

# RFF Comments on the Proposed Revisions to Circular A-4

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US Office of Management and Budget 725 Seventeenth Street NW Washington, DC 20503

#### Dear Director Young,

On behalf of Resources for the Future (RFF), I am pleased to share the accompanying comments with the Office of Management and Budget (OMB) on the **proposed revisions to Circular A-4: Regulatory Analysis**.

RFF is an independent, nonprofit research institution in Washington, DC. Its mission is to improve environmental, energy, and natural resource decisions through impartial economic research and policy engagement. RFF is committed to being the most widely trusted source of research insights and policy solutions leading to a healthy environment and a thriving economy.

While RFF researchers are encouraged to offer their expertise to inform policy decisions, the views expressed here are those of the individual authors and may differ from those of other RFF experts, its officers, or its directors. RFF does not take positions on specific legislative proposals.

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If you have any questions or would like additional information, please contact Brian Prest at prest@rff.org.

Sincerely,

Richard G. Newell President and CEO

## RFF Comments on the Proposed Revisions to Circular A-4

## 1. Overview

OMB's proposed revisions to Circular A-4 represent an essential and important step to update 20-year-old guidance. Much has changed in financial markets and in economic and scientific understanding in the past two decades, which merits updates to regulatory analysis—in particular regarding approaches to discounting.<sup>1</sup> Our comments below focus on three key issues that have been updated in the proposed revision to Circular A-4: (1) approaches to discounting; (2) the scope of analysis; and (3) the newly proposed approach to distributional weighting. We conclude by noting the important role of OMB guidance for ensuring analytical consistency across agencies.

## 2. Discounting

#### 2.1. Default Discount Rate

The proposed A-4 revision appropriately focuses its discussion of discounting methods on the social rate of time preference, which indicates the rate at which society is willing to trade current *consumption* for future *consumption*. The estimated value for that rate has been reasonably based on the real rate of return to long-term US government debt, and OMB proposes to update that estimate from 3 percent (set in 2003) to 1.7 percent using more recent historical data. We agree that the 3 percent estimate is outdated, and a lower rate is justified based on the evolution of market conditions over the past 20 years.

Nonetheless, the figure on the top of page 30 of the Preamble demonstrates that the 30-year trailing average is now less stable with respect to the estimation period than it was when the existing Circular A-4 was written and also throughout the 2000s. For example, the 1991-2020 average is about 2 percent, whereas the 1993-2022 average yields a substantially lower value of 1.7 percent. We find it difficult to argue that the social rate of time preference, which is what the discount rate used in regulatory analysis is meant to represent, changes that quickly. Relatedly, we are concerned that a methodology leading to significant changes in a benefit-cost analysis, perhaps driven by a noisy signal of underlying social preferences, could undermine its value. Given the variability demonstrated by the Preamble's figure on page 30, OMB could carefully consider both the level of precision given the stability of the underlying data, as well as how frequently to update the discount rate estimate. On the latter point, OMB could consider a regularized and recurring update of discount rates on a stable basis, such as ten or perhaps five years—but not more frequently.

In addition, it is worth noting that the real return on 10-year Treasury bonds is not the only reasonable measure of the long-term consumption rate of interest. Another benchmark is the real return on longer

<sup>&</sup>lt;sup>1</sup> Discounting is the process of converting a value received in a future time period to an equivalent value received immediately. For more, see **Prest (2020)**.

duration Treasuries, like 30-year bonds, which are less susceptible to the year-to-year volatility noted above. Returns on 10-year and 30-year Treasury Inflation Protected Securities (TIPS) bonds can be seen in the figure below, which is based on **Federal Reserve Economic Data (FRED) data**. Over the period for which both 10year and 30-year TIPS yields are available (2010-present), the real yields on 30-year TIPS have on average been about 60 basis points higher than 10-year TIPS yield. 30-year TIPS yields have also rarely been negative, while 10-year TIPS yields have been negative for lengthy periods, and such negative rates are unlikely to reflect long-run social preferences.

