparing things that are not comparable. Monetization is not an objective process that produces consistent, common units – rather, it obscures differences by pretending that a wide variety of different variables, methods, and contexts are all the same. The report gives the inaccurate illusion of clarity and precision, but the true substance of the rules is obscured.

H. Ignores Research

Although OMB asks for input and promises to "incorporate new insights and recent innovations in what constitutes a good analysis,"[28] the agency has dismissed the concepts that the Network and others have raised.

The OMB is apparently unwilling to improve the methodology of its benefit/cost guidance by incorporating the emerging economic research and discussions illustrating the need to more appropriately consider children.

The guidance encourages the use of "willingness to pay" methodologies[29], [30] and promotes, with some caveats, the use of occupational-risk premiums.[31] But the caveats do not mention the

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[26] February 3, 2003 *Federal Register*, p. 5498
[27] February 3, 2003 *Federal Register*, p. 5499
[28] February 3, 2003 *Federal Register*, p. 5498
[29] February 3, 2003 *Federal Register*, p. 5518
[30] February 3, 2003 *Federal Register*, p. 5520
[31] February 3, 2003 *Federal Register*, p. 5519

inappropriateness of using such measures for other populations who are not working -- e.g., children. And there is no discussion at all of the inadequacies of using "willingness to pay" measures that are not designed to take children into account.

I. Based on faulty assumptions

Cost-benefit analyses rest on assumptions. That means that analyses are only as good as their underlying assumptions. And, more importantly, no matter how good, that is all they are -- assumptions that should not be used to replace ethics, morals, responsibility or common sense.

As quoted earlier, OMB had stated:

> "Where all significant benefits and costs can be quantified and expressed in monetary units, benefit-cost analysis provides decisionmakers with a clear indication of the most efficient alternative."[32]

This guidance assumes that that which is quantifiable is of greater weight than that which is not; and that which is monetizable is better still – and that the most "efficient" alternative is always best, even if such an alternative might, for example, fail to protect children most at risk while focusing resources on wealthier communities.

The guidance assumes that over-estimated benefits are a greater concern than over-estimated costs, discussing how to avoid over-counting benefits[33] but not costs. Yet this assumption is not supported by experience. Experience shows that the real-world costs of a regulation are frequently far below the pre-regulation estimate, while such regulatory decisions as removing lead from gasoline have yield benefits more than an order of magnitude higher than predicted.[34]

The OMB asks "how the U.S. balances precautionary approaches to health, safety and environmental risks with other interests such as economic growth and technological innovation."[35] The OMB assumes that these two categories conflict with each other, which is far from universally true. But even when there are tradeoffs, shouldn't protecting health, safety and the environment be our primary goals? Other factors should serve them, not compromise them.

I've already mentioned the assumption that is perhaps my favorite:

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[32] February 3, 2003 *Federal Register*, p. 5514
[33] February 3, 2003 *Federal Register*, p. 5518
[34] Eban Goodstein, "Polluted Data," *The American Prospect* vol. 8 no. 35, November 1, 1997 - December 1, 1997.
[35] February 3, 2003 *Federal Register*, p. 5499

"Future generations are likely to be wealthier than those currently living"[36]

Perhaps OMB posits a radical increase in the number of lotteries? Does the agency also assume that future generations are smarter, more attractive, and wittier? Will all children be above average?

In the next guidance, OMB may argue that agencies have no need to take into account environmental benefits because they are now assuming that future generations will be living in Paradise.

Conclusion

We agree with OMB when it says "When important benefits and costs cannot be expressed in monetary units, [benefit-cost analysis] is less useful, and it can even be misleading . . ."[37] Our hope is that OMB will change its guidance to put this important observation into effect.

If we are to truly value our children, we must do a better job of considering them in our policy making. If we turn to tools such as cost-benefit analyses, we should do so only when they give us better information, they increase understanding, or they make transparent the decision process.

This guidance fails on all of these counts.

But even if these analyses were conducted in the most child-protective fashion possible, it is still critical to remember: these analyses should never become a substitute for the hearts, minds, and souls of our public officials, under oath to protect the public and promote the general welfare.

Thank you.

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[36] February 3, 2003 *Federal Register*, p. 5522
[37] February 3, 2003 *Federal Register*, p. 5516

Mr. OSE. Now, as is our practice, we will go to each Member now for questions, to the extent there are questions that don't get answered within their respective 5-minute period. We will have multiple rounds accordingly, as we did with the last panel. I'm willing to lead off.

For Dr. Miller, Dr. Hahn and Dr. Tozzi. Actually, I think this is more accurately for Dr. Hahn and Dr. Tozzi. In his written statement, Dr. Miller supports the need for agency input into OMB's annual regulatory accounting report. Do you think the OMB should issue an annual OMB bulletin to the agencies, which would require agency estimates of aggregate and new regulatory burden, as it does in annual OMB bulletins to the agencies for aggregate and new paperwork burden? Dr. Miller supports the need, in his written statement, for the same information on aggregate and new regulatory burden. Dr. Hahn, do you agree with that? Do you think OMB should issue an annual OMB bulletin to the agencies which would require that?

Dr. HAHN. I don't know the answer to that, Mr. Chairman. The reason I don't know the answer relates to a fundamental confusion I've heard in some of the testimony today. We operate in a world of finite resources. So we have to make difficult tradeoffs, as Dr. Graham pointed out, among, for example, like investing in certain SUV safety and the like. By the same token, if you're at OIRA, and have a fixed number of employees, you need to consider whether the investment in this new innovation is going to be cost effective, and I simply don't know the answer to that without thinking about it further.

Mr. OSE. So, if I understand your question, you don't know whether or not OMB should issue such a bulletin, which would require for regulatory burden much what they require for the paperwork burden?

Dr. HAHN. My gut says yes, it's a good idea, but I would want to ask Dr. Graham how it would impact other aspects. I mean, certainly it would be very useful to know much more about the regulatory burdens than we do now.

Mr. OSE. Dr. Tozzi, what about your position?

Dr. TOZZI. Well, you see I have worked for Dr. Miller a long time, and every day we'd start a staff meeting he'd explain that I was the deputy. But, if I could be relieved of that conflict of interest——

Mr. OSE. By congressional edict you are relieved of that——

Dr. TOZZI. Thank you, sir. I want the record to show that. I think there might be a need for a bulletin, but my question is, if you take Dr. Miller's approach, the bulletin would look at measuring aggregate costs across the board, and it would probably help OMB. My question is, if you arrived—my favorite thing of turning this into a regulatory budget, but then the bulletin wouldn't be on total economic costs. There would be a bulletin and it would be a bulletin that turned this into a regulatory budget. So I guess in summary, Mr. Chairman, where I am, I'm in the same church or synagogue, but a different pew.

Mr. OSE. Dr. Miller, any response?

Dr. MILLER. I agree with——

Mr. OSE. That was good, Dr. Tozzi.

Dr. MILLER. I agree with my colleague, Dr. Tozzi. Actually, I think what we were just talking about is a template and just asking the agencies to present the information in a consistent format, a consistent way. You could better address some of the questions Ms. Heinzerling had about some of these measures if they were in a consistent format across the agencies. If you look at this report, you're struck by the fact that OMB had to grapple with the fact that many of the reports from the agencies are inconsistent one to the other. Even within agencies there are different standards.

Mr. OSE. Your concern is we have apples and apples or oranges and oranges rather than apples and oranges?

Dr. MILLER. Mr. Chairman, I wish I had said it your way.

Mr. OSE. I'm not going to measure or match wits with either you or Dr. Tozzi, regardless of which church we all attend.

My time has expired. Governor Janklow, for 5 minutes.

Mr. JANKLOW. Dr. Tozzi and Ms. Heinzerling, could you tell me, Dr. Tozzi, do you agree with her analysis, the way she presents it, the factual basis of her analysis?

Dr. TOZZI. Governor, I'd like to go through her analysis a little bit more, but I do think Professor Heinzerling is asking the question of what's the limitations of benefit-cost analysis, and it depends where you sit as to where you stand. And, I think she's raised some legitimate concerns that's been raised in the literature for a number of years you can only push this tool so far.

But, on the other hand, the macro issue that's been around for years and years, can you ever assign value to a life? And, the question is—before you get into the details of the methods, the question is do you want to? And, implicit in most Federal programs there is a cost, the opportunity cost—there's a cost associated with saving a life, and, so, the issue is how you measure it? And I would defer to the professor here, whether her issues—whether it should be done at all or the methodology for doing so. I think there is an implicit cost and the question that's up for debate is how, and the professor may have a different view on that.

Mr. JANKLOW. Please.

Ms. HEINZERLING. Yes. I don't think cost benefit of the type that OMB performs should be done, and this doesn't mean that we have to spend an infinite amount of money to save every human life. Most Federal regulation of health and safety and the environment takes economic costs and technological feasibility into account. It puts a thumb on the scales in favor of regulation. It tells an agency please protect health, safety and the environment to the best you can, but don't bankrupt industries, don't bring them to the brink of failure, try to limit plant closings, do what you can in the most efficient way possible. That is the basic framework under which our health, safety and environmental agencies operate.

In my opinion, that's a very different charge from saying to them—which you haven't done actually as a body in Congress—saying to them, we would like you to look at the amount that individuals have indicated they are willing to pay for health, safety and the environment, and limit your interventions to that amount. And, it seems to me very different, the numbers may be very different, and the whole enterprise is different when one considers in the first case, let's do the best we can to protect health and the en-

vironment; and, in the second place, let's limit our interventions to those the market basically has already produced.

Mr. JANKLOW. Rabbi Swartz, do you disagree with the subject completely of a regulatory budget or do you disagree more so with the procedure that's been followed or suggested?

Rabbi SWARTZ. I think it's an excellent way to lay out the choices, and it would be the second. I think that one can total up costs and benefits in a way that—and here I think, in fact, trying to put a dollar figure on everything gives you more of apples and oranges than would some other ways of explicitly leaving some judgments to lawmakers.

