

**PEOPLE OF THE STATE OF CALIFORNIA,
EX REL. EDMUND G. BROWN JR., ATTORNEY GENERAL
CONNECTICUT ATTORNEY GENERAL RICHARD BLUMENTHAL
STATE OF NEW JERSEY, ATTORNEY GENERAL ANNE MILGRAM AND
COMMISSIONER LISA P. JACKSON
NEW MEXICO ATTORNEY GENERAL GARY K. KING
STATE OF OREGON, ATTORNEY GENERAL HARDY MYERS
RHODE ISLAND ATTORNEY GENERAL PATRICK C. LYNCH
COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL
PROTECTION
NEW YORK CITY CORPORATION COUNSEL MICHAEL A. CARDOZO**

May 27, 2008

BY OVERNIGHT

Docket Management Facility, M-30
U.S. Department of Transportation
West Building, Ground Floor, Room W12-140
1200 New Jersey Ave., SE
Washington, DC 20590

RE: Docket No. NHTSA-2008-0060
Comments on Supplemental Notice of Public Scoping for an Environmental Impact
Statement for New Corporate Average Fuel Economy Standards

Dear Sir or Madame:

This letter contains the comments of the Attorneys General of the States of California, Connecticut, New Jersey, New Mexico, Oregon, and Rhode Island, the Commissioner of New Jersey, the Commonwealth of Pennsylvania Department of Environmental Protection, and the New York City Corporation Counsel regarding the Supplemental Notice of Public Scoping for an Environmental Impact Statement ("EIS") for New Corporate Average Fuel Economy ("CAFE") Standards published by the National Highway Traffic Safety Administration ("NHTSA").

Pursuant to the instructions in the Supplemental Notice, we have provided Internet citations to the documents referenced and are also providing the Agency with two CDs containing copies of the documents themselves. Please provide us with notice of publication of the NEPA documents, along with a URL to access the documents and the executive summary.

Summary

NHTSA is mandated to prepare an EIS to address the global warming impacts of its proposed CAFE standard. This is more than a mere formality. In order to satisfy the requirements of the National Environmental Policy Act (“NEPA”), 42 U.S.C. §§ 4321 *et seq.*, and to provide the “hard look” at global warming legally required, the EIS must do more than simply present raw data on tons of greenhouse gases (“GHG”) emitted from the relevant vehicles. It must educate the Agency and the public to the reality of global warming and the contribution made by the emissions from the CAFE standard, coupled with other foreseeable GHG emissions. The EIS must answer a critical question, informing the public in plain English¹ whether the Agency’s decisions in setting the CAFE standard keep us on the “business as usual” trajectory toward increased global warming and inevitable environmental disaster, or whether NHTSA will take necessary steps to moderate the levels of GHG emissions in a manner that, when coupled with actions taken by other entities, will slow global warming sufficiently to avoid environmental disaster.

NHTSA Has a Legal Duty to Prepare an EIS that Addresses Greenhouse Gas Emissions and Global Warming

NEPA requires all federal agencies, such as NHTSA, to analyze the environmental impacts of proposed major actions in order to promote better environmental decision-making. “[T]he comprehensive ‘hard look’ mandated by Congress and required by the statute. . . must be taken objectively and in good faith, not as an exercise in form over substance, and not as a subterfuge designed to rationalize a decision already made.” *Metcalf v. Daley*, 214 F.3d 1135, 1142 (9th Cir. 2000). As the courts have repeatedly noted, while NEPA does not require an agency to reach a particular result, it “ensures that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts; it also guarantees that the relevant information will be made available to the larger

¹See 40 C.F.R. § 1502.8 (EIS must “be written in plain language and may use appropriate graphics so that decisionmakers and the public can readily understand them”); *Earth Island Institute v. U.S. Forest Service*, 442 F.3d 1147, 1160 (9th Cir. 2006) (EIS “must be organized and written so as to be readily understandable by governmental decisionmakers and by interested non-professional laypersons likely to be affected by actions taken under the [EIS]” (quoting *Oregon Environmental Council v. Kunzman*, 817 F.2d 484, 494 (9th Cir. 1987).)

audience that may also play a role in both the decision making process and the implementation of that decision.” *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989).

In recent years the legal consensus on global warming has caught up with the scientific consensus. In *Massachusetts v. EPA*, 127 S.Ct. 1438 (2007), the Supreme Court acknowledged that the “harms associated with climate change are serious and well recognized.” Impacts include a “precipitate rise in sea levels,” “severe and irreversible changes to natural ecosystems,” “significant reduction in water storage in winter snowpack,” “increase in the spread of disease,” and more extreme weather events. *Id.* at 1455-56 (citations omitted, quoting Declaration of Michael MacCracken).

