

August 13, 2018

Andrew Wheeler
Acting Administrator
U.S. Environmental Protection Agency
William Jefferson Clinton Federal Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Attention: 2010-AA12

Comments submitted electronically via <https://www.regulations.gov>

RE: Comments on Advance Notice of Proposed Rulemaking, “Increasing Consistency and Transparency in Considering Costs and Benefits in the Rulemaking Process,” 83 Fed. Reg. 27524, Regulation Identifier Number: 2010-AA12

Dear Acting Administrator Wheeler:

The California Air Resources Board submits the enclosed comments on the Advance Notice of Proposed Rulemaking, “Increasing Consistency and Transparency in Considering Costs and Benefits in the Rulemaking Process,” 83 Fed. Reg. 27524 (June 13, 2018). We urge the Environmental Protection Agency to maintain and enhance consideration of co-benefits and social costs in regulatory analyses. We also urge the Agency to refrain from rulemaking that is unlikely to enhance consistency or transparency, but is likely to result in bias and delay in fulfilling the Agency’s mission and duty to protect public health and the environment.

Sincerely,

Richard W. Corey
Executive Officer

Enclosure: Comments of the California Air Resources Board on the Advance Notice of Proposed Rulemaking, “Increasing Consistency and Transparency in Considering Costs and Benefits in the Rulemaking Process”; Docket No. EPA-HQ-OA-2018-0107.

Comments of the California Air Resources Board

Responding to

The United States Environmental Protection Agency's

Request for Comment on Increasing Consistency and Transparency in Considering Costs and Benefits in the Rulemaking Process: Advance Notice of Proposed Rulemaking

Docket No. EPA-HQ-OA-2018-0107

The California Air Resources Board (CARB)¹ submits the following comment on the U.S. Environmental Protection Agency's (EPA) advance notice of proposed rulemaking (ANPRM), "Increasing Consistency and Transparency in Considering Costs and Benefits in the Rulemaking Process."²

While CARB supports U.S. EPA's ostensible goal of increasing consistency and transparency in its cost-benefit analyses, the ideas on which U.S. EPA solicits comment are unlikely to improve analyses or further the agency's mission to protect public health and the environment. Instead, they are likely to bias regulatory decisionmaking. There are other steps that U.S. EPA can and should take to improve regulatory cost-benefit analysis in furtherance of its mission, namely, heightened consideration of co-benefits and social costs.

CARB is committed to fully estimating anticipated costs and benefits when considering regulatory actions. CARB has relied on previously-established guidelines from U.S. EPA,³ in conjunction with State-level requirements,⁴ in the analysis of economic impacts including

¹ The mission of the California Air Resources Board (CARB) is to protect and promote public health, welfare, and ecological resources of California's population through air quality monitoring and protection. CARB's major goals include safe and clean air for all Californians, reducing the State's greenhouse gas (GHG) emissions, and providing leadership and innovating approaches to implement air pollution controls. CARB works with local California Air Districts, many of which regulate air pollution from oil and gas operations at the regional or county level, in addition to developing statewide rules.

² 83 Fed.Reg. 27,524 (June 13, 2018).

³ U.S. EPA Guidelines for Preparing Economic Analyses, National Center for Environmental Economics, Dec. 17, 2010, updated May 2014, *available at* <https://www.epa.gov/environmental-economics/guidelines-preparing-economic-analyses>.

⁴ *E.g.*, the California Administrative Procedure Act, Cal. Gov. Code section 11340 et seq., *available at* https://oal.ca.gov/publications/administrative_procedure_act/; Cal. Health & Safety Code Sections 38506, 38562.5 (requiring CARB, when adopting certain rules and regulations, to "consider the social costs of the emissions of greenhouse gases," defined as "an estimate of the economic damages, including, but not limited to, changes in net agricultural productivity; impacts to public health; climate

monetary and non-monetary costs and benefits. Development of these guidelines is spearheaded by U.S. EPA's National Center for Environmental Economics in consultation with economists across U.S. EPA, and they benefit from expert peer review (by U.S. EPA's Science Advisory Board Environmental Economics Advisory Committee or external experts) before finalization.⁵

CARB is committed to consistent and transparent quantification and monetization of economic impacts based on the latest peer-reviewed science and economic literature. CARB urges U.S. EPA to maintain its historic commitment to the same principles. These principles would not be served by altering approaches for cost-benefit analysis in the manner that U.S. EPA presently contemplates.