For example, I can see the attraction of wanting to compare a traumatic head injury to a cancer to asthma and to have one objective standard that lets you say that so many cases of traumatic head injury equals so many cases of asthma, but there isn't. It's not going to be objective. It's going to be assumption ridden, and so why not instead look at how—what's the most efficient way to combat asthma, what's the most efficient way to combat traumatic head injuries, and then let you, as our elected officials, make the decision about what's most important for our country.

Mr. JANKLOW. Dr. Miller, do you think there's another way to look at the substance as opposed to the procedure in a regulatory budget? Do you agree with Rabbi Swartz?

Dr. MILLER. I really don't. I really don't. Let me address Professor Heinzerling's initial point that the use of benefit-cost analysis is unlawful: She is welcome to her opinion, but it goes against all the evidence. If it is, in fact, unlawful, someone surely would have sought injunctive relief and no one has. There have been some important cases, such as whether OMB can prevent an agency from meeting a congressionally mandated time table. The Supreme Court held it could not. The Executive orders all start out with "in so far as" permitted by law. Obviously, if it's not permitted by law, you can't do it. That point, I think just a red herring.

The other question: I don't want to label Professor Heinzerling's or Rabbi Swartz' testimony as necessarily fitting this mold, but so much of what you hear is that you ought not look at benefits and costs at all. It's like coming up with a Federal budget and not expecting people to testify and talk about the relative merits of the various programs.

You in Congress have to make those judgments, and basing those judgments on information and analysis is surely better than doing it blindly, and what Dr. Tozzi's been saying, Dr. Hahn's been saying, things like you ought to work on the information and make sure you understand it and do the analysis correctly and make your judgments—it ought to be an informed decision rather than an uninformed decision, and for the life of me, I can't understand why someone would argue you ought to make uninformed decisions rather than informed decisions.

Mr. JANKLOW. Thank you.

Mr. OSE. The gentleman from Tennessee for 5 minutes.

Mr. COOPER. Thank you, Mr. Chairman. I must admit, I didn't expect to be interested by this panel, but it has intrigued me. You read the title of it and you——

Ms. HEINZERLING. We're happy to serve.

Mr. COOPER [continuing]. Think, oh, boy, I'd rather be somewhere else. Let's assume for a moment that this regulatory budgeting approach is valid. If it is at the regulatory level, then why isn't it even more important to implement at the congressional voting level, which none of our colleagues would countenance? All the regulation is, is an administrative principle that's within the scope of the statute, but I think we, as Members, realize that we deal with life and death issues, war and peace issues, love and affection issues that are impossible to quantify, and I have the greatest respect for economists and accountants, and I would love to apply their principles to what we do, but, if you take a book like *Against the Gods* by Peter Bernstein, a study of risk in the world, you realize that even a prominent Wall Street analyst has concluded that much of our knowledge is so new that even Wall Street types are unfamiliar with the quantification techniques.

I'd like to point out one paragraph in Ms. Heinzerling's testimony, which I think the average American should focus on if they're looking at this issue. It reads as follows: "it's hard to overstate the effect of discounting on benefits that will accrue to future generations. In the year 2100, the Census Bureau predicts the population of the United States will be approximately 571 million people. At OMB's 7 percent discount rate, saving the entire population of the United States one century from now becomes equivalent in cost benefit terms to saving about 658,000 people today. With the magic of a calculator, over 570 million lives simply disappear." You know, we have to be careful with numbers. The average American has trouble understanding an interest rate, much less a discount rate.

We have to have lots of Federal regulations to help people understand what your mortgage lender is doing to you or other lenders. So it's important that we focus on these things, and I would like to ask Dr. Miller and Dr. Tozzi if this is such a great idea, let's not even think of applying it at the congressional level, how about the tax expenditure budget level? Last week we were asked to vote on a tax break for foreign bettors on U.S. horse races. Another tax break was on folks who manufacture bow and arrow sets, presumably for children. I don't think it's in the Pentagon budget. Another tax break was for those who mix diesel fuel with water, which I always thought was illegal, but those are three of the things that we were asked to allow special tax leniency for. Would you suggest applying cost-benefit analyses to each of those provisions?

Dr. TOZZI. Sir, it's the—first of all, the idea of a discount rate and where it fits in a regulatory budget is probably a tier 11 issue. The idea of putting a regulatory budget together, just laying out all the regs and their costs in some orderly way, that is such a job and what we're getting down to the discounts rate is how you estimate the cost. OK? And, that is a big issue to the economics profession, I agree, but in terms of a regulatory budget, look at the budget you people look at, several trillion dollars.

Has it ever come up to you what the discount rate behind those programs were? Never. And, we're very capable of spending money without that number. So I think there's a lot of technical issues on it, but I don't think we should confuse resolving what the discount

rate is and how you can use that opposed to the imposition of a regulatory budget. I think it's way down the line.

Dr. MILLER. Congressman Cooper, I do not know of any responsible academic who argues that you shouldn't apply discount rate in comparing benefits and costs. That is just totally beyond the pale, as far as academic research goes. On your question of defending these, I would apply benefit-cost analysis to the three issues you raised based—and on your description they would all fail fast.

Dr. TOZZI. It depends—maybe yes, maybe no. It depends if I got one.

Mr. COOPER. An honest man. I don't think the question is whether it's not appropriate, in theory, to apply discount rates, but no one really knows what a discount rate really is. I used to be an investment banker. They're all over the lot. You can manufacture reports to prove almost anything you want. Ms. Heinzerling has worked for perhaps one of the foremost jurists in this country, as far as economics, Richard Posner. You know, I'm not sure about Justice Brennan's qualifications in that regard. But I think, perhaps, Dr. Miller you should allow more latitude. I think some of these people are responsible. I don't think you meant to apply that they're all irresponsible. And, this is something that we should have a valid and lively debate on.

I appreciate you gentlemen raising the issue, but I've never heard a Republican yet say that we should do this for a tax expenditure budget. In fact, the Reagan view is tax expenditures don't exist. It's all the people's money.

Dr. MILLER. Could I volunteer to be the first?

Mr. COOPER. I will look forward to your column on that subject.

Dr. MILLER. I might write one. But back to the point, you might disagree over what the discount rate might be, and it might be different for different starting points, as Dr. Hahn will probably elaborate. If I misunderstood, I apologize to Professor Heinzerling, but if I understood the import of what you read from her testimony, she would reject the notion of a discount rate—not a question of whether it should be 7 percent or 4 percent or 3 percent or 6 percent, but reject the notion. To me it's just flat out nonsensical.

Mr. OSE. The gentleman's time has expired. We'll come around again. Drs. Miller, Hahn and Tozzi, we had a discussion in the first panel about the inclusion of the regulatory accounting statement and its associated report on impacts with the President's budget at submittal time, and Dr. Miller has already offered in his comment that can be delivered concurrent with the President's budget.

Dr. Hahn and Dr. Tozzi, do you think delivering those pieces of information concurrent with the budget would increase the overall utility of the information to Congress, or would it make any difference?

Dr. TOZZI. Well, before I got on the regulatory budget, I was in the budget business at OMB for a long time, and I think the budget side of OMB is going to oppose that very, very heavily and I will tell you why. First of all, if you compare the accuracy in their mind of the data in the Federal budget that's up for appropriation, with what will come out of this system, in this current system, and put the OMB stamp of approval on it, I think there's going to be a big debate on that.

So, I think there's going to be a reluctance within the institution to do that. Second, I think there's going to be an overall resistance because of the nature of who uses the budget, and it goes up through the budget shops of all the agencies, and you're going to have a lot of procedural work to be done to match two information flows, all the regulatory people into that budget process. So I can't argue. I agree with Dr. Miller that in the long run, that if we had a regulatory budget and the numbers were of sufficient accuracy, I agree they could be mixed. I think in the short run, I'd rather have the limited resources again turning this into a regulatory budget and marry them at a later stage in time with the Federal budget when the data is of comparable accuracy.

Mr. OSE. Let me come back to that question. Dr. Hahn, do you share that opinion?

Dr. HAHN. Yes, I basically share that opinion.

Mr. OSE. Going back to your point about the unified agenda there being the more interesting document, how much time—if we're not going to pare this regulatory accounting statement with the President's budget, how much time do you think should elapse between the submittal of the President's budget and the issuance of these——

Dr. TOZZI. Well, that's a good question.

Fortunately this comes out every 6 months and so it has a lot more real time information in it than the President's budget. It's supposed to be due out in October or April, and they've been pretty good recently. They've been missing it by a month. So what you'll see, Mr. Chairman, if they meet these dates, you'll have a picture of the regulatory state 2 or 3 months before the budget comes out and 2 or 3 months after the budget comes out.

Now, if at some point in time you wanted to marry these, I think that could be done, but I don't think that would be the main problem right now. The main problem is taking the steps procedurally to turn this into a regulatory budget. I don't think that 3 months one way or the other, before or after that system is a big handicap.

Mr. OSE. Chronologically, the President drops his budget in——

Dr. TOZZI. January/February.

Mr. OSE. Yes, early February. At least the House calendar moves to adopt the budget by April 15. Now, how do we reconcile that timeframe? Because it would seem to me that the Budget Committee would need the regulatory accounting statement in order to decide how they want to allocate resources.

Dr. TOZZI. Correct, and what I'm suggesting is they're going to have two documents because between October of 1 year and April the following year, the changes in total macro costs could be substantial, I doubt it. And, second, if they would have enough time to work on the October edition well before that markup, because if we come out in April with this, it's too late for them to do it, but I don't think—the numbers have to bear themselves out. I just don't think with a document this size, unless there's some really unusual rule which comes out, October numbers would not be that bad to work on each year because you'd work with the October budget for the early markups. By the time you had final markup, you'd have the April edition.

Mr. OSE. My time has expired. I'm going to come back to this question.

Governor Janklow.

Mr. JANKLOW. Rabbi Swartz, last year Susan Dudley, when she gave testimony before this committee, said, "Studies reveal that a reallocation of current spending from lower risk to higher risk problems could greatly increase the lifesaving benefits of regulations designed to reduce health and safety risks and achieve other goals."

If this is correct, if what she says is correct, isn't regulatory accounting really essential to better protect public health and safety?