Following on the Supreme Court’s decision, the Ninth Circuit observed that the phenomenon of global warming is “non-linear,” and incremental increases in CO₂ can lead to abrupt, catastrophic, and irreversible changes, particularly in light of the “compelling scientific evidence concerning ‘positive feedback mechanisms’ in the atmosphere.” *Center for Biological Diversity v. National Highway Traffic Safety Administration*, 508 F.3d 508, 554 (9th Cir. 2007) [“*CBD*”].² Thus, “even a small increase in greenhouse gases could cause abrupt and severe climate changes.” *Id.* at 557. As the Ninth Circuit noted, NHTSA is in control of a significant portion of the GHGs emitted in the United States, and the CAFE standards “will affect the level of the nation’s greenhouse gas emissions and impact global warming.” *Id.* at 522, 547; see also *id.* at 554-55.

The need for prompt and decisive action has only become more urgent since the Ninth Circuit’s decision. The atmospheric concentration of CO₂, the leading GHG, is now at least 385 parts per million (ppm),³ higher than any time in the last 650,000 years, and rising at about 2 ppm per year.⁴ According to experts, an atmospheric concentration of CO₂ exceeding 450 ppm is

²A Petition for Rehearing is pending, but only on the issue of whether the Ninth Circuit had the authority to order NHTSA to prepare an EIS, or was limited to remanding the matter to the Agency to reconsider its Environmental Assessment.

³U.S. Department of Commerce, National Oceanic & Atmospheric Administration, “Trends in Atmospheric Carbon Dioxide - Mauna Loa,” available at <http://www.esrl.noaa.gov/gmd/ccgg/trends/>. (CD1, Doc. 1)

⁴Fourth Assessment Report of the Intergovernmental Panel on Climate Change (4th IPCC Report) WGI, Frequently Asked Question 7.1, *Are Increases in Atmospheric Carbon Dioxide*

almost surely dangerous because of the catastrophic climate changes it will cause.⁵ We may be fast approaching a “tipping point,” where the increase in temperature will create unstoppable, large-scale, disastrous impacts for the planet.⁶

In its rulemaking, NHTSA recognized the “need to take action to reduce greenhouse gas emissions, e.g., motor vehicle tailpipe emissions of CO₂, in order to forestall and even mitigate climate change . . .” 73 Fed. Reg. at 24357 (footnote omitted). The Agency correctly acknowledged that addressing climate change is not simply part of the NEPA analysis. Rather, NHTSA must consider GHG emissions and climate change when balancing the various factors mandated by the Energy Policy and Conservation Act (“EPCA”) in setting the CAFE standard. See *id.* at 24364, 24456, 24465.⁷

Thus, both in setting the CAFE standard under EPCA and in evaluating environmental consequences consistent with NEPA, NHTSA must take the mandated “hard look” at the GHG emissions that will result from its CAFE standard, and the effects that these and other emissions will have on our environment.

and Other Greenhouse Gases During the Industrial Era Caused by Human Activities?
<http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-faqs.pdf>. (CD1, Doc. 2)

⁵ See Hansen, J.H. *et al.*, Dangerous human-made interference with climate: a GISS modelEstudy, *Atmos. Chem. Phys.*, 7, 2287–2312, 2007, available at http://pubs.giss.nasa.gov/docs/2007/2007_Hansen_etal_1.pdf; Hansen, J.H., *et al.* Climate change and trace gases, *Phil. Trans. R. Soc. A*, 365, 1925-1954, 2007, available at http://pubs.giss.nasa.gov/docs/2007/2007_Hansen_etal_2.pdf. (CD1, Docs. 3, 4)

⁶ See *ibid.* See also discussion of tipping point in *Green Mountain Chrysler Plymouth Dodge Jeep v. Crombie*, 508 F.Supp.2d 295, 313-14 (D. Vt. 2007).

⁷The proposed rule states that, in setting the CAFE standard, to the extent NHTSA gives greater weight to mitigating global warming, it would “put increasingly more emphasis on reducing energy consumption and CO₂ emissions, given their impact on global warming, and less on the other factors, including the economic impacts on the industry.” 73 Fed. Reg. at 24465; see also *id.* at 24473, noting that the “25% below optimized alternative” is not the maximum feasible CAFE standard under the statute, in light of the need of the nation to conserve energy and reduce global warming.