U.S. EPA should not codify standardized definitions or practices to implement disparate legal requirements.

Increased consistency in analytical practices and approaches, where permissible and appropriate, can assure quality, improve transparency, and reduce uncertainty. In foundational environmental statutes, however, as U.S. EPA recognizes, Congress has assigned disparate statutory requirements and parameters to the agency's cost-benefit analyses of different pollutants, sectors, and reduction strategies.⁶ Preserving the legality of agency actions frequently requires U.S. EPA to tailor analytical practices by statute, program, pollutant, strategy, and/or judicial interpretation.⁷

Additionally, mandating consistent implementation of disparate statutory requirements and judicial holdings would impair regulatory decisionmaking. As U.S. EPA acknowledges, "Many technical and practical factors play a role in how EPA implements statutory instruction related to cost considerations in regulatory decisions. Any assessment of costs (and benefits) is limited by the state of scientific and economic modeling, quantification methods, and available data—all of which change over time and across industries and sectors of the economy."⁸

adaptation impacts, such as property damages from increased flood risk; and changes in energy system costs, per metric ton of greenhouse gas emission per year.")

⁵ <https://www.epa.gov/environmental-economics/guidelines-preparing-economic-analyses>, last updated Jan. 31, 2018.

⁶ "Most statutory provisions require or allow some consideration of cost and benefits when setting regulatory standards to achieve public health and environmental benefits, but there can be a significant variation in terminology and specificity provided in each law regarding the nature and scope of cost and benefit considerations"; "Even when Congress does include statutory language to indicate how EPA should weigh cost considerations against benefits and other relevant factors, there is considerable variation in the language used." 83 Fed.Reg. at 27525.

⁷ "For many of EPA's regulatory programs, the courts have weighed in on the scope of costs to be considered during the development of a regulation"; "In cases where current EPA practice reflects prior judicial decisions, a change in course may come with significant burden to the Agency." *Id.* at 27526, 27527.

⁸ *Id.* at 27526.

Further, “industry or sector specific factors may play a role, as some metrics may be more or less relevant to the affected industries, sectors, or question at hand.”⁹ These technical, practical, and industry factors argue for continued appropriate tailoring of regulatory analyses in the manner that most comprehensively and accurately considers benefits and costs.

The ANPRM also seems to contemplate that consideration of co-benefits may be reduced or eliminated in cost-benefit analyses for regulatory decisionmaking, evidently in the name of consistency.¹⁰ At the same time, the ANPRM references Office of Management and Budget Circular A-4,¹¹ the office’s guidance to federal agencies on cost-benefit analyses in regulatory decisionmaking, which was heralded in President Trump’s Executive Order (E.O.) 13783 (March 28, 2017).¹² Circular A-4 states, “Your analysis should look beyond the direct benefits and direct costs of your rulemaking and consider any important ancillary benefits and countervailing risks. An ancillary benefit is a favorable impact of the rule that is typically unrelated or secondary to the statutory purpose of the rulemaking Like other benefits and costs, an effort should be made to quantify and monetize ancillary benefits and countervailing risks.”¹³

We agree that full consideration of co-benefits is a vital component of effective cost-benefit analysis and that U.S. EPA should, if anything, develop methods and require consistency in quantifying and considering co-benefits more fully. Partially considering benefits while fully considering costs is both inappropriate for economic analysis and unlawful,¹⁴ as it results in significant underestimation of the benefits of environmental regulations. Full estimation of co-benefits of regulatory actions is critically important to ensuring appropriate actions are taken to comprehensively improve air quality and mitigate climate change. CARB vehemently opposes changes in policy or guidance that dilute or prevent agencies from estimating co-benefits of

⁹ *Ibid.*

¹⁰ U.S. EPA notes that industry “commenters argued in past rulemakings the Agency has justified the stringency of a standard based on the estimated benefits from reductions in pollutants not directly regulated by the action (*i.e.*, ‘ancillary benefits’ or ‘co-benefits’),” and requests comment on “to what extent should EPA develop a general rule on how the Agency will weigh the benefits from reductions in pollutants that were not directly regulated (often called ‘co-benefits’ or ‘ancillary benefits’).” *Id.* at 27526-27.