Rabbi SWARTZ. The thing that I think is really important to remember, and I think it was Dr. Tozzi who mentioned this, is that this is a tool, and it's going to have some use but it's not going to do your job for you, and for example, in terms of comparing risks, one piece of information that's very helpful when you're making decisions about risk is what's the most frequent risk, but risk for what? Is it risk for being a fashion catastrophe or a terrorist catastrophe? So, you want to see the size of the effect, and you also want to see is it a reversible effect or not? Is it something you can fix easily or something that's basically irreversible?

Mr. JANKLOW. But, if we don't know the costs or the benefits of a regulation, then how do we really know if—we say we're trying to do, we're doing it in people——

Rabbi SWARTZ. I'm sorry. I'm not arguing against measuring costs and benefits. What I'm arguing about is a way that does, that says that the only thing you measure are dollar values.

Mr. JANKLOW. Could you make available to us or your organization—and frankly, I don't know if they're the same sir, because I don't know you folks that well. Could you make available to the committee what methodology you don't like that's being followed or recommended, and what methodology you suggest should be used for a regulatory accounting approach?

Rabbi SWARTZ. Sure, and along that line I would—I'm a little intimidated correcting Dr. Miller's notion of the economic field, but I know at least six economists who are well published, well regarded in the field who have written about the inappropriateness of discount rates under certain circumstances. I'm not, and I don't think that Professor Heinzerling is saying you never use discount rates, but discounting health benefits has some fundamental theoretical problems. And, you can read those in Richard Howarth at Dartmouth, or Edward Barbier at the University of Wyoming, or Jane Hall at Fullerton and——

Mr. JANKLOW. But I'm also suggesting, sir, if you'd make available to us what is it that you suggest should be the measuring criteria.

Rabbi SWARTZ. Sure. I would be glad to.

[The information referred to follows:]

From: Daniel Swartz
To: Melanie Tory
Re: Additional documents

The Subcommittee requested additional guidance on how to improve regulatory accounting practices. While the literature looking about more theoretical issues is extensive, I thought that Subcommittee members would be more interested in efforts focusing on the actual practice of valuation of costs and benefits in relation to children's health.

The most important document is EPA's draft "Children's Health Valuation Handbook," which is supposed to be issued in final form later this spring. Ed Chu from EPA's Office of Children's Health Protection is leading this effort. He can be reached at 202-564-2196.

At the request of the Children's Health Protection Advisory Committee, a FACA committee to EPA upon which I serve, EPA and the National Science Foundation have promoted research to improve such valuation over the past several years. A number of working papers have resulted from this research, papers that have not only served to inform the Valuation Handbook but that also address specific issues in more depth. The entire paper series can be accessed at:
http://yosemite.epa.gov/ee/epa/eed.nsf/pages/wpseries

Below are some of the titles of the papers that I believe would be of particular value to the Subcommittees deliberations:

Paper # 2001-02, "Estimating Individual Discount Rates in Denmark: A Field Experiment," Glenn W. Harrison; Morten I. Lau; Melonie B. Williams

Paper # 2002-03, "Willingness to pay to Reduce a Child's Pesticide Exposure: Evidence from the Baby Food Market," Kelly B. Maguire, Nicole Owens, and Nathalie B. Simon

Paper # 2002-05, "'Optimal' Pollution Abatement – Whose Benefits Matter, and How Much?" Wayne B. Gray and Ronald J. Shadbegian

Paper # 2002-06, "Data Requirements for Valuation of Children's Health Effects and Alternatives to Valuation," Kimberly M. Thompson

Paper # 2002-07, "Existing Literature and Recommended Strategies for Valuation of Children's Health Effects", Jim Neumann and Harriet Greenwood

Paper # 2002-08, "On Techniques to Value the Impact of Environmental Hazards on Children's Health," Mark D. Agee and Thomas D. Crocker

Paper # 2002-09, "Valuing Indirect Effects From Environmental Hazards On A Child's Life Chances, Jason Shogren

Paper # 2002-10, "Benefits Transfer of Children's Health Values," Marla Markowski

Mr. JANKLOW. Could you do the same thing too, Dr. Heinzerling, also?

Ms. HEINZERLING. Absolutely. Absolutely. I think you'll find that it's reflected in many of our current laws, the approach that I'll provide for you. But absolutely I'd like to do that.

[The information referred to follows:]

About the Center for Progressive Regulation (CPR)

CPR's Mission

The Center for Progressive Regulation is a nonprofit research and educational organization of university-affiliated academics with expertise in the legal, economic, and scientific issues related to regulation of health, safety, and the environment. CPR supports regulatory action to protect health, safety, and the environment, and rejects the conservative view that government's only function is to increase the economic efficiency of private markets. Through research and commentary, CPR seeks to inform policy debates, critique anti-regulatory research, enhance public understanding of the issues, and open the regulatory process to public scrutiny.

Founded in 2002, CPR is committed to developing and sharing knowledge and information, with the aim of preserving the fundamental value of the life and health of human beings and the natural environment. One component of the CPR's mission is to prepare and circulate academic papers, studies, and other analyses that promote public policy consistent with the social values that led to the enactment of the nation's health, safety and environmental laws. In particular, CPR shares its work with policymakers in the legislative and executive branches. CPR seeks to provoke debate on how the government's authority and resources may best be used to preserve these values and to hold accountable those who violate them.

About CPR's Perspectives Series

The Center for Progressive Regulation supports constructive and responsible regulatory action to protect health, safety, and the environment, and rejects the conservative view that government's only function is to increase the economic efficiency of private markets. CPR's Perspectives Series is a set of monographs by CPR scholars on timely and important regulatory debates. Each Perspective provides a thumbnail sketch of the competing arguments concerning a substantive or procedural principle for developing appropriate health, safety and environmental policies. Each Perspective closes with a statement of CPR's proposed approach to the issue.

The views expressed in each Perspective represent consensus views of CPR scholars, although not every scholar endorses every view.

CPR PERSPECTIVE SERIES

Statutory Design: The Advantages of Technology-Based Standards in Protecting Health, Safety, and the Environment

The Issue
The proper method for determining the appropriate level of controls to impose on activities that discharge pollution and generate other effects harmful to public safety, health and the environment

Background

Federal law seeks to protect public health and safety, and the environment from the harmful side effects of industrial activity and land development. The Clean Air Act, for example, declares as its goal the protection and enhancement of the quality of the nation's air resources so as to promote the public health and welfare and the nation's productivity. Likewise, the goal of the Clean Water Act is to restore and maintain the integrity of the nation's waters through the achievement of water quality suitable for fish and wildlife and recreational use.

Although the goals of these laws continue to be widely supported, conservative critics have objected to the manner in which agencies determine the appropriate level of regulation. The essential task is to decide the level of protection needed to protect public health, safety, and the environment. That question is sometimes referred to as the "how safe is safe" or "how clean is clean" question. Ideally, regulation would result in the elimination of all risk, but it is often impractical or impossible to eliminate all risks produced by industrial and developmental activity. It may be undesirable to eliminate all risk, for example, because trying to do so would require the elimination of activities that provide significant benefits to society. We must therefore strike a balance between the desire to reduce risks and the desire to sustain economically and socially productive activity.

What's At Stake
The ability of agencies responsible for protecting health, safety, and the environment to

– provide adequate levels of protection without imposing paralyzing analytical and evidentiary burdens on regulatory agencies

– set standards to control harmful activities despite uncertainty about the relationship between the resulting costs and benefits

– set standards in a way that is respectful of the value of human life and of the environment

The decision about the appropriate level of stringency of regulation may be made in a variety of ways. At one extreme, the law could mandate that an agency adopt whatever level of regulation is necessary to achieve a desired level of protection (such as air clean enough to breathe without creating a risk of pulmonary illness), regardless of the costs it would take to achieve that goal. On the other extreme, the law could require that agencies determine the appropriate levels of

regulation through a rigorous cost-benefit balancing process, so that the agency may not regulate at all unless it can show that regulation will yield regulatory benefits that exceed the costs of compliance. Congress, however, often uses a third, intermediate option which requires agencies such as the Environmental Protection Agency (EPA) to take cost into account without depending on the outcome of a cost-benefit analysis. Under statutes that rely on this third option, Congress requires agencies to set the level of regulation by determining what kinds of controls are technologically and economically achievable for a particular regulated industry. These are often referred to as technology-based standards.

The Clean Water Act is an obvious example of a statute that relies heavily on the technology-based approach. EPA must set effluent limitations for existing point sources of pollution by determining the level of control that could be achieved through the use of the "best available technology economically achievable." The statute specifies that in determining that level, EPA consider "the cost of achieving such effluent reduction." Nevertheless, the Clean Water Act pointedly fails to require any kind of cost-benefit analysis. New point sources are set through a similarly cost-sensitive process that abjures reliance on cost-benefit analysis. These sources are subject to controls based on the "best available demonstrated control technology," taking into consideration the cost of achieving effluent reduction as well as other factors such as non-water quality environmental impact. Still other examples of a technology-based approach to environmental regulation are found in the Clean Air Act. EPA must establish emission standards for hazardous air pollutants that require the maximum degree of emission reduction achievable, taking costs into consideration. The agency must also set standards for major new stationary sources of air pollution, like power plants and oil refineries, in the same basic way.

Congress has adopted a complicated array of health, safety and environmental laws during the past 30 years. In most of those instances, it has avoided relying on either of the extreme options concerning the role of cost that are described above. Many of these laws instead rely on a technology-based approach to regulation that makes cost a relevant consideration without requiring that agencies perform a cost-benefit analysis. It is this consistent congressional refusal to require that agencies rely on cost-benefit analysis in setting regulatory standards that has generated some of the most consistent and vigorous criticism of the health, safety and environmental laws.

What People Are Fighting About

Many critics charge that current environmental laws are economically inefficient and irrational. They contend that laws that do not require agencies to conduct cost-benefit analyses can result in regulations that produce benefits that could have been achieved at lower cost. Such regulations are wasteful, in the critics' view, in that the money that is unnecessarily spent in protecting people and the environment could instead have been spent reducing other environmental risks or could have been channeled into income-producing investments. Even worse, according to the critics, an approach not tied to cost-benefit analysis can produce counterproductive regulation if the costs of complying with regulation exceed resulting regulatory benefits. Technology-based standards have become a particular target of criticism on the ground, among others, that they require all entities within a particular industry to achieve equivalent levels of control, even

though some entities are capable of controlling at lower cost than others. In short, the critics of current forms of regulation often contend that the current system reflects an approach that is perversely oblivious to the cost of regulation.