#### Figure 1. Returns on 10-year and 30-year Treasury Inflation Protected Securities bonds



Source: FRED (n.d.).

Similarly, over the longer time periods for which *nominal* Treasury yields are available, the spread between 30year and 10-year Treasury yields generally averages around 50 to 70 basis points (e.g., 57 and 56 basis points over the 1991-2020 and 1993-2022 windows respectively), and 70 basis points over the 2010-present window that coincides with **TIPS data**. A portion of the higher yield on 30-year bonds may reflect a term premium, but it is arguable those higher yields also reflect longer-run social time preferences not captured by 10-year bond yields, which are more sensitive to short-run monetary policy. Taken together, this suggests a central discount rate closer to 2 percent would be more accurate.

Moreover, the recommendation of a 1.7 percent discount rate, measured to the 0.1 percent level of precision, may embody an unwarranted degree of precision that is both sensitive to the estimation period and more likely to fluctuate across time. **The rounding of the 1.7 percent estimate to a 2 percent central value, while** 

also suggesting lower and upper discount rate sensitivity cases of 1.5 percent and 2.5 percent, which includes the more precise 1.7 percent estimate as well as other possible empirical benchmarks, would recognize the above factors.

#### 2.2. The Shadow Price of Capital

The proposed revisions to A-4 eliminate the use of a 7 percent discount rate to account for capital displacement based on investment returns, instead using a shadow price of capital (SPC)<sup>2</sup> approach to account for impacts on investment using an SPC value of 1.2, with the 1.2 value coming from a 2022 publication (Newell, Pizer, and Prest 2022b). This approach is generally supported by our research. However, we also note that the specific 1.2 value is now outdated. In a subsequent more detailed publication (Newell, Pizer, and Prest 2023), we centered on the somewhat lower SPC estimate of 1.1 (with a reasonable range of 1.1 to 1.2).

In some applications, the appropriate shares of costs and benefits that impact capital may be clear, but in many it will not be. As an alternative, three general cases may be considered. The first is a default, central case that assumes that the share of all costs and benefits impacting investment is equal to the savings rate, which is set to 22 percent in the aforementioned paper based on historical averages. Savings augment investment, and therefore assuming as a central benchmark that 22 percent of costs and benefits impact investment (rather than consumption directly) is consistent with overall economic conditions. Additionally, the inclusion of two extreme cases that assume either that all costs displace capital or that all benefits augment capital is proposed. The two extremes bound the central case that assumes that 22 percent of costs and benefits fall on investment. All cases would use the central discount rate (suggested at 2 percent above).

#### 2.3. Ramsey Discounting

The proposed update also acknowledges Ramsey discounting, which links the discount rate to the rate of economic growth, as a potential approach for benefit-cost analysis. Though the existing Circular A-4 does not mention it, Ramsey discounting is important in contexts with large degrees of uncertainty in future consumption growth, such as when considering the long-term impacts of climate change or phenomena with similarly long time horizons. Newell, Pizer, and Prest (2022a) illustrate that this is particularly important in the context of estimating the social cost of greenhouse gases because, relative to using a constant discount rate, the Ramsey discounting appropriately accounts for correlated risks and that failing to account for this can alter estimates of climate benefits by a factor of two or more. However, in contexts where there is relatively little uncertainty in consumption growth, such as when discounting near-term impacts, the additional complexity of Ramsey discounting is not typically necessary. Thus, OMB's proposal to permit agencies to use a Ramsey discounting appropriate, but only after conferring with OMB, is sensible.

<sup>&</sup>lt;sup>2</sup> The shadow price of capital is the value of a dollar of capital in consumption equivalent terms. A dollar of capital is worth more than one dollar of consumption because capital yields higher rates of return, due to market distortions including taxes.