The EIS Must Discuss the Scientific Consensus on Global Warming and Describe the Impact of Global Warming on the Environment Under the Various Climate “Scenarios”

In the Supplemental Notice of Public Scoping, NHTSA calculated that its proposed CAFE standard will avoid a total of 521 million metric tons of CO₂ over the lifetime of the regulated vehicles, compared to the emissions that would have resulted without the new standard. 73 Fed. Reg. at 24456. Based on these calculations, NHTSA reports that “[f]uel savings from stricter CAFE standards . . . result in lower emissions of carbon dioxide (CO₂). . .” *Id.* at 24413.

NHTSA’s calculation of tons of GHG saved by the proposed CAFE standard, while necessary, is insufficient to inform the public about the impacts of GHG emissions from the vehicles. In order to make the raw data meaningful, NHTSA must, as a preliminary matter, describe and discuss the scientific consensus on global warming, including all of the following in the EIS:

- The phenomenon of global warming overall, as discussed in the 4th IPCC Report and subsequent research, including the causes of global warming, current and historic levels of CO₂ in the environment, the projected levels of CO₂ if GHG emissions are not abated, the effect of increased levels of CO₂ on temperature, and the effect of temperature changes on the environment;
- The potential “tipping points” associated with ongoing global warming that could create unstoppable, large-scale, disastrous impacts for the planet;⁸
- What must be done to reduce CO₂ emissions in order to avoid reaching the tipping point. There is widespread agreement among scientists that global warming of 2 degrees Celsius (3.6 degrees Fahrenheit) above global temperatures in 1990 “has effects that may be highly disruptive.” In fact, it has recently been argued that the level of dangerous interference with the climate is as little as 1 degree Celsius above 1990 levels, and thus that “the world is already close to the

⁸See Center for Health & the Global Environment, *Climate Change Futures, Health Ecological and Economic Dimensions*, 26-30 (2005), available at http://www.climatechange-futures.org/pdf/CCF_Report_Final_10.27.pdf (CD1, Doc.5)

dangerous level.” To avoid such warming we would likely need to hold CO₂ levels below 450 ppm.⁹

- The various climate scenarios that may result based on different levels of atmospheric GHGs. The first, is the “business as usual” scenario in which human inputs continue to push global temperature to higher ranges until the tipping point is reached and cataclysmic results ensue, including dramatic climatic disruptions and extermination of a substantial portion of the animal and plant species on the planet. “Business as usual” scenarios would result in additional global warming of 2 to 4 degrees Celsius (3.6 to 7.2 degrees Fahrenheit) by 2100 (relative to 1990). The “alternative scenarios,” are those in which human inputs on global warming are constrained to varying degrees to keep temperature increases below 2 degree Celsius, and the effects of global warming are mitigated to greater and lesser extents. Under these alternative scenarios, CO₂ emissions would need to level out quickly, and decline before 2050, in order for there to be a possibility that adaptation can occur that will avoid a catastrophic disruption of life on earth;¹⁰
- The legal and regulatory efforts being made to slow and reduce the levels of CO₂ in the environment including the Kyoto Accord which requires industrialized countries to reduce GHG emissions in the vicinity of 6% to 8% below 1990 levels; California’s Global Warming Solutions Act of 2006,¹¹ which requires California to reduce CO₂ emissions to 1990 levels by 2020; the New Jersey Global Warming Response Act,¹² which calls for reducing greenhouse gas emissions in New Jersey to 1990 levels by 2020, followed by a further reduction

⁹See Hansen, J.H. et al., Dangerous human-made interference with climate: a GISS modelE study, *Atmos. Chem. Phys.*, 7, 2287–2312, 2007, *supra*, at n.5. (CD1, Doc. 3)

¹⁰ See *Ibid.*; See also Figure SPM.5, IPCC Fourth Assessment Report of the Working Group I, “The Physical Science Basis,” Summary for Policy Makers, available at <http://www.ipcc.ch/ipccreports/ar4-wg1.htm>. (CD1, Doc. 6)

¹¹California Health & Safety Code, § 38500 *et seq.*

¹² N.J.S.A. 26:2C-37 *et seq.* (P.L. 2007, c. 112).

of emissions to 80 percent below 2006 levels by 2050; and other significant state and regional efforts to reduce GHG emissions.¹³

This “context” section of the EIS should ensure that both the Agency and the public understand that, while we cannot stop the effects of global warming that are already underway, we are capable of avoiding outright cataclysm, and there are major benefits to be achieved in limiting climate change.