¹¹ *Id.* at 27525.

¹² “Promoting Energy Independence and Economic Growth,” noting that Circular A-4 “was issued after peer review and public comment and has been widely accepted for more than a decade as embodying the best practices for conducting regulatory cost-benefit analysis.” 82 Fed.Reg. 16093 (March 31, 2017), § 5(c), citing Circular A-4, September 17, 2003, *available at* https://obamawhitehouse.archives.gov/omb/circulars_a004_a-4/#e.

¹³ § 6.

¹⁴ *E.g.*, *Ctr. for Biological Diversity v. Nat’l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1198 (9th Cir. 2008) (“Even if NHTSA may use a cost-benefit analysis to determine the “maximum feasible” fuel economy standard, it cannot put a thumb on the scale by undervaluing the benefits and overvaluing the costs of more stringent standards. NHTSA fails to include in its analysis the benefit of carbon emissions reduction in either quantitative or qualitative form. It did, however, include an analysis of the employment and sales impacts of more stringent standards on manufacturers.”).

potential regulatory actions. Additionally, reducing consideration of co-benefits in regulatory decisionmaking would affect air quality planning. CARB and local air agencies employ the co-benefits analyses and information in U.S. EPA's regulatory impacts analyses for compliance planning and development of state compliance strategies within State Implementation Plans for the National Ambient Air Quality Standards. U.S. EPA should not promulgate any rulemaking that requires the agency to ignore or discount co-benefits, but may increase consistency by requiring and promoting their full and appropriate consideration.

The ideas under consideration would not increase transparency.

Transparency in regulatory decisionmaking requires full analysis of all costs and benefits of a proposed regulation and regulatory and non-regulatory alternatives, including taking no action. This is among the reasons that Presidents have issued multiple currently-effective E.O.s to require and promote comprehensive regulatory analyses across the federal government, including E.O. 12866 (Sept. 30, 1993, requiring agencies to fully assess the costs and the benefits of an intended regulation and available alternatives, including "both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider")¹⁵ and E.O. 13563 (Jan. 18, 2011, directing agencies "to use the best available techniques to quantify anticipated present and future benefits and costs as accurately as possible . . . [including] values that are difficult or impossible to quantify, including equity, human dignity, fairness, and distributive impacts.")¹⁶

U.S. EPA's request for comment on transparency in the ANPRM, however, focuses on extending the agency's concurrent proposal to limit regulatory science and requiring greater retrospective review of existing regulations before rulemaking. Neither would increase transparency and both would impede U.S. EPA's foundational mission of protecting public health and the environment.

Limiting consideration of benefits would bias decisionmaking.

U.S. EPA asks, "In what ways can EPA increase transparency about the decision-making process in cases where the decision was based on information that is barred from release by law?"¹⁷ This query echoes the agency's concurrent proposal to bar consideration of scientific data and models that are not publicly available,¹⁸ based on the false presumption that public availability of underlying data is the guarantor of transparency. Here, as with the agency's anti-science proposal, transparent analysis does not necessarily depend on public availability of data. Rather, transparent analysis depends on factors such as clear discussion of methods, explanation of models, and discussion of any uncertainties or limitations. As with U.S. EPA's

¹⁵ 58 Fed.Reg. 51735 (October 4, 1993), § 1(a), (b)(6).

¹⁶ 76 Fed.Reg. 3821 (January 21, 2011), § 1(c).

¹⁷ 83 Fed.Reg. at 27527.

¹⁸ "Strengthening Transparency in Regulatory Science," 83 Fed.Reg. 18768 (April 30, 2018).

proposal to limit consideration of science in regulatory decisionmaking, the effect of limiting the use of protected data in agency analyses would likely be to privilege industry-funded data and models over epidemiological studies (for which the raw individual health data is protected by law) or academic models (which are often protected intellectual property).¹⁹

Retrospective analysis is already required and is a useful tool, but can also justify or cause delay.