We also note the strong support of this approach found in a recent independent peer review of EPA's proposed update of the social cost of greenhouse gases (Cropper et al. 2023).

## 3. Scope of Analysis

The proposed revisions to Circular A-4 include an endorsement of accounting for not only the impacts of regulations within US borders, but also their global impacts, particularly in circumstances when "regulating an externality on the basis of its global effects supports a cooperative international approach to the regulation of the externality by potentially inducing other countries to follow suit or maintain existing efforts". An important example of such a case is the regulation of the emissions of greenhouse gases, which are globally mixed pollutants.

To efficiently solve a pollution problem due to a negative externality, it is essential to reduce that pollution to a level that accounts for the full value of the marginal external damages caused by the pollutant. For a problem like climate change, where emissions *anywhere* enter the atmosphere and affect countries and people *everywhere*, it is necessary to have a global scope to assess those damages. By contrast, if all countries only considered the effects of climate change and their emissions within their borders, it would not be possible to solve the problem. For example, US greenhouse gas emissions account for about 12 percent of the global total.<sup>3</sup> If all countries considered only the domestic effects of their greenhouse gas emissions, about 88 percent of climate change impacts on US citizens would be ignored. An analytic focus solely on direct impacts to the United States of US emissions, when generalized, therefore omits most of the total climate impacts the United States faces.

In addition, damages from US emissions of greenhouse gases are felt not just within US borders, but also abroad. Though such damages occur on foreign soil, their economic effects can be felt domestically through the globally interconnected economy. However, most integrated assessment models that aim to estimate the impacts of climate change do not yet take full account of interactions between countries. These interactions include factors like global migration and economic and political destabilization. Regulatory actions taken by the United States also may be reflected in policy actions taken by other countries, with perhaps the clearest example of such reciprocal action being the Canadian government's full adoption of US federal values for the social costs of carbon dioxide, methane, and nitrous oxide. Such feedbacks, interactions, and reciprocity effects advise against solely considering domestic impacts and suggest consideration of broader international impacts as well. While those concerns do not *necessarily* imply a completely global scope, under assumptions a global number is indeed appropriate (see Kotchen 2018, which OMB may consider citing in its discussion of this issue).

<sup>&</sup>lt;sup>3</sup> https://www.wri.org/insights/interactive-chart-shows-changes-worlds-top-10-emitters

### 4. Distributional Effects

#### 4.1. Distributional Weighting

Section 10 of the proposed revision to Circular A-4 also permits agencies to use distributional weighting, recommending an elasticity of marginal utility of consumption (EMUC) of 1.4. In practice, this means that a subgroup of the population with median income level  $\bar{y}_i$  will be given a weight denoted  $w_i$  calculated as follows:

$$w_i = \left(\frac{\bar{y}_i}{y_{med}}\right)^{-\varepsilon}$$
,

where  $y_{med}$  is the overall median US income and  $\varepsilon = 1.4$  is an estimate of the EMUC. The rationale for this approach is that a dollar is more valuable to a lower income individual than it is to a wealthier one—a fundamental economic concept known as the diminishing marginal utility of income. This is an important conceptual point that is not taken into consideration by the standard Kaldor-Hicks criterion that concludes a policy has positive net benefits if the net dollar-denominated impacts are positive. The Kaldor-Hicks criterion notes that if the net dollar-valued impacts are positive, those who benefit from a policy could more than compensate those who are harmed—"the winners could compensate the losers"—thereby making all parties better off. However, such direct compensation does not typically happen in practice, meaning distributional effects remain unaddressed by use of the Kaldor-Hicks criterion.

The issue identified by OMB—that winners do not compensate losers and therefore distribution and efficiency must be considered together—is real. This suggests a strong emphasis on presenting both costs and benefits for different demographic groups, including income. However, the use of numerical quantitative weights faces several problems in application, as described further below.