Few would quarrel with the notion that regulation should take costs into account. Agreement with that proposition, however, does not necessarily support adoption of the extreme cost-benefit based approach to regulation favored by critics of regulation. Indeed, environmental and other public interest groups contend that there are compelling reasons not to rely on such an approach, and that Congress' consistent refusal to replace technology-based approaches with a cost-benefit standard indicates that it has by and large found those arguments to be persuasive.

CPR's Perspective

Neither of the two extreme methods of determining the appropriate level of regulation is desirable. A system of regulation that completely excludes cost considerations is undesirable because of the adverse economic impact it is capable of generating and the difficulty of identifying cause-and-effect linkages between discharges and adverse environmental impacts. Congress has rarely relied on a cost-oblivious approach, even when it has endorsed the use of health- or risk-based regulation. As the Supreme Court recently recognized, the Clean Air Act requires that EPA set national ambient air quality standards without taking cost into consideration. But the establishment of the standards is only the first step of the process. The second step involves the development of implementation plans by the states. At that step of the process, the states are authorized to consider a variety of factors, including the economic impact of reducing emissions. Even under this two-step approach, however, agencies can become embroiled in difficult line-drawing inquiries. The Clean Air Act requires that EPA set the national ambient air quality standards at the level that is requisite to protect the public health, allowing an adequate margin of safety. Given the difficulty of accumulating the evidence necessary to establish a dose-response curve, it is often hard to determine the point at which exposure to a pollutant first creates health risks. When the pollutant involved is a non-threshold pollutant—that is, one for which there is no established safe threshold level of exposure, such as a cancer-causing chemical, the exercise becomes virtually impossible. If a pollutant causes some risk to health at all levels of exposure other than zero, the mandate to establish a level that is requisite to protect the public health, no less that the level provides a sufficient margin of safety, seems nonsensical. It is for that reason that EPA made almost no headway during the first 20 years after the adoption of the Clean Air Act in establishing national emission standards for hazardous air pollutants, most of which were carcinogens for which safe threshold levels had not been established. In light of this experience, Congress abandoned the risk-based approach to the regulation of hazardous air pollutants in 1990, replacing it with a set of technology-based controls. Congress followed the same path with respect to toxic water pollution under the Clean Water Act, replacing its initial risk-based approach to toxics in water with a technology-based approach.

CPR is even more strongly opposed to the opposite extreme, which requires that EPA and other agencies establish standards to protect health, safety, and the environment through the use of cost-benefit analysis. Proponents of cost-benefit analysis argue that it leads to a more efficient

allocation of society's resources, but CPR believes that cost-benefit analysis is incapable of living up to this promise. Cost-benefit analysis requires monetization of the benefits of protecting human health and the environment. The process of reducing life, health, and the natural world to monetary values, however, is inherently flawed. It is typically much easier for agencies such as EPA to quantify compliance costs than it is for them to quantify the benefits of environmental regulation. An approach that requires justification in cost-benefit terms is therefore likely to delay the issuance of protective regulations until the agency can provide the missing information. In addition, benefit quantification requires establishing monetary values for things like clean air or water, avoided illnesses, and, ultimately, human life itself. Such an effort to "commodify" incommensurable values is morally repugnant and inconsistent with the extraordinary value that our society places on human life and a clean environment. Even if agencies are authorized to describe the benefits of regulation qualitatively rather than quantitatively, there is a tendency to downgrade the importance of these "soft variables" in favor of the more easily quantified cost data. Thus, it is likely that cost-benefit analysis, by skewing cost-benefit relationships in the direction of high costs and low benefits, will inevitably produce less costly but also less protective levels of regulation. The practice of discounting the future benefits of regulation that typically accompanies cost-benefit analysis simply exacerbates this problem. Finally, even if an approach based on cost-benefit analysis generates regulations that are "efficient" in the economists' sense of that term, those regulations may be inequitable in the sense that they concentrate risks in particular areas or impose disproportionate risks on disadvantaged segments of society. For more on CPR's objections to the use of cost-benefit analysis, see CPR's Perspective on Pricing the Priceless: Cost-Benefit Analysis of Health, Safety, and Environmental Protection. {Add a link here to the Cost-Benefit perspective}

Technology-based standards are preferable to either of the extreme versions of standard-setting for several reasons. Unlike ambient quality-based or risk-based approaches to regulation, technology-based regulation is not oblivious to cost. Agencies operating under technology-based statutes are limited to setting standards that are achievable by industry using technology that is already available or will be available within the foreseeable future. The conservative critics of technology-based standards often claim that these standards cause unnecessary and harmfully disruptive economic impacts. There is little or no evidence to back up this charge. Technology-based standards have caused few individual plants to close down, have not destroyed or even significantly disrupted any industrial sector, and have not caused cataclysmic adverse economic impacts. Few retrospective studies have been performed to measure the economic impact of the application of technology-based regulation, but those that have been done typically show that compliance costs have turned out to be less than predicted because, for example, industries developed more efficient and effective technologies in response to regulation. Because technology-based regulation usually dictates the level of control but not the method of achieving it, that kind of regulation provides regulated sources with continuing incentives to develop means of achieving the designated levels of emissions reduction in the most efficient way possible. Conservative critics also charge that technology-based controls often require the expenditure of millions, and in some cases, billions of dollars to save even one life. The methodologies used to support this charge, however, have been definitively refuted.

Unlike either health-based controls or cost-benefit analysis, technology-based regulation does not

impose crushing analytical burdens on agencies charged with protecting health, safety, or the environment. It is typically easier for an agency to determine what level of control industry is capable of achieving using current technology than it is to determine the impact that a particular source or group of sources will have on the environment in order to determine the level of control necessary to avoid that impact. It is also much easier to determine what level of control industry is capable of achieving using currently available technology than to monetize the costs and benefits of regulation in order to determine the level of regulation that will yield the optimal cost-benefit relationship. Agencies are therefore likely to generate technology-based regulation more quickly than regulation based on risk or on cost-benefit analysis, and they are likely to have an easier time defending that regulation if it is attacked in court. For similar reasons, technology-based standards are typically easy for both agencies and private citizens to enforce when they are translated into specific emission limits contained in permits issued to individual sources.

A technology-based approach to regulation also avoids the moral problem inherent in cost-benefit analysis because it does not require that regulatory agencies translate the benefits of regulation into monetary terms. Instead, agencies governed by a technology-based mandate determine the level of control that available technology is capable of achieving, taking cost into account, thereby committing industry to doing the best that it can to operate in a way that is protective of health, safety, and the environment. In some cases, it is desirable to push industry beyond its current capabilities. In those instances, agencies can build on technology-based controls to develop technology-forcing approaches to regulation. Technology-forcing regulation is aspirational in this sense: it sets regulatory standards at a level that requires industries with relatively poor track records on pollution control to develop new, more effective risk-reducing technologies. For these reasons, technology-based and technology-forcing regulation are more consistent than cost-benefit analysis with fostering of the nonmarket significance of human life and the natural environment.

Technology-based regulation is even-handed in that all members of the same industry are treated equally. Because technology-based standards set minimal levels of control with which all states must comply, these standards take away incentives that industry might have to relocate to states with less severe environmental problems or to states with less stringent standards.

Technology-based regulation is flexible. It is relatively easy to engraft a market-based approach like emissions trading onto a technology-based system of controls. The technology-based controls set individual source emission limits, which sources are free to meet by controlling themselves or by purchasing emission credits from other sources that have overcontrolled. The combination of technology-based controls with carefully monitored emissions trading will induce regulated entities to meet their emission limits in the most efficient manner possible.

Finally, practical experience demonstrates that technology-based regulation has worked. Before the adoption of the Clean Water Act in 1972, for example, many of the nation's surface water bodies were little more than waste receptacles. Rivers like the Cuyahoga even caught on fire. In the last 30 years, dramatic progress has been made through the application of the statute's technology-based controls in reducing the levels of pollution discharged into these waters and in restoring some of them to fishable-swimmable status. Conservative critics sometimes claim that

technology-based standards were a suitable means of eliminating the most flagrant pollution problems, but that they have become a blunt instrument to attack the more subtle remaining problems, which tend to be more costly to control. CPR believes, however, that technology-based standards have not outlived their usefulness. Agricultural practices that generate nonpoint source water pollution, for example, have yet to be subject to meaningful controls, and technology-based regulation is capable of generating significant reductions in the levels of health and safety risks experienced in the workplace.

In sum, CPR opposes the replacement of the technology-based approach to health, safety, and environmental regulation with either a risk-based approach or one based on formal cost-benefit analysis. It supports instead continued reliance on technology-based controls because:

- they are not cost oblivious;
- they do not require agencies to justify regulation through application of a cost-benefit measure, particularly one that seeks to reduce all relevant values to dollars-and-cents terms, thereby avoiding the monetization of incommensurable values such as human life and a clean environment;
- they are easy for agencies and the public to enforce;
- they allow agencies to take steps to protect health, safety, and the environment even in the absence of certainty concerning the precise amounts of harm attributable to industrial and developmental activity and concerning the costs necessary to avoid that harm;
- they have proven to be affordable, even-handed, flexible, and effective.

For further analysis supportive of technology-based approaches to regulation, see Wendy E. Wagner, The Triumph of Technology-Based Standards, 2000 U. Ill. L. Rev. 83; Howard Latin, Ideal versus Real Regulatory Efficiency: Implementation of Uniform Standards and "Fine Tuning" Regulatory Reforms, 37 Stan. L. Rev. 1267 (1985); Thomas O. McGarity, Media-Quality, Technology and Cost-Benefit Balancing Strategies for Health and Environmental Regulation, 46 Law & Contemp. Probs. 159 (1983); Sidney A. Shapiro & Robert L. Glicksman, Risk Regulation at Risk: Restoring A Pragmatic Approach (2003).