Despite CARB's commitment to accurately representing and appropriately analyzing the economic impacts of its regulatory actions,²⁰ CARB does not consider it appropriate to require comprehensive retrospective analyses of all existing regulations before initiating regulatory action, given the variability of regulatory actions, available data, competing agency priorities, and resource limitations. Such a requirement is likely to stall vital public health and environmental protections by increasing "analysis paralysis," allowing U.S. EPA to delay setting protective standards through prolonged evaluation of cumulative effects of a new regulation in the existing regulatory environment. A related likely consequence would be to limit U.S. EPA's ability to quickly respond to emerging challenges.

U.S. EPA already has a Plan for Periodic Retrospective Reviews of Existing Regulations,²¹ in keeping with the requirements of E.O.s 13563 (Jan. 18, 2011),²² 13579 (July 11, 2011),²³ and 13610 (May 10, 2012).²⁴ CARB would support U.S. EPA's issuance of additional guidance on the types of data and information that could be collected from regulated entities to facilitate periodic retrospective analyses in the future. This type of guidance would support transparency and lay the foundation for potential beneficial actions related to retrospective analyses in regulatory impact assessments.

¹⁹ See California Environmental Protection Agency's forthcoming comment on the notice of proposed rulemaking, Docket ID No. EPA-HQ-OA-2018-0259.

²⁰ In 2012, CARB and the University of California at Santa Barbara convened a symposium of economists to discuss the potential for the ex-post analysis of the State's flagship law addressing GHG emissions, Assembly Bill 32 (the Global Warming Solutions Act). The symposium focused on the need for regulatory evaluation while also highlighting the difficulty in obtaining the data necessary to perform consistent retrospective analyses – especially given interacting policies and levels of regulatory jurisdiction. Charles D. Kolstad and Emily Wimberger, "Information Needs for Analysis of Effectiveness of the Cap-and-Trade Regulation," April 2012, available at <https://www.arb.ca.gov/lists/com-attach/23-ct-3-2-18-wkshp-ws-B2wHbl0wUXFXJVc2.pdf>.

²¹ August 2011, available at <https://19january2017snapshot.epa.gov/laws-regulations/documents-retrospective-review.html>.

²² 76 Fed.Reg. 3821, January 21, 2011.

²³ "Regulation and Independent Regulatory Agencies," 76 Fed.Reg. 41587 (July 14, 2011).

²⁴ "Identifying and Reducing Regulatory Burdens," 77 Fed.Reg. 28468 (May 14, 2012).

U.S. EPA analyses should incorporate and reflect the global social costs of GHGs.

Whether or not U.S. EPA promulgates rulemaking in pursuit of consistency and transparency in regulatory cost-benefit analyses, it should maintain and promote consideration of the social costs of GHG emissions. CARB strongly suggests the continued inclusion of the social costs of GHG emissions in regulatory analyses, as environmental damage caused by carbon emissions should be included in the estimation of economic impacts of regulatory actions that reduce those emissions. The inclusion of these valuations results in a more complete estimation of economic impacts, which leads to more appropriate and responsive regulations.

Since 2008, federal agencies have been incorporating the social costs of GHGs, including carbon dioxide, methane, and nitrous oxide, into the analyses of their potential regulatory actions to comprehensively account for the economic impact of regulations that will result in changes in GHGs emissions. In 2008, the U.S. Ninth Circuit Court of Appeals held that a National Highway Transportation Safety Administration vehicle fuel economy rule was arbitrary and capricious because it failed to consider the social cost of carbon, writing, "While the record shows that there is a range of values, the value of carbon emissions reduction is certainly not zero."²⁵

In 2009, the President's Council of Economic Advisors and the U.S. Office of Management and Budget convened the Interagency Working Group on the Social Cost of Greenhouse Gases²⁶ (IWG) to develop a methodology for estimating the social cost of carbon. This methodology relied on a standardized range of assumptions and could be used consistently when estimating the benefits of regulations across agencies. The IWG, comprised of scientific and economic experts, recommended the use of social cost of carbon values based on three integrated assessment models developed over decades of global peer-reviewed research.²⁷ The IWG provides a critical example of transparency in methodology and assumptions as well as consistency in valuation of environmental damages. CARB utilizes the current IWG-supported social cost of carbon values to consider the social costs of actions to reduce GHG emissions. This approach is in line with Presidential E.O.s, including 12866, and OMB Circular A-4, which as noted above, require agencies to quantify anticipated benefits and costs of proposed rulemakings as accurately as possible using the best available techniques, and to ensure that

²⁵ *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1200 (9th Cir. 2008).