The use of quantitative equity weighting is sufficiently unfamiliar and unsettled that its use may create more confusion than support for more equitable outcomes. An alternative that is a prerequisite to equity weighting, but that does not raise the same problems, provides information about the distribution of outcomes in a standard format across different demographic groups, such as income. At the same time, additional applied research could focus on weighting and other analytical approaches to assessing and summarizing equity, with an eye to future guidance updates.

**Proposed weighting elasticity of 1.4.** The proposed 1.4 value for the elasticity of the marginal utility of income seems large and has a limited basis documented in the proposal. The parameter value  $\varepsilon = 1.4$  is based on a narrow review of the literature, yet it has major consequences. For example, that value implies that impacts on households making five times the median income (\$350,000) are valued at only 10 percent of the value of households at the median (\$70,000); similarly, the effects on someone at 1/5th the median income (\$14,000) are valued at 10 times the median. The 1.4 estimate thus appears at odds with the fact that the US electorate has not embraced re-distributive policies with a commensurate magnitude.

It would therefore be helpful if the guidance provided a literature review of the key studies used to develop that value. The list of studies included in the Preamble Table I is short and could be made more comprehensive. In addition, it is sensitive to the one outlier study (Pindyck 1988) which has estimates of 3-4, which is roughly double the magnitude of the next-highest estimate of 1.7. Removing that one outlier changes

the average from 1.4 to 1.1.<sup>4</sup> This would result in major differences to the weights; the weight of 10 noted above would change to about 6 simply due to the removal of the one outlier. This suggests the estimate would be better supported by a more comprehensive literature review.

**Distributional weighting implementation issues.** In addition, the guidance as written is not sufficiently specific regarding implementation procedures, which creates the potential for analyses to inadvertently fall prey to pitfalls, inconsistencies, and unintended and potentially irrational consequences.

The first step to applying distributional weights is to produce comprehensive estimates of the distribution of all costs, benefits, and transfers. Given the limited experience of regulatory analysts with producing such detailed results, it seems premature to suggest they would be of sufficient quality to then make a quantitative, rather than qualitative, summary. In particular, if an agency uses distributional weights, the weights must be consistently applied to all aspects of the analysis. Page 65 of the proposed Circular A-4 correctly says that "the same weights should be applied to benefits and costs consistently in each analysis." This statement merits further emphasis. Applying weights to costs but not benefits, or to some costs and benefits but not others, would render the comparison problematic and potentially meaningless. We note that the distribution of the costs of new rules is rarely studied.

However, it may be the case in practice that some impact categories of may be easy to disaggregate while it may be difficult or impossible to do so for other categories; in such cases, analysts may be tempted to distributionally weight only where feasible. As OMB notes, this would be inappropriate, but there is no strong direction in the proposed revisions to A-4 that directs agencies to avoid such an approach. One possible option is for OMB to articulate some minimum set of impacts needed to perform a weighting analysis, e.g., weighting benefits alone without considering the distribution of costs would lead to uninterpretable results. For example, it might be useful for OMB to provide guidance to specify some minimum level of modeling capacity needed to conduct such analysis. The guidance could require more than 90 percent of unweighted costs and benefits to be estimated at a given degree of subgroup resolution (e.g., by income decile) before it is appropriate to use distributional weighting.

**Transfers, pass-throughs, and pecuniary externalities.** Distributional weights imply that impacts that would normally not be important in calculating net benefits suddenly loom very large in the analysis. This includes transfers, pass-throughs, and pecuniary externalities. For example, in the section in the guidance on "Transfers", the revision notes that when considering transfers, "[i]mportantly, net benefits (societal benefits minus societal costs) would be the same regardless of accounting approach" (p.10). While this is true of traditional cost benefit analysis, it is not true when distributional weights are used as the revision proposes. With distributional weights, transfers between groups of different incomes are not welfare neutral.