Mr. JANKLOW. Do you think the current law that we have is the best we can do?

Ms. HEINZERLING. No. I would never say that but I don't think that cost-benefit analysis is going to improve the ways in which I think the current system fails. For one thing, the current system fails to regulate many risks as stringently as I think should be required. Second, cost-benefit analysis adds to the informational burdens already borne by the agencies. It's expensive. It's time consuming. It's contentious, it leads to litigation. At the end of the day, nobody's satisfied with it, and so, yes, I think that there are places where we could improve things.

I think economists have really helped us out in many ways by pointing out ways in which social goals can be achieved more cheaply. I think that all of that is all to the good. I don't think that the system will be improved by reducing everything to dollars and then discounting them over a period of time.

Mr. JANKLOW. Thank you. Dr. Hahn you're smiling. Why?

Dr. HAHN. Yes. Professor Stigler, may he rest in peace—he was a Nobel Laureate in economics said, "It takes a theory to beat a theory." I think one of the problems with all these criticisms, you put your finger on it, is they don't really have a theory that beats the implementation of cost-benefit analysis in a broad sense. It just defies common sense to say you shouldn't think about what the costs and benefits are before you make a decision either individually or socially.

Mr. JANKLOW. Thank you.

Dr. MILLER. Could I just add one point sir? You might ask the question, can benefit-cost analysis be misapplied? The answer is, of course. It's done all the time, and that is one reason some very good people criticize benefit-cost analysis. I'm not trying to defend all benefit-cost analysis. I have criticized my share. I have sent some back when I was OIRA head. The question, though, is whether it is a useful tool; and the answer is, yes, it is a very useful tool. Broadly defined, benefit-cost analysis, as Dr. Hahn was suggesting, is what you think when you make your decision—should I go this way or that way? And, even if you don't tote up and monetize benefits and costs, you're revealing that you think this way is better than that way when you take the former path.

Mr. OSE. The gentleman's time is expired.

The gentleman from Tennessee for 5 minutes and 45 seconds.

Mr. COOPER. I thank the Chair. There are many failings of government. We all realize that our budgeting process does not rely on accrual accounting. We don't have a capital budget. Lots of things that Congress has decided we do not need to have because we're not like a corporation. We're different. When Dr. Hahn said it takes a theory to beat a theory, I thought our theory was the Constitution of the United States and the Bill of Rights, things like that; essentially human documents that do not tell, for example—every jury has to rely on cost-benefit analysis before they issue a verdict. I can't help but wonder if some liberals might not—should be for this regulatory budgeting concept, because my guess is the foreign aid budget of the United States would have to be multiplied 100 or 200-fold, since the fee to keep alive in a foreign country might take as little as $1 a day; and, yet, we in our country, our infinite

wisdom, choose not to do that. Then the question of whether their lives are worth less than our lives over here.

To me, I love accounting and economics. I think it's great. I think we should apply these tools when and if appropriate, but I'm deeply worried that we might be creating a little bit of a monster here that—not to preclude any of this analysis, but to wholesale stop regulations as Dr. Graham seems to have. It seems to me that maybe we're allowing the tools to control the master here, especially when so few people in the general public are equipped at all to deal with these tools.

You know, there are some great economists who proved that there's no such thing as a hot streak in basketball. Each shot is independent. But tell that to a sports fan, you know. They would no more believe you than they would have believed pre-Galileo that the Earth was round.

You know, we have to work with what we've got here, which are human beings. And, to me, we need to gradually introduce these tools when and if appropriate, and then see if we can improve the wisdom of our decisions as we go along. Is that—Dr. Hahn.

Dr. HAHN. If I understand you Congressman Cooper, I agree with you, only you said it more eloquently than I would have. I'm not suggesting that the results of a cost-benefit analysis that a good economist does should be decisive in the sense that it should immediately be implemented.

What I am suggesting is that toting up the benefits and costs, both those that can be quantified and those that can't in some systematic fashion, can usefully inform decisionmaking when we're making multibillion-dollar decisions, as we do in regulatory agencies every day, not that they would necessarily be decisive.

Mr. COOPER. We're having a huge fight here now in dynamic scoring. We can't decide when or if to apply that, and that is relatively simple in comparison to these decisions. But, that's the current state of play in Congress right now is—I don't think we've picked a new head of the Joint Tax committee, have we? We do have Dr. Hosaka and the CBO, and I'm sure he delivered a crushing blow to dynamic scoring—this was last week—when he was expected to deliver a much more favorable scoring of the President's budget than in fact he turned in.

But, to me it's exciting to contemplate these new tools, but, they're so primitive, as I think Dr. Bernstein pointed out in his book. I had no idea as a relatively young economist that so many of these things were so recently invented. The human mind has a long way to go before we fully understand a lot of these things, but, I thank the Chair and yield back the balance of my time.

Mr. OSE. The gentleman yields back.

Dr. Miller, Hahn and Tozzi, the President's budget comes out with a 7-year analysis in terms of the impact of its proposals. It's got the past year, the current year, the budget year and the 4 following outyears.

Now, the question I have is whether or not it would be helpful to Congress so that the on-budget and off-budget costs of that budget—the President's budget—could be evaluated in a simultaneous or concurrent fashion. Do you think that would be positive or negative? Dr. Miller.

Dr. MILLER. I think it would be positive, but I have said many, many times I think Congress can get carried away with looking at the outyears. The aggregate figures for spending and for revenues, are not very reliable.

Mr. OSE. So we have to recognize that those are projections, of course.

Dr. MILLER. Yes. And the same thing with regulation; though your question triggers the question of whether they're more reliable than the fiscal figures. If you're looking at the deficit figures, they probably have the variance that is much higher than the variance on major regulations.

Mr. OSE. So, at least for the past year, the current year, the budget year, it might be useful.

Dr. MILLER. Yes.

Mr. OSE. But, as you move out, your variation—I mean, your——

Dr. MILLER. Confidence interval.

Mr. OSE [continuing]. Confidence interval gets higher and higher and higher.

Dr. Hahn.

Dr. HAHN. I agree with what Dr. Miller said. I think it is a good idea, given my own belief and what the research of others suggests, that regulation has a reasonably big impact on the economy; that you, as our decisionmakers, are given the kind of information you need to see that. So, I would be for informing you in that way.

Mr. OSE. Dr. Tozzi.

Dr. TOZZI. Sir, I don't think that data are available. When we put the budget for President Carter together, the regulatory budget, what we did was an incremental regulatory budget. We took the cost of all pending regulations over—that were coming out, and the problem is the data base has a total cost of the regs, but we had no idea if you were going to put $1 billion for a clean air reg, what the expenditures by thousands of companies were going to be over the ensuing years.

So, I don't think that data are available, and I think the initial effort on a regulatory budget would be looking at the incremental total costs imposed by that regulatory menu and then developing some algorithm of how you set a total on it. I think trying to spread those macrocosts on a year-by-year basis are going to be very difficult. I haven't seen any data base even close to that that will allow us to do it.

Mr. OSE. So, to use Mr. Cooper's word, it's pretty dynamic, isn't it?

Dr. TOZZI. Dynamic, I think is sort of a yuppie term for budgeting. I'm not sure what it is.

Mr. OSE. This issue of a pilot test for regulatory budgeting, Dr. Miller, I'd be curious as to your feedback as to whether or not it's useful. I don't know which agency or program you might pick, but in terms of setting up a pilot program for regulatory budget approach, do you think it would be useful; which agency do you think you probably want to use as the template; and what would you expect to achieve?

Dr. MILLER. That is a good question. I mean, I would address one of the larger regulatory agencies, one that has reasonably good data on benefits and cost, one whose regs tend to be reasonably ho-

mogeneous and comparable, and then maybe even a component of that. Say, for EPA—might do just the air part.

The authorizing committee could insist the agencies do that in cooperation with OMB and talk about the total costs imposed upon the private sector. They could force the agencies to address how they might establish priorities and yield more cost-effective results. That is, everything else equal, for the cost it imposes upon the private sector, how to get greater benefits—or alternatively, for the same benefits how to lower costs; the same kind of things you demand of agencies when you talk about appropriating money for programs. You ask them to give you information about how to accomplish the goals most efficiently.

In response to Mr. Cooper—I'm sorry he's left. What we're proposing here and discussed before is that Members of Congress make those determinations. I just think that you ought to be more informed rather than less informed, and doing a regulatory budget would be a way of your getting a handle on what the agency does and force them to be more cost-effective and get them thinking the right way about this—responding to the public which pays their salaries.

Mr. OSE. Five minutes is awfully short.

Governor, we're going to go to 10-minute rounds, and you're going to be first.

Mr. JANKLOW. I'm going to be very brief, Mr. Chairman. Dr. Tozzi, back when President Carter was a candidate for President, coming off his tenure as a Chief Executive of Georgia, he was a strong proponent and advocate of what they called in those days zero-based budgeting. Did you ever attempt to do that during his administration, and was there any success at all, or what was your—the analysis, if it was tried? And, I don't know if it was.

Dr. TOZZI. Yes, sir. At that point in time, I was Chief of the Environment Branch in OMB and I had jurisdiction over EPA's programs and a couple of other environmental programs. And, President Carter's zero-based budgeting looked at—there was no base to any program, and we would rank-order all of the programs.

And, I will say that was the third or fourth such big system I helped put in. President Johnson put in PPBS, Planning Programming Budgeting System. President Carter put in zero-based budgeting. The Nixon administration put in management by objective. And you name it and I was there. OK? That is the reason I——

Mr. JANKLOW. Have you recorded all of this for the National Archives?

Dr. TOZZI. Not on the record, sir.

The question is that's why my reluctance to put any big governmentwide system on cost accounting in. I think the process of setting a regulatory budget where you put—just simply put all the regs in an agency in one place, people look at them and debate the merits of those. They look at individual things on the entrees and say, hey, are you going to look at this alternative? What cost information? And, you come up with an identified menu of what you're going to do, the way to go to get all the details of how you do the discount rates and setting up the regulatory budget look—they want a base. They want to know all the costs of existing programs.

