

Center for Progressive Regulation P.O. Box 76293 Washington, DC 20013-6293 April 3, 2003

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NEOB Room 10202
725 17th Street N.W.
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Re: Draft 2003 Report to Congress on the Costs and Benefits of Federal Regulations, 68 Fed. Reg. 5492 (February 3, 2003)

Dear Sir/Madam:

These comments are submitted by the Center for Progressive Regulation (CPR or the Center), an organization of academics specializing in the legal, economic, and scientific issues that surround federal regulation. CPR's mission is to advance the public's understanding of the issues addressed by the country's regulatory laws.

The Center is committed to developing and sharing knowledge and information, with the ultimate aim of preserving the fundamental value of the life and health of human beings and the natural environment. One component of the Center's mission is to circulate academic papers, studies, and other analyses that promote public policy based on the multiple social values that motivated the enactment of our nation's health, safety and environmental laws. The Center seeks to inform the public about scholarship that envisions government as an arena where members of society choose and preserve their collective values. We reject the idea that government's only function is to increase the economic efficiency of private markets.

The Center also seeks to provoke debate on how the government's authority and resources may best be used to preserve collective values and to hold accountable those who ignore or trivialize them. The Center seeks to inform the public about ideas to expand and strengthen public decision-making by facilitating the participation of groups representing the public interest that must struggle with limited information and access to technical expertise.

These comments concern 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.

Our 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.

OMB's biased and aggressive use of cost-benefit and other analytic techniques, and its early and invasive interventions in agencies' decision-making processes, make the transparency of OMB's influence on the regulatory process all the more important. If OMB's influence is invisible, or exceedingly hard to discern, regulatory accountability suffers. While trumpeting a new focus on transparency, OMB has at the same time done little to ensure that the public will be able to discern (and, where appropriate, critique) OMB's influence on particular regulatory decisions. OMB should take steps to increase transparency and accountability by making publicly available the changes made at OMB's request at every stage of the regulatory process, including changes made prior to the issuance of a notice of proposed rulemaking. In addition, OMB should made side-by-side comparisons of agency proposals, and OMB's responses to them, available on its web site.

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 costbenefit 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 several 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. By using cost-effectiveness analysis rather than cost-benefit analysis, OMB will not avoid the dilemmas associated with valuing life, but it surely will drive these dilemmas even further underground.

Cost-effectiveness analysis combined with 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 drop by orders of magnitude. Yet the tables circulated for over a decade before anyone recognized the large influence of discounting on the estimates of costs per life saved. (See Lisa Heinzerling, Regulatory Costs of Mythic Proportions, 107 Yale L.J. 1981 (1998).) OMB's proposal to increase use of cost-effectiveness analysis, combined with discounting, threatens the very kind of transparency in government analysis that OMB has recently touted.

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. And, because in this cost-effectiveness analysis regulatory benefits are presented as human lives, rather than as dollars, they will not be "compounded" to account for increases in income (which translate into increases in WTP, and thus increases in the value of statistical life) over the time one waits for the benefits to accrue. Where life-saving benefits are monetized, on the other hand, such compounding should occur; 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 costeffectiveness analysis understates the benefits of life-saving regulation.

In addition, where lives rather than dollars are the relevant metric, 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.

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 cost-benefit analysis the Skies" initiative, the of "Clear 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. Indeed, in many instances where scientific uncertainty is great, it simply will not be possible to conduct the kind of analysis OMB proposes to require.

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).) In the Final Report, OMB should explain exactly what its position is on the effect of age on the value of statistical

life. OMB's coyness on this issue to date is unacceptable both for an issue of this magnitude and for an agency that has been at pains to publicize its new "transparency."

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. In the Final Report, OMB should clearly direct the agencies to increase values for statistical life based on predictions about future income growth. (Sources supporting such an adjustment based on the relationship of income and WTP for reductions in risk include: Ted R. Miller, "Variations between Countries in Values of Statistical Life," Journal of Transport Economics and Policy 34 part 2, May 2000, 169-188; James K. Hammitt, Jin-Tan Liu, and Jin-Long Liu, "Survival is a Luxury Good: The Increasing Value of a Statistical Life," NBER Summer Institute Workshop on Public Policy and the Environment, Cambridge, Massachusetts, August 2000 (corresponding author: James Hamitt, Harvard School of Public Health. James_Hammitt@Harvard.edu.); Dora L. Costa and Matthew E. Kahn, "Changes in the Value of Life, 1940-1980", December 2002 (unpublished, available from costa@mit.edu or matt.kahn@tufts.edu).)

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. We will rest, in these comments, 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 we 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 we 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) proceeds in several steps.

First, reduce the value of statistical life by considering only "contingent valuation" studies (surveys), not studies of actual market behavior. This step is taken in complete and unexplained contradiction of OMB's preference, expressed elsewhere (68 Fed. Reg. at 5519), for the latter over the former.

Second, assign a lower monetary value to the lives of the elderly than to those of younger people (63 cents on the dollar for those over 70 compared to those under 70). (The controversial nature of this step is perhaps best illustrated by OIRA Administrator John D. Graham's obvious reluctance, at the March 11 hearing in the House on this Draft Report, to admit to Rep. Jim Cooper of Tennessee that OMB had indeed used this assumption in several cost-benefit analyses. Dr. Graham chose, instead, to focus on the end result of its strange new analysis, in which it turns out the elderly wind up being worth more than the young.)

Third, by looking at average life expectancy, determine the average number of life-years remaining to the populations that produced the monetary values assigned in step (2).

Fourth, discount each life-year from the year in which it would have been lived. Thus, for example, the 75th year of life for a 40-year-old would be discounted for 35 years; the 74th for 34 years; and so on. By this weird calculation, no one – not even a baby – ever loses a whole life, but only a fraction of the number of life-years she could actually be expected to live.

Fifth, add up the number of discounted life-years calculated in step (4).

Sixth, divide the monetary value you have assumed by the number of life-years calculated in step (5).

In combination, 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 bizarre 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 nowhere explains the theoretical or empirical basis for an analytical approach that contains such a large internal inconsistency. Are the elderly worth more or less than the young? According to OMB's analysis, the confusing answer appears to be: yes.

OMB's strange analysis does not end here. After the calculations already described, 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 costbenefit analysis of the "Clear Skies" initiative, available 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.

Equally fundamental, 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 specialinterest 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 (as discussed in Part I, above).

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. For example, the Report twice presents estimates of the costs and benefits of the acid rain program – once in Table 7 (68 FR at 5500), and again in Table 9 (68 FR 5507). In Table 7, the program has a very favorable benefit/cost ratio, with benefits exceeding \$76 billion and costs from \$1 to 2 billion. In Table 9, in contrast, the program appears to have an unfavorable benefit/cost ratio, with figures for both benefits and costs that are different from those in Table 7. OMB should explain (or correct) this inconsistency. In the pursuit of greater clarity, it would also 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.

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.

Equally important, OMB's proposal, expressed in this Draft Report (68 Fed. Reg. at 5499), to subject even more of the values we hold dear – including privacy, time, 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. In an administration in which life, health, and the environment all have been given a price (albeit a heavily discounted one), perhaps it should not surprise us that it is now proposed that privacy and freedom itself also be given a dollar value. OMB's reasoning, it appears, 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 in OMB's analysis when they are threatened. It seems to us just the opposite

is the case. Once we say that privacy and freedom have a finite monetary price, then we have cheapened these values, deeply and perhaps irremediably.

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), OMB would be well advised to reconsider its open-ended invitation for a new "hit list" comprised of precautionary regulatory assumptions and approaches.

Sincerely,

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