When using distributional weights, the **transfer** of T dollars from households with weight  $w_i$  and to other households with higher weight  $w_i \ge w_i$  will generate the distributionally weighted net benefits (NB) of

$$NB = (w_i - w_i)T.$$

<sup>&</sup>lt;sup>4</sup> Dropping both the highest and lowest outliers would also result in a lower estimate of 1.2, illustrating that the effect of outliers is not symmetric.

So long as the weights are not equal, more transfers from higher to lower income groups are always better from a weighted net benefit perspective. Benefit-cost analysis is meant to guide regulatory design, but distributional weighting could incentivize agencies towards designing policies that maximize transfers, even if they are unrelated to the actual impact of the core regulation under consideration or the agency's mission.

For example, consider a regulation that requires improvements in the fuel economy of internal combustion engine conventional vehicles but increases the cost to manufacture them. Some of that cost is borne by the vehicle manufacturers' stakeholders (e.g., workers and stock shareholders) and the rest is **passed through** to consumers via an increase in vehicle prices. The traditional way to estimate this direct social cost would be to calculate the incremental manufacturing cost. Absent distributional weights, the analyst does not need to estimate how much of the incremental cost is borne by each stakeholder. By contrast, with distributional weighting, the analyst would need to also know (1) how much of the cost increase is passed through to each of those entities and (2) their income levels. It is worth noting that this introduces considerable complexity not typically required of agency analysts. As a result, the capacity of existing economic models to comprehensively assess regulations' costs and benefits by income groups is limited.

Relatedly, with distributional weights, **pecuniary externalities**—shifts in resources between individuals purely due to price changes—are also no longer welfare neutral. In the above example, the higher price of new vehicles would increase the price of substitutes—for example, used vehicles. This creates a pecuniary externality which, absent distributional weights, would merely amount to a welfare-neutral transfer. With distributional weights, however, the analyst must also consider the relative incomes of owners of substitutes such as used vehicles (who receive a benefit from the price increase) and purchasers thereof (who bear a cost). Given that the number of used vehicles greatly exceeds the number of new ones sold each year (and the fact that the regulation also likely increases the quality of new vehicles but not used ones), it would not be surprising if distributional weighting could lead these indirect pecuniary effects, which would normally net to a zero effect, to be larger in magnitude than the direct effects. Due to the potential for very large impacts of pecuniary effects, it would be valuable for OMB to provide guidance on to what degree pecuniary effects should be considered when implementing distributional weighting.

Distributionally weighted estimates are prone to subjective influences. Any stream of benefits and costs can be paired with a redistributive element to increase its estimated net benefits. Given the limited experience with estimating distributional outcomes, this seems particularly problematic.

**Group-specific willingness to pay measures are necessary when using distributional weights.** If an analyst is using distributional weights, they should also consider whether their willingness to pay (WTP) estimates also vary by income. For example, it has been argued that individuals' WTP for environmental protection is increasing in their income. If a WTP metric is proportional to income, then there are offsetting factors in a distributional analysis: higher income groups will have higher WTP values but lower weights. The traditional approach of multiplying the average WTP by the size of the population yields the correct total WTP, illustrating that the average WTP is an appropriate metric. This is not true with distributional weighting.

For example, there are i = 1, ..., N subgroups (assumed to be of equal size for simplicity), and subgroup *i*'s willingness to pay for a given benefit is proportional (i.e., a fixed percentage of) their income, as in  $WTP_i = \alpha \bar{y}_i$ . The total unweighted benefit,  $B^u$ , is thus the sum across those individuals:

$$B^{u} = \sum_{i=1}^{N} WTP_{i} = N \cdot \overline{WTP}^{u}$$

where  $\overline{WTP}^u$  is the average WTP across the population,  $\overline{WTP}^u = \frac{1}{N} \sum_{i=1}^{N} WTP_i$ . That is, absent distributional weights, the average WTP is the appropriate value to use for the population as a whole.