I think that is a humongous exercise that maybe goes the way of some of these other exercises.

If you look at a regulatory budget, incremental costs that are going to be put on that or quantified, I think you can do something; but, I'm reluctant to say you're going to have right now a regulatory system that looks at all the costs of all the regs of every Federal Government agency and totals them up. I think that's a big job and may go the way of those other 15 things I worked on.

Mr. JANKLOW. Dr. Hahn, you're shaking your head no and commenting to Dr. Miller. Go ahead.

Dr. HAHN. No. I think most people are talking about doing a regulatory budget. This is just in response to Dr. Tozzi. You're talking about at least trying it out with respect to a pilot program, in response to your question; and also incrementally, the new regulations, what impact will they have over time and how do we prioritize them.

Mr. JANKLOW. Rabbi Swartz, given Dr. Tozzi's explanation of what he thinks we ought to do, do you disagree with that, and, if so, why?

Rabbi SWARTZ. I don't. As Dr. Hahn said to an earlier question, the key would be to get more information from this than it adds burden to the various agencies. They do have limited staffs and limited resources. So I would want to make sure that the information you get out of it is worth as much to you as the time that they can't be doing the other parts of their job. And, I can't make that judgment. I don't have the expertise to do that. But, that's what I would look at.

Mr. JANKLOW. That's all I have, Mr. Chairman. Thank you.

Mr. OSE. I think one of the curious things that I hear is that on a day-to-day-to-day basis, all of us who sit on this side of the microphone struggle with how to allocate resources. I mean, Rabbi Swartz, you just said something that I thought was particularly insightful, and that was that we're not sitting out at the agencies making the day-to-day decisions to—is this consultant or is this person going to dedicate their time to evaluate the cost and the benefits of this program, or are they going to go implement the system? It's not our role.

Our role is to decide, all right, we're going to put X number of resources here, Y number there, and Z number there.

Now, what I'm trying to get to is some year-after-year-after-year means of tracking what Congress authorizes, allocates, and appropriates against the benefit that we get as a country from those authorizations, allocations, and appropriations, and then somehow or another reconcile that with the unauthorized or unappropriated burden that we put on the American—on the United States as a whole.

I think we have, frankly, some difficulty in deciding what the priorities should be. I mean, that's why we have at least two different parties. But, I don't think anybody struggles terribly hard with the need to at least prioritize.

Now, I want to just go through here and understand the degree to which this tool can be used, this regulatory accounting tool can be used. I mean, I hear from Dr. Miller that it is a tool and only a tool. I hear, perhaps, Rabbi Swartz suggesting that the tool has

severe limitations. Would you care—I mean, Doctor, would you care to—we're going to go right down the dias here, the table. I want to give you an opportunity here, before we close, to evaluate the validity of the information that we might get out of a regulatory accounting proposal.

Dr. MILLER. Oh, I think it could be very useful, and if you push the agencies to give it a high priority, it would be reasonably accurate and to the point and will help the quality of your decisionmaking a lot. Even if you disagree over priorities, you and your colleagues, you're more likely to come up with something that makes sense than if you are in the dark about a lot of these things. So, the more information you have, the better. The better the analysis, the better your decisions.

And, the point that I have made and you've made before is compared to all of this intense scrutiny and work that is done on the appropriations process, which accounts in the discretionary side for less than the total resources commanded by regulation, the amount of focus on regulation is de minimis.

Mr. OSE. Dr. Hahn.

Dr. HAHN. I think the regulatory accounting proposal has a lot of merit. I think we have to take stock of where we are now. My research and that of others suggests that the regulatory analyses that the agencies are doing, while quite variable in quality, are frequently poor and not summarized very well. And, it's not put into the kinds of statements that would be useful for you, as you were suggesting. So, I think moves in that direction would be very constructive.

Mr. OSE. Dr. Tozzi.

Dr. TOZZI. Mr. Chairman, what I am recommending is not that you propose a regulatory accounting system, I'm recommending that you start a regulatory budgeting system, which would mean that you would take this document before me, and as Dr. Miller said, look at one component of an agency. Here's EPA, which obviously—because I think they do a pretty good job. There's 100 regulations under development in this document; and the regulatory budget to me, the first start would be a debate on two things: Which of those resources—which of those should go forward, which ones should you put money on to work on; and second, within a reg, what alternatives should be looked at? What is its timeframe?

And, there should be a debate on that, and the Congress would act on this menu. I do not need at this point in time a massive regulatory accounting system to do that. You could implement it out of this book. It's a regulatory budget. Doesn't have numbers in it, but it's the same as a Federal budget. You could look at that and debate the programs, make a decision of what goes in this document, and an informed congressional debate on each of these programs. And, I don't need the regulatory accounting system to do that right now.

Mr. OSE. Professor Heinzerling.

Ms. HEINZERLING. I think part of the premise of your question is that we would have more information if we had a regulatory accounting requirement. And, I would just point out that we have a huge amount of information about regulations already. We're swim-

ming in information. The agencies are practically paralyzed by analytical requirements.

And, so the first thing I would ask is, what good would this regulatory requirement do in comparison to the system that we already have? I would agree—I don't agree with everything Dr. Graham says, but, today, I agree very much with something he said, which is that, if we had such a system, we have to remember to look at benefits as well, and not just at costs. And, so the hesitation I would have, in addition to the one I just stated, is that we would want to be able to look at the benefits that are gained by these programs and not just the costs.

And, the other observation I would make is that I think it seems to me that all of the witnesses here have agreed, even if they like regulatory accounting or regulatory budgeting, which are different things, if they like either one or both of those things, they don't think we should start by imposing this requirement on all of the agencies at once. And, I just point out again the mystery here, which is that Dr. Miller suggests we start with EPA as an example, and yet here again the puzzle that I opened with remains; which is, if EPA has some of the biggest regulatory bargains around, why are we starting with this agency and starting with something that might hobble it even further?

The last point I'd simply make is that I'm not aware of—and I'd be happy to see cites. I'm not aware of analysis that does a cost-benefit analysis on cost-benefit analysis. I think it would be very interesting to see that.

Mr. OSE. Rabbi Swartz—that was well put.

Rabbi SWARTZ. I want to second Professor Heinzerling's point about the sea of information; and certainly in an ideal world, the more information the better. But, you don't live in an ideal world. You live in the real world. And, you have limited staff and limited ability to take stuff in, too. So, you're going to need summaries, and it makes those summaries more palatable if they're all in the same format. And, that requires things to be translated from one kind of information to another. And, if there is one thing that I know that I'm more expert in than anybody else on this panel, it's how controversial translating is. You can gain or lose a lot of information in the translation, depending on how good the original information is and how good the translator is.

So there are going to be costs to try to get everything—every piece of information the same way.

Is it good to have a summary of it? It is great to have a summary that at least puts things in the columns—here are all the costs and here are all the benefits—whether they are tabulated or not. I think that would be very useful. But the extra tweaking you have to do to be able to get a single number on each side may cost you more than it gains you.

Mr. OSE. Governor, you have anything you want to add?

Mr. JANKLOW. No, I don't. Thank you very much to all of you, and I think your comments at the end are really appropriate. We just have to figure out how to move forward in a sensible way, because I don't think anybody questions the fact there has to be a cost-benefit understanding of what it is that we do when we're taking money from taxpayers and spending their money.

Mr. OSE. I thank the gentleman from South Dakota. I want to express my appreciation to the panel that joined us for our second session today.

We're going to leave the record open for 10 days in case there are Members who wish to submit written questions, and we would appreciate your timely responses to that. I am grateful for your taking the time today, and I'm sure we'll have at least another meeting or two on regulatory accounting in the future. Have a great day. We're adjourned.

[Whereupon, at 4:22 p.m., the subcommittee was adjourned.]

[Additional information submitted for the hearing record follows:]

March 25, 2003

The Honorable John D. Graham
Administrator
Office of Information and Regulatory Affairs
Office of Management and Budget
Washington, DC 20503

Dear Dr. Graham:

Thank you for testifying before the Subcommittee on Energy Policy, Natural Resources and Regulatory Affairs on March 11, 2003. I have attached some additional questions that were not addressed at the March 11th hearing. Please send your answers in writing for the hearing record by April 8, 2003.

Thank you in advance for your cooperation.

Sincerely,

Henry A. Waxman
Ranking Minority Member

Questions for Dr. John D. Graham from Rep. Henry A. Waxman

1. You strongly advocate the use of cost-benefit analysis in regulatory decision-making. Last March, I asked you whether OMB would require EPA to perform a cost-benefit analysis of a proposal to modify EPA's new source review (NSR) regulations. You stated that you would determine whether the action is a "significant regulatory action" under the terms of E.O. 12866, and if so, you would review the package and determine whether it meets the principles of E.O. 12866.

   Late last year, EPA issued a proposal to modify the NSR routine maintenance provisions.[1] The proposal states that OMB considers the proposed NSR rule an "economically significant regulatory action" and that OMB has reviewed the proposal.[2]

   a. Did EPA analyze the costs and benefits of this proposal?

   b. If so, what were the costs and benefits of the proposal?

   c. Was this analysis made available to the public?

   d. If EPA did not analyze the costs and benefits of this proposal, why did OMB approve the proposed rule without such an analysis? Please explain how such an approval meets the requirements of E.O. 12866, as OMB interprets those requirements.

   e. What opportunity will the public have to provide comment on a cost-benefit analysis of the NSR rule?

   f. Please explain how your approach to this package is consistent with your position regarding the importance of using cost-benefit analysis in agency rulemaking.

2. Changes to the new source review requirements could have significant clean air and public health impacts by affecting both future industry compliance and ongoing enforcement actions for alleged past violations. A recent study shows that air pollution from power plants subject to new source review is responsible for over 30,000 premature

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[1] *Prevention of Significant Deterioration (PSD) and Non-Attainment New Source Review (NSR): Routine Maintenance, Repair and Replacement*, 67 Fed. Reg. 80290 (Dec. 31, 2002).