²⁶ Originally titled the Interagency Working Group on the Social Cost of Carbon, the IWG was renamed in 2016.

²⁷ Additional technical detail on the IWG process is available in the Technical Updates of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866. Iterations of the Updates are available at: <https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/for-agencies/Social-Cost-of-Carbon-for-RIA.pdf>; <https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/scc-tds-final-july-2015.pdf>; and https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/scc_tsd_final_clean_8_26_16.pdf.

any scientific and technological information or processes used to support their regulatory actions are objective.²⁸

CARB acknowledges that the current federal administration has withdrawn certain social cost of GHG reports as no longer representative of federal governmental policy.²⁹ However, this determination does not call into question the validity and scientific integrity of federal social cost of carbon work, or the merit of independent scientific work. Indeed, the IWG's work remains relevant, reliable, and appropriate for use for these purposes. CARB supports continued use of the IWG social cost of GHG values and strongly suggests that U.S. EPA support and promote these values, which would increase transparency and consistent high quality of regulatory analyses.

The IWG describes the social costs of carbon dioxide as follows:

The social cost of carbon (SC-CO₂) for a given year is an estimate, in dollars, of the present discounted value of the future damage caused by a 1-metric ton increase in carbon dioxide (CO₂) emissions into the atmosphere in that year, or equivalently, the benefits of reducing CO₂ emissions by the same amount in that year. The SC-CO₂ is intended to provide a comprehensive measure of the net damages – that is, the monetized value of the net impacts- from global climate change that result from an additional ton of CO₂.

These damages include, but are not limited to, changes in net agricultural productivity, energy use, human health, property damage from increased flood risk, as well as nonmarket damages, such as the services that natural ecosystems provide to society. Many of these damages from CO₂ emissions today will affect economic outcomes throughout the next several centuries.³⁰

Table 1 presents the range of IWG social cost of carbon values used in regulatory assessments in California and specifically at CARB.³¹

²⁸ 58 Fed.Reg. 51735 (October 4, 1993); Circular A-4, September 17, 2003, *available at* https://obamawhitehouse.archives.gov/omb/circulars_a004_a-4/#e.

²⁹ E.O. 13783, March 28, 2017, § 5(b).

³⁰ The National Academies, *Valuing Climate Damages: Updating Estimation of the Social Cost of Carbon Dioxide*, 2017, *available at* <http://www.nap.edu/24651>.

³¹ The social cost of carbon values as of July 2015 are available at <https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/scc-tds-final-july-2015.pdf>.

Table 1. Social cost of carbon dioxide, 2015-2030 (in 2007\$ per Metric Ton)

Year	5 Percent Discount Rate	3 Percent Discount Rate	2.5 Percent Discount Rate
2015	\$11	\$36	\$56
2020	\$12	\$42	\$62
2025	\$14	\$46	\$68
2030	\$16	\$50	\$73

The IWG estimates the social cost of GHGs across a range of discount rates that encompass a variety of assumptions regarding the correlation between climate damages and consumption of goods and is consistent with OMB's Circular A-4 guidance.³²

There is an active discussion within government and academia about the role of social cost of GHGs in assessing regulations, quantifying avoided climate damages, and the values themselves. In January 2017, the National Academies of Sciences, Engineering, and Medicine (NAS) released a report examining potential approaches for a comprehensive update to the social cost of carbon methodology to ensure resulting cost estimates reflect the best available science. The NAS review did not modify the estimated values of the social cost of carbon, but evaluated the models, assumptions, handling of uncertainty, and discounting used in the estimating of the social cost of carbon. The report titled, "Valuing Climate Damages: Updating Estimation of the Social Cost of Carbon Dioxide" recommends near-term improvements to the existing IWG social cost of carbon as well as a long-term strategy to more comprehensive updates.³³ CARB will continue to follow updates to the IWG social cost of carbon dioxide, including changes outlined in the NAS report, and incorporate appropriate peer-reviewed modifications to estimates based on the latest available data and science and supports U.S. EPA in following the recommendations of the NAS in continuing to modify and expand the estimation of values associated with mitigation actions.