However, when using distributional weights, one cannot simply use average WTP metrics, but must also consider how WTP varies with income. In this case, the total weighted benefit,  $B^w$ , is the sum of group specific WTP multiplied by their weights:

$$B^{w} = \sum_{i=1}^{N} w_{i} \cdot WTP_{i} = \sum_{i=1}^{N} \left(\frac{\bar{y}_{i}}{y_{med}}\right)^{-\varepsilon} \alpha \bar{y}_{i} = \sum_{i=1}^{N} \left(\frac{\bar{y}_{i}}{y_{med}}\right)^{1-\varepsilon} \alpha$$

If the analyst fails to recognize the variation in  $WTP_i$  across groups and uses the simple average for all groups, this will yield the <u>mistaken</u>  $B^{w,m}$  value of

$$B^{w,m} = \sum_{i=1}^{N} \left(\frac{\overline{y}_i}{y_{med}}\right)^{-\varepsilon} \cdot \overline{WTP}^u$$

How much can the correct calculation differ from the mistaken one? Consider a simple example with two groups where the first group has a US median income value of about \$50,000 and the second group at three times that value (\$150,000). Suppose both  $WTP_i$  values are  $\alpha = 0.01\%$  of income, so  $WTP_1 =$ \$5 and  $WTP_2 =$ \$15, implying an unweighted average of  $\overline{WTP}^u =$ \$10.

With distributional weighting, the weights are  $w_1 = 1$  and  $w_2 = (50/150)^{-1.4} = 0.215$ . Using the average  $\overline{WTP}^u = \$10$  and applying distributional weights, one would calculate total weighted benefits of  $B^{w,m} = 1 \cdot \$10 + 0.215 \cdot \$10 = \$12.15$ . However, the correct answer is  $B^w = 1 \cdot \$5 + 0.215 \cdot \$15 = \$8.22$ , meaning that ignoring the relationship between WTP and the distributional weights overstates overall WTP by nearly 50% (\$12.15 instead of \$8.22). The reason is that the correct calculation down-weights the higher income group's WTP based on their distributional weight, an aspect of the calculation that is missed by simply applying the average WTP value.

More generally, whenever WTP varies positively with income, using an average WTP will overstate the true value. Conversely, whenever WTP varies inversely with income, the average WTP would understate the true value. This issue will affect any benefit or cost calculation for which WTP varies with income, implying that distributional weighting will only be appropriate for costs or benefits whose relationship with income can be quantified. OMB guidance should be clear that if agency analysts use distributional weights, they must also use subgroup WTP estimates at the same resolution as the weights.

Increased granularity of the distribution will raise the weighted result, making results with different granularity difficult to compare. Because weights are highly convex, using finer quantiles will raise the weighted average. Consider, for example, a policy that provides one dollar in benefits each to all households. For simplicity, assume household income is distributed uniformly from 0 to 100. Focusing on quintiles, where the average income is 10, 30, 50, 70, and 90, yields a weighted average of \$2.72. But focusing on deciles, where the average

income is 5, 15, ..., 95, yields a weighted average of \$3.90. Unless the granularity is specified, comparisons of results across policies (or across costs and benefits within a policy) can differ simply based on the data disaggregation if the granularity differs.

## **4.2.** The Intersection of "Scope of Analysis" and "Distributional Effects"

The intersection of distributional weights with the global scope of analysis generates additional issues. On page 3 of the Preamble to Circular A-4, OMB has requested comment on the following question: "Are there any interactions between this section and other sections of the Circular, for example between the sections 'Scope of Analysis' and 'Distributional Effects,' that should be further accounted for in the revisions to the Circular?"

In the "Scope of Analysis" section of the updated A-4, OMB permits agencies to consider costs and benefits outside of the United States in certain circumstances. In section 10, it also permits agencies to use distributional weighting, recommending an elasticity of marginal utility of consumption (EMUC) of 1.4. However, the proposed revisions to Circular A-4 do not explicitly comment one way or the other on the implications of these two revisions taken together—that is, whether or not it is appropriate to apply distributional weights to costs and benefits accruing outside the United States.