[2] *Id.* at 80305.

deaths a year.[3] Internal EPA documents indicate that changes to new source review that the Administration is considering could "vitiate" the program.[4]

With respect to the new source review enforcement cases, Eric Schaeffer, who until his resignation was EPA's Director of Regulatory Enforcement, has stated that EPA could reduce air pollution by 4.8 million tons per year just by carrying out the ongoing enforcement actions under the existing new source review requirements, if they are not weakened. The attorney generals of nine northeastern states oppose weakening the new source review regulations and have expressed concern that the Administration's changes would undermine the ongoing enforcement cases against 51 plants for violation of new source review requirements.[5]

Last year I asked you the following question: "Do you agree that if a rule or Agency guidance has the potential to affect the litigation success or settlement outcomes of current enforcement cases, those enforcement-related effects should be taken into account in an analysis of the impacts of that rule or guidance?" You gave the following reply:

> "The Administration has stated that the NSR initiative will not affect its efforts to pursue the current enforcement cases."

Of course, that response does not address my question. I am attempting to determine the scope of effects that OIRA believes should be addressed in conducting cost-benefit analysis.

a. Please indicate whether a regulation's potential effect on the outcome of ongoing litigation is an effect that should be taken into account for purposes of a cost-benefit analysis.

b. If such an effect should not be addressed, please explain the basis for your position and how it is consistent with your position regarding the appropriate scope of analysis of other impacts of regulatory action.

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[3]Clean Air Task Force, *Death, Disease & Dirty Power: Mortality and Health Damage Due to Air Pollution* (Oct. 2000); Abt Associates, *The Particulate-Related Health Benefits of Reducing Power Plant Emissions* (Oct. 2000).

[4]*EPA and Energy Department War Over Clean Air Rules*, New York Times (Feb. 19, 2002).

[5]*White House Warned on Easing Clean Air Rules; Democratic Lawmakers, 9 Attorneys General Vow to Challenge Plan on Older Coal-Fired Plants*, Washington Post (Jan. 9, 2002).

c. If such an effect should be addressed, please indicate how such a possible effect will be taken into account in any analysis of the costs and benefits of EPA's proposed routine maintenance rule.

3. I am interested in what cost-benefit analysis might tell us about limiting emissions from power plants. If one proposal would cost approximately $6.5 billion and deliver approximately $90 billion in monetized health benefits, and, using the same methodology, another proposal would cost approximately $10 billion and deliver approximately $150 billion in monetized health benefits, which proposal would be better from a cost-benefit perspective?

4. In November 2002, EPA issued a final rule controlling emissions from large spark-ignition engines and recreational engines, including snowmobiles.[6] It appears that as a result of OMB review, a benefits estimate was added to the rule based on an alternative methodology for calculating benefits.

a. When was this alternative methodology peer reviewed and by whom?

b. What comments did the outside peer reviewers have?

c. How does this methodology differ from the one that EPA used to calculate the primary benefits number?

5. The National Research Council recently issued a report on estimating public health benefits of air pollution regulations.[7] With respect to projecting benefits from reduced exposure to fine particles, NRC clearly endorsed EPA's approach of relying on long-term cohort studies, rather than time-series studies.[8] With respect to several recent EPA actions, however, an "alternative benefits analysis" has been included, reportedly at OMB's insistence. This alternative benefits analysis derives lower benefits estimates by relying, in large part, on time-series studies.[9]

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[6] *Control of Emissions from Nonroad Large Spark-Ignition Engines, and Recreational Engines (Marine and Land-Based)*, 67 Fed. Reg. 68242 (Nov. 8, 2002).

[7] National Research Council, *Estimating the Public Health Benefits of Proposed Air Pollution Regulations* (2002).

[8] *Id.* at 9.

[9] *See, e.g.*, EPA, *Technical Addendum: Methodologies for the Benefit Analysis of the Clear Skies Initiative*, 27 (Sept. 2002).

a. Given the NRC's review, will OMB continue to support (or insist on) use of the "alternative benefits" analysis in analyzing benefits from the Administration's Clear Skies proposal, EPA's non-road diesel rule, and other actions to reduce fine particles?

b. Given the NRC review, how can an alternate methodology based on time-series studies be considered use of sound science and quality data?

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

ADMINISTRATOR
OFFICE OF
INFORMATION AND
REGULATORY AFFAIRS

April 16, 2003

The Honorable Henry A. Waxman
U.S. House of Representatives
Washington, DC 20515

Dear Representative Waxman:

Thank you for your letter of March 25, 2003, regarding some additional questions associated with the regulatory analysis of two EPA rulemakings: EPA's proposed routine maintenance, repair, and replacement exclusion for the New Source Review program and EPA's final rule limiting emissions from large spark-ignition engines and recreational equipment engines. I have enclosed responses to your questions. Thank you for bringing these additional concerns to our attention.

Sincerely,

John D. Graham, Ph.D.
Administrator

Enclosure

Question 1 Concerning EPA's New Source Review proposed rule

a. Did EPA analyze the costs and benefits of this proposal?
b. If so, what were the costs and benefits of the proposal?
c. Was this analysis made available to the public?
d. If EPA did not analyze the costs and benefits of this proposal, why did OMB approve the proposed rule without such an analysis? Please explain how such an approval meets the requirements of E.O. 12866, as OMB interprets those requirements.
e. What opportunity will the public have to provide comment on a cost-benefit analysis of the NSR rule?
f. Please explain how your approach to this package is consistent with your position regarding the importance of using cost-benefit analysis in agency rulemaking.

EPA prepared a draft regulatory analysis as a part of this proposal. This analysis included a quantitative analysis of the electric utility sector using several alternative scenarios that offer a "bounding" analysis of the effect of alternative routine maintenance repair and replacement (RMRR) approaches. The analysis demonstrated that the breadth of the RMRR exclusion would not affect the sulfur dioxide (SO_2) emissions from the electric utility sector. The analysis also suggested that nitrogen oxide (NO_x) emissions from this sector could increase or decrease modestly, depending on the effect of the NSR changes on plant efficiency and capacity utilization. Finally, the analysis suggested that the electric utility sector could realize cost savings associated with the proposed revisions to the NSR program, depending on the effect of these changes on plant efficiency and capacity utilization.

This analysis is publicly available and the public can provide comments on the analysis as a part of the public comment process for the rulemaking. We expect EPA to review these comments and prepare a final Regulatory Impact Analysis for the final rule.

Question 2 concerning EPA's New Source Review proposal.

a. Please indicate whether a regulation's potential effect on the outcome of ongoing litigation is an effect that should be taken into account for purposes of a cost-benefit analysis.
b. If such an effect should not be addressed, please explain the basis for your position and how it is consistent with your position regarding the appropriate scope of analysis of other impacts of regulatory action.
c. If such an effect should be addressed, please indicate how such a possible effect will be taken into account in any analysis of the costs and benefits of EPA's proposed routine maintenance rule.

Regulatory analysis should examine the reasonably foreseeable effects of a regulatory action, including the effects of enforcement efforts to the extent that such actions are reasonably foreseeable. As a practical matter, agencies typically assume that all the expected benefits of a regulatory action are realized, without evaluating any of the

"friction" associated with the implementation of a regulatory program such as enforcement and litigation costs and unintended consequences like the erosion of plant efficiency. In this case, the Administration has stated on a number of occasions that the NSR initiative will not affect its efforts to pursue the current enforcement cases.

Question 3

If one proposal would cost approximately $6.5 billion and deliver approximately $90 billion in monetized health benefits, and, using the same methodology, another proposal would cost approximately $10 billion and deliver approximately $150 billion in monetized health benefits, which proposal would be better from a cost-benefit perspective?

The latter option would be the preferred option from a strict "benefit-cost" perspective, though we should remember that EO 12866 also authorizes a variety of policy considerations beyond economic efficiency.

Question 4 regarding EPA's regulatory analysis of large spark ignition engines and recreational engines.

a. When was this alternative methodology peer reviewed and by whom?
b. What comments did the outside peer reviewers have?
c. How does this methodology differ from the one that EPA used to calculate the primary benefits number?

The alternative methodology has not been subject to peer review. However, the alternative methodology uses studies from peer reviewed publications and elements of this methodology were subject to peer review in the course of EPA's Science Advisory Board review of the Section 812 Reports to Congress on the Benefits and Costs of the Clean Air Act.

The alternative estimate is presented in conjunction with a base estimate in the regulatory analysis for the final rule addressing the emissions from spark ignition engines and non-road (recreational) engines. These two estimates are presented in an effort to provide an explicit representation of the uncertainty associated with the benefit estimates. The key differences between these two estimates include:

1) The Alternative Benefit Estimate was derived from the large number of time-series studies that have established a likely causal relationship between short-term measures of PM and daily mortality statistics. It was presented to reflect concerns about the inherent limitations in the relatively few studies supporting a causal association between long-term exposure and mortality. A particular strength of the time-series studies is the fact that potential confounding variables such as socio-economic status, occupation, and smoking do not vary on a day-to day basis in an individual area.

2) The Alternative Benefit Estimate also reflects the effect of changes to key assumptions on the valuation of a reduction in the risk of premature mortality. These include: (a) the effect of using a predominantly wage-risk based value of statistical life estimates as opposed to contingent valuation-based estimates alone, (b) the relationship between age and willingness-to-pay for fatal risk reductions, and (c) the extent to which a reduction in mortality risk associated with reduced exposure to air pollution would increase the remaining life-years for the affected population. The alternative-estimate method has been modifier slightly in the recent proposed rule to curb exhaust from off-road diesel engines.

Question 5 regarding EPA's regulatory analysis of other actions to reduce exposure to fine particles.

a. Given the NRC's review, will OMB continue to support (or insist on) use of the "alternative benefits" analysis in analyzing benefits from the Administration's Clear Skies proposal, EPA's non-road diesel rule, and other actions to reduce fine particle?
b. Given the NRC review, how can an alternate methodology based on time-series studies be considered use of sound science and quality data?