It is important to note that the social cost of carbon, while intended to be a comprehensive estimate of the damages caused by carbon globally, does not represent the cumulative cost of climate change and air pollution to society. There are additional co-benefits from reductions in carbon, including changes in co-pollutants, social costs of other GHGs including methane and nitrous oxide, and co-benefit estimation that may be limited by data availability and modeling constraints. The IPCC has stated that the IWG social cost of carbon estimates are likely underestimated due to the omission of significant impacts that cannot be accurately monetized, including important physical, ecological, and economic impacts.³⁴ CARB will

³² The National Academies, Valuing Climate Damages: Updating Estimation of the Social Cost of Carbon Dioxide, 2017, available at <http://www.nap.edu/24651>.

³³ National Academies, Valuing Climate Damages: Updating Estimation of the Social Cost of Carbon Dioxide, 2017, available at: <http://www.nap.edu/24651>.

³⁴ https://www.ipcc.ch/publications_and_data/ar4/wg3/en/ch3s3-5-3-3.html.

continue engaging with experts to evaluate the comprehensive California-specific impacts of climate change and air pollution.

Social costs of methane and nitrous oxide have also been developed consistent with the methodology used in estimating the IWG social cost of carbon. The social cost of methane and nitrous oxide values have also been endorsed by the IWG and used in federal regulatory analyses.³⁵

CARB supports the inclusion of these valuations in regulatory analyses to promote transparency and consistency and proposes that U.S. EPA fulfill these objectives by requiring the inclusion of social costs of GHGs in all regulatory impact assessment. Along with the social cost of carbon, CARB also supports the use of the social cost of methane and nitrous oxide values in monetizing the impacts of GHG emissions and proposes that the IWG valuations be included in any future U.S. EPA guidance on the estimation of costs and benefits.

Finally, CARB also supports the IWG valuations' consideration of global damages when estimating the social cost of GHGs. Given the interconnectedness of the global economy and security, climatic damages outside U.S. borders have both direct and indirect domestic impacts. The Defense Authorization Act of 2018 acknowledges the global impacts of climate change, including some of the ways in which foreign impacts impose domestic costs, such as sea level rise that threatens U.S. military sites abroad and drought and famine that lead to failed states, "which are breeding grounds of extremist and terrorist organizations."³⁶

Rulemaking to increase consistency and transparency is unnecessary.

U.S. EPA's current Guidelines for Preparing Economic Analyses³⁷ and Plan for Periodic Retrospective Reviews of Existing Regulations³⁸ are transparent and comprehensive. They provide appropriate and necessary flexibility in evaluating costs and benefits across a wide variety of regulatory actions and various pollutants. They are not in need of update, amendment, or regulatory codification.

Indeed, U.S. EPA cannot identify any such need, referencing only alleged "perceived inconsistency and lack of transparency in how the Agency considers costs and benefits in

³⁵ More information is available at https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/august_2016_sc_ch4_sc_n2o_addendum_final_8_26_16.pdf.

³⁶ Public Law 115-91, December 12, 2017, 131 Stat 1283, § 335.

³⁷ U.S. EPA Guidelines for Preparing Economic Analyses, National Center for Environmental Economics, Dec. 17, 2010, updated May 2014, available at <https://www.epa.gov/environmental-economics/guidelines-preparing-economic-analyses>.