Because OMB has not commented on the intersection between these issues in the proposed updates to Circular A-4, analysts are left to decide whether to interpret OMB's independent endorsements of both (i) a global geographic scope *and* (ii) the use of distributional weights, to therefore imply an endorsement of their combination, even if OMB has not explicitly said so.

Distributional weighting in a global context entails valuing each dollar of costs or benefits accruing to individuals outside of the United States—who usually have lower incomes—as more than one dollar of costs or benefits accruing to individuals inside the United States. Because there is substantially more variation in median income across countries than within countries, the implication of the proposed distributional weight of 1.4 will be much larger when considering impacts outside of the United States.

This is a major change to existing practice, which weights each dollar of global impacts with a weight of either 0 (if only a domestic scope is considered) or 1 (when using a global scope but not distributional weights). Given the importance of this change, it would be valuable for OMB to provide guidance on whether and when it is appropriate to use distributional weights within global geographic scopes.

## 4.3. The Value of Risk Reductions, or the Value of a Statistical Life (VSL)

Page 66 of the revision states "For example, it is appropriate to use a value for mortality risk reductions (sometimes referred to as the value of a statistical life, or VSL) that does not depend on the income of the sub-population to which the mortality risk reduction benefits accrue, consistent with the guidance provided elsewhere in this Circular."

In the context of recommending the use of a global analytical scope in certain circumstances, this statement could be interpreted as a direction to agencies to use the same value of the VSL for individuals outside the United States. However, such an approach would be inconsistent with the literature on this question (e.g., Viscusi and Aldy 2003; Hammitt and Robinson 2011; Narain and Sall 2016; Viscusi and Masterman 2017; Hammitt, Robinson, and O'Keefe 2019). Indeed, OMB's preamble of this update surveys the literature on the income elasticity of the VSL, finding values ranging from 0.5 to 1.44 (Table I of Preamble); this range does not include the value of zero that would be implied by using the same VSL for all individuals globally.

While it is true that federal agencies typically use the same VSL within the United States, it is standard practice to use different VSL values that are scaled to income at the country level (Narain and Sall 2016; World Bank 2007; World Health Organization 2015). This is consistent with the approach to the VSL taken by the Interagency Working Group on the Social Cost of Carbon, which is the basis for the current interim estimates of the social cost of greenhouse gases, as well as EPA's 2022 report proposing to update these estimates (EPA 2022).

Clarification is necessary to understand if this statement regarding using a uniform VSL is intended to apply to impacts outside of the United States. For example, if it was not intended to do so, OMB can clarify by adding "within the United States" after the parenthetical statement. If it was intended to apply outside the United States, additional language can specify whether the VSL used outside the United States should be equal to the US value or a value adjusted for global average income and can include an explanation of the rationale.

### 5. Conclusion

The proposed revisions include necessary updates to the approach to discounting and clarification on the appropriate scope of analysis for fundamentally global issues.

The revised A-4 guidance offers agencies substantial flexibility in how they conduct benefit-cost analysis, which may have unintended consequences. This may be deemed necessary in certain cases to address unique circumstances that require specific analytical needs; however, offering fewer clear and specific instructions to agencies may result in less consistency in the resulting analysis produced across agencies. An important reason guidance from OMB and OIRA is put forth is so that analytical approaches are harmonized from the start and that decisions can be informed in a consistent manner across the federal government. That harmonization can also help avoid complex rewrites of analyses that may deviate from best practice and/or incorporate inconsistencies. The area with the greatest such potential is distributional weighting, which substantially increases the analytical needs to be valid—needs that have not been implemented by any agency to date. When OMB is specific about reasonable default approaches for agencies to take, for example around when distributional weighting is appropriate, how to divide subgroups, and related matters, the goal of informing decisions in a consistent manner across the federal government is more likely to be met.

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