As pointed out in the National Research Council's recent reports on "Research Priorities for Airborne Particulate Matter," (NRC 1998, 1999, 2001), a number of uncertainties remain in quantifying the relationship between human health and exposure to particulate air pollution. Within the context of this uncertainty, the NRC report to which you refer, *Estimating the Public Health Benefits of Proposed Air Pollution Regulations* (NRC 2002), highlights the importance of the assumptions inherent in the choice of an estimate of the quantitative association between ambient air pollution levels and the corresponding health effects (i.e., the concentration-response function.) The rationale for the alternative-estimate method has been modified in the recent off-road diesel rulemaking, in part due to the NRC (2002) recommendations.

A variety of options are available for characterizing the uncertainty in the concentration-response function. Use of an alternative estimate for the concentration-response function based on different bodies of scientific literature is an approach that is consistent with our recent "OMB Draft Guidelines for Conduct of Regulatory Analysis." We used such an approach in the recent rule to which you refer. Specifically, we used an interpretation of the results of the time-series studies to provide "an alternative" estimate for the mortality effects of fine particle exposure. Note that the NRC 2002 report found the results of the time series studies especially compelling with respect to a causal interpretation due to the consistency of the results across multiple cities. Furthermore, it is also important to note that the formulation of the short-term studies that EPA used in the "alternative estimate" (i.e., incorporating a longer lag period) results in an estimate that is consistent in size with the confidence intervals of the cohort studies endorsed by the NRC, 2002.

Regardless, however, we agree that in the longer term, a more sophisticated approach to characterizing the uncertainty is desirable. We are currently collaborating with EPA to

use an expert judgment process to develop a distribution of possible values for the concentration-response function, with associated likelihoods. The approach involves recruiting a panel of independent scientists from which to elicit judgments regarding the likely distribution of a variety of uncertainties regarding the concentration-response function. The outcome of this work will allow EPA and OMB to develop a more formal, peer-reviewed approach to addressing the uncertainty associated with the benefits of reducing exposure to fine particles in the air.

ANOTHER VIEW

An Assault On Congressional Lawmaking

"There's been a constant, steady erosion of the prerogatives and the power in the Oval Office. . . . What we're committed to is to make sure that we preserve the office."

— VICE PRESIDENT CHENEY, January 29, 2002

"There is a change underway at OIRA compared to previous administrations. . . . Since my confirmation in July, I have returned over 20 rules to agencies."

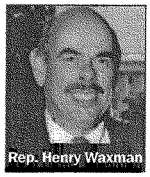
— DR. JOHN GRAHAM, March 12, 2002

The White House is increasing its control over agency rulemaking by enhancing the role of an obscure branch of the Office of Management and Budget: the Office of Information and Regulatory Affairs. This shift in power from the agencies to the White House should concern every person interested in health, environmental, and other types of federal rulemaking.

For the past several decades, OMB has served as the president's primary tool for overseeing and controlling rulemaking activities by federal agencies. Within OMB, OIRA reviews and approves significant agency rulemakings pursuant to a series of executive orders. Its review is supposed to ensure that agencies assess a regulation's costs and benefits and consider alternatives to the selected approach. OIRA also oversees federal government information collection activities.

Under the Bush administration, however, OIRA is assuming expanded power in the regulatory process. This interferes with regulatory agencies' exercise of the discretion that Congress delegates to them. It also increases the danger that the ultimate decisions will not comply with the statutory criteria specified by Congress. The consequent erosion of congressional legislative authority is legally suspect and will result in reduced environmental and public health protections.

Under the leadership of Dr. John Graham, OIRA is using multiple tactics to increase its influence in the rulemaking process. These include: the aggressive use of the "return letter" to reject agency rules; greater insistence on use of analytical criteria that systematically devalue regulatory protections; issuance of data quality guidelines that demand substantially higher levels of proof to support agency action; public solicitation of candidate rules for rollback; and a new initiative to co-opt agency rulemaking by allowing OIRA to directly participate in an agency's development and drafting of regulatory proposals.


Rep. Henry Waxman

Let's look at these new tactics in turn.

Dr. Graham has extolled the "revival of the dreaded 'return letter.'" Through a return letter, OIRA sends a draft rulemaking package back to the agency, effectively vetoing the regulation unless the agency addresses OIRA's demands. Dr. Graham has highlighted the fact that he has returned over 20 rules thus far, in contrast to President Clinton's OIRA, which generally negotiated rule changes with agencies.

At the same time, OIRA is pushing use of analytical techniques that may ultimately have a more profound deregulatory effect, such as certain applications of cost-benefit analysis. As experts such as Professor Lisa Heinzerling of Georgetown University law school persuasively argue, cost-benefit analysis inherently under-represents the values society places on environmental and public health protections, and its use systematically biases decisionmaking against regulations that provide such protections. OIRA is supporting use of techniques such as "discount rates" and "quality-adjusted life years" that would significantly exacerbate these problems. As a result, mainstream economists have publicly opposed recent OIRA proposals on analytical techniques.

In another initiative, OIRA has propounded guidance for agencies issuing new "data quality guidelines," required under recent legislation. The guidelines address information disseminated or relied upon by agencies. OIRA's guidelines go beyond the statute to set significantly more stringent standards for information, making it more difficult for agencies to support their regulatory proposals. Dr. Graham asserts that the purpose of the guidelines is to promote better quality data. Yet at the same time, OIRA does not apply these standards to itself. For example, agency staff charge that in critiquing regulations, OIRA relies on unsubstantiated data provided by industry. Similarly, a peer reviewer of OIRA's 2001 report to Congress on the costs of federal regulation criticizes the report for using estimates that are grossly obsolete and manifestly wrong.

Under Dr. Graham, OIRA has also established a process for pressuring agencies to modify or revoke existing regulations. While the process is ostensibly open to public suggestions for strengthening regulations as well, OIRA's first "hit list" of 23 regulations of top concern focuses on weakening or repealing the target regulations.

Under Dr. Graham's most recent innovation, OIRA staff will participate directly in an agency's rulemaking process from the beginning, in an unprecedented intrusion into agencies' independent decisionmaking. OIRA and EPA (notably with OIRA in the lead) have announced an agreement to jointly develop a rule under the Clean Air Act to regulate diesel emissions from off-highway vehicles. The press release itself described this as an "unusual collaboration" between the agency and the office.

Injecting OIRA as a co-participant in EPA's regulatory development and decisionmaking process will make it substantially more difficult for the agency to develop and defend an environmentally protective rule. This is demonstrated by the diesel proposal itself, which states that OIRA and EPA will consider a regulatory approach that could weaken critical new standards for diesel trucks. Further, the announcement contains rulemaking directives that are contrary to the Clean Air Act. For example, it states that EPA and OMB will consider "how risks, benefits, and costs might vary by type of off-road engine and geographical location of use." However, the Clean Air Act requires EPA to reduce these emissions to the greatest degree possible through available technology, taking cost, noise, energy, and safety factors into consideration. Congress did not authorize EPA to allow dirtier diesel engines in relatively pristine areas, such as national parks, just because the air quality is not yet degraded in those areas, but that is the result pushed by OIRA's methodologies.

This joint approach also undermines the ability of the public and Congress to identify regulatory decisions driven by the White House. Under the Clean Air Act, Congress requires EPA to make public each draft rule submitted to OMB. The purpose is to reveal how OIRA review affects the final product. Under this new model, however, it will be largely impossible to assess the degree of OIRA's influence. Consequently it will be much more difficult to shield the regulatory process from inappropriate White House demands.

These initiatives to enhance OIRA's role in the rulemaking process are troubling for many reasons. One is the office's deregulatory bias. Over the past three decades, OMB review has generally weakened, delayed, or stopped regulations. Comprised largely of economists, OIRA's staff relies heavily on economic tools that are inherently skewed against regulation, as they underestimate or entirely ignore many public health and environmental values. The small number of staff and their lack of scientific and engineering expertise means that they must rely on data and analyses supplied by outsiders, usually industry. Also, OIRA and agency staff have historically had an adversarial relationship, in which the office sees its mission as countering agency attempts to issue more stringent rules. The practical result of greater OIRA muscle will be less regulatory protection.

A more insidious problem with OIRA's rise is the effect on the balance of power between Congress and the Executive Branch. In the modern administrative state, Congress legislates in part by delegating rulemaking authority to executive agencies. By expanding presidential control over agency rulemaking activities, the White House is in effect assuming powers that Congress bestowed on agency heads.

Setting precedent here is important, as this area of constitutional law and policy is still evolving. There is general agreement on the big picture. Agencies' authority to regulate is derived from Congress and is subject to the criteria that Congress specifies in statute. At the same time, as the head of the Executive Branch, the president may pursue broad policy goals through the agencies. Most also agree that reconciling these constitutional authorities requires striking a balance, in which the president provides input to the rulemaking process but does not displace the decisions of agency heads exercising their delegated discretion. However, many of the details of this process have never been litigated.

In the absence of sharp legal boundaries, the Bush administration is pushing an expansionist approach that will weight the balance of power in rulemaking heavily in favor of the president. As OIRA increasingly dictates regulatory decisions, it is seizing authority that Congress delegated to regulatory agencies, not the White House.

OIRA further diminishes congressional input by undermining the application of statutory criteria in rulemaking. The office's emphasis on comparing costs to benefits pushes agencies to downplay or disregard statutory criteria such as protection of human health, technical feasibility, and promoting equity. If a final agency decision clearly violates the statute it may be overturned in court. Yet where the agency has some leeway to exercise its discretion, it is difficult to demonstrate that impermissible White House pressure has produced a given outcome. The fact that such pressure is difficult to identify and police only enhances the concern. Overall, by increasing OIRA's power over agency rulemakings, the Bush administration is subtly, yet effectively, infringing on Congress's constitutional authority to legislate.

I commend Dr. Graham for improving OIRA's regulatory review process in one important respect. He has instituted new procedures for public disclosure of OIRA activities, which should help address the historical problem of the office's exerting secret influence on agency rulemakings.

Nevertheless, the Bush administration's aggressive expansion of OIRA's role in the rulemaking process is deeply troubling. It empowers an entity institutionally opposed to regulation. It sets a precedent for inappropriate White House intrusion into agency rulemaking decisions. It also threatens Congress's ability to delegate rulemaking authority for agencies to exercise according to statutory criteria. The result will be less protection for public health and the environment.

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