³⁸ August 2011, available at <https://19january2017snapshot.epa.gov/laws-regulations/documents-retrospective-review.html>.

rulemaking,” and requesting “more information about the nature and extent of the concerns.”³⁹ To the extent that U.S. EPA relays specific concerns that prompted publication of the ANPRM and solicitation of further public comment, U.S. EPA admits that these concerns are limited to industry and reflect policy preferences related to consideration of co-benefits and other analytical decisions.⁴⁰ Nowhere does U.S. EPA suggest that these concerns relate to consistency or transparency, merely to compliance costs.⁴¹ Additionally, U.S. EPA states that it is *not* accepting exactly the category of comment that it claims necessitated the ANPRM: “In this ANPRM, EPA is taking comment on the role that regulatory analysis or aspects of that analysis play in decision making consistent with statutory direction, not what these existing guidance documents recommend about how best to conduct the underlying analysis of regulatory actions.”⁴² Yet this is the only type of comment that U.S. EPA relays as it describes the alleged problem.⁴³

CARB notes that current E.O.s and U.S. EPA policies obviate any claimed need for rulemaking, and that any rulemaking that U.S. EPA does undertake must abide by the E.O.s. E.O. 12866, “Regulatory Planning and Review,” was issued twenty-five years ago and has been upheld by all presidents since.⁴⁴ It requires agencies to “assess both the costs and the benefits of the intended regulation and, recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs.”⁴⁵ As noted above, the assessed costs and benefits must “include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider.”⁴⁶ E.O. 12866, requiring that the anticipated benefits of

³⁹ 83 Fed.Reg. at 27527.

⁴⁰ *Id.* at 27526.

⁴¹ *Ibid.*

⁴² *Id.* at 27525.

⁴³ *Id.* at 27526.

⁴⁴ 58 Fed.Reg. 51735 (October 4, 1993); <https://www.archives.gov/federal-register/executive-orders/1993-clinton.html#12866>.

⁴⁵ § 1(b)(6).

⁴⁶ § 1(a). Additionally, for significant regulatory actions, agencies must also prepare “(i) An assessment, including the underlying analysis, of benefits anticipated from the regulatory action (such as, but not limited to, the promotion of the efficient functioning of the economy and private markets, the enhancement of health and safety, the protection of the natural environment, and the elimination or reduction of discrimination or bias) together with, to the extent feasible, a quantification of those benefits; (ii) An assessment, including the underlying analysis, of costs anticipated from the regulatory action (such as, but not limited to, the direct cost both to the government in administering the regulation and to businesses and others in complying with the regulation, and any adverse effects on the efficient functioning of the economy, private markets (including productivity, employment, and competitiveness), health, safety, and the natural environment), together with, to the extent feasible, a quantification of those costs; and (iii) An assessment, including the underlying analysis, of costs and benefits of potentially effective and reasonably feasible alternatives to the planned regulation, identified by the agencies or the public (including improving the current regulation and reasonably viable nonregulatory

rulemaking strictly justify anticipated costs, replaced E.O. 12291, which required that benefits strictly outweigh costs,⁴⁷ thereby acknowledging the difficulty of precisely measuring and monetizing benefits and costs. E.O. 13563, "Improving Regulation and Regulatory Review," which also remains active, both affirms the 1993 E.O. and additionally directs federal agencies "to use the best available techniques to quantify anticipated present and future benefits and costs as accurately as possible. Where appropriate and permitted by law, each agency may consider (and discuss qualitatively) values that are difficult or impossible to quantify, including equity, human dignity, fairness, and distributive impacts."⁴⁸

If current U.S. EPA regulatory guidance on costs and benefits is to be modified, including through rulemaking, it should only be to increase the comprehensiveness of valuation of costs and benefits. This would include emphasis on valuing the co-benefits of mitigation actions and the inclusion and continued refinement of valuation of currently non-monetized impacts, including impacts on natural and working lands, health impacts, and impacts related to active transportation and mobility.

Conclusion

U.S. EPA should not pursue a rulemaking that is unlikely to promote transparent and high-quality decisionmaking and is likely to impede U.S. EPA's mission of protecting public health and the environment. The agency should instead improve its analyses by advancing mechanisms for monetizing or otherwise quantifying currently unquantified harms and benefits. This particularly includes co-benefit, negative externalities of pollution, and the social costs of GHGs.

actions), and an explanation why the planned regulatory action is preferable to the identified potential alternatives. (§ 6(a)(3)(C).)

⁴⁷ 46 Fed.Reg. 13193 (February 19, 1981).

⁴⁸ 76 Fed.Reg. 3821 (January 21, 2011), § 1(c).