The EIS Must Discuss How the Emissions from the CAFE Standard, Coupled with Emissions from Other Foreseeable Sources, Will Affect Global Warming

In addition to being insufficient, NHTSA’s presentation of the expected GHG emissions from the proposed standard, and its characterization of the CAFE Standard as representing a reduction in GHG emissions (73 Fed. Reg. at 24413), is affirmatively misleading. As the Ninth Circuit noted in the *CBD* case, it is not enough to report that GHG emissions are reduced from what they would otherwise have been, absent the new rule. Rather, the Agency must inform the public that, because of the expected increase in vehicle miles traveled (VMT) (see 73 Fed. Reg. at 24407), the actual amount of GHGs emitted for the model years will *increase* above past years’ emissions. *CBD*, 508 F.3d at 549 (“The new rule will not actually result in a decrease in carbon emissions, but potentially only a decrease in the rate of growth of carbon emissions”).

Further, the Agency must discuss the GHG emissions that will result from the CAFE standard, coupled with expected GHG emissions from other foreseeable sources, and describe how the projected emissions relate either to the “business as usual” or alternative scenarios. Thus, the EIS must:

¹³See Lutsey, N., Sperling, D., America’s bottom-up climate change mitigation policy, *Energy Policy* 36, 673-685, 2008 (discussing local and state level actions to reduce GHG emissions), available at http://pubs.its.ucdavis.edu/publication_detail.php?id=1135 (CD1, Doc. 7); Dernbach, J.C. et al., Developing a Comprehensive Approach to Climate Change Policy in the United States that Fully Integrates Levels of Government and Economic Sectors, *Virginia Environmental Law Journal*, 26, 227-69, 2007, Widener Law School Legal Studies Research Paper No. 08-20, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1020740. (CD1, Doc. 8)

- Quantify and discuss the amount of GHG emissions emitted from vehicles subject to the proposed CAFE standard combined with other anticipated GHG emissions from United States sources, and compare these emissions to levels in past years;
- Present graphs demonstrating how the overall increase, leveling off, or decrease in emissions from past years will affect temperature. The public should be able to determine from the charts presented whether the trajectory of GHG emissions from the proposed CAFE standard and the alternative standards, coupled with other foreseeable emissions, will enable us to reduce GHG emissions sufficiently to keep CO₂ below the “tipping point” level of 450 ppm and to keep temperature change below an increase of 2 degrees Celsius.

Ultimately, the critical piece of information that the EIS must disclose is whether the proposed CAFE standard puts us on target to meet the goals that are required to slow global warming sufficiently to avoid global disaster. It is that single piece of information that will best inform the Agency and the public about the consequences of decisions made by NHTSA in setting the CAFE standard.

Response to NHTSA’s Requests for Information in the Notice of Public Scoping:

Below are the responses to NHTSA’s specific requests for comments in its scoping notice (NHTSA’s requests are in bold):

(1) Peer-reviewed scientific studies issued since the IPCC’s Fourth Assessment Report that address (a) the impacts of CO₂ and other greenhouse gas (“GHG”) emissions on temperature and the temperature changes likely to result from the proposed standards or the alternatives; (b) the impacts of changes in temperature on the environment, including water resources and biological resources and human health and welfare; or (c) the time periods over which such impacts may occur.

Nothing published subsequent to the IPCC report undermines the consensus range of how much warming can be expected to arise from a given increase in greenhouse gas concentrations (“climate sensitivity”), published in that report.¹⁴ A number of new studies, however, suggest the

¹⁴ Papers purporting to undermine that consensus have been refuted in the peer reviewed literature. See e.g., Foster, G., et al., “Comment on ‘Heat Capacity, Time Constant, and Sensitivity of Earth’s Climate System’ by S.E. Schwartz,” *J. Geophys. Res.* (in press), available

likelihood that various climate change impacts could be significantly more serious than suggested in the IPCC report. These include:

- Rahmstorf, S., et al., Recent Climate Observations Compared to Projections, *Science* 316, 709, 2007 (models used by IPCC for climate change may underestimate potential rate and magnitude of climate change), available at http://pubs.giss.nasa.gov/docs/2007/2007_Rahmstorf_etal.pdf (CD1, Doc. 10);
- Barnett, T.P, et al., Human-Induced Changes in the Hydrology of the Western United States, *Science*, 319, 1080-1083, 2008 (coming crisis in water supply for the western United States), available at <http://tenaya.ucsd.edu/~dettinje/barnett08.pdf> (CD1, Doc. 11);
- Barnett, T.P., and D.W. Pierce, When will Lake Mead go dry?, *Water Resources Research*, doi:10.1029/R006704, 2008 (major and immediate water supply problem on the Colorado system) (CD1, Doc.12);
- Rahmstorf, S., A Semi-Empirical Approach to Projecting Future Sea-Level Rise, *Science*, 315, 368-370, 2007 (projected sea-level rise in 2100 of 0.5 to 1.4 meters above 1990 level), available at http://www.pik-potsdam.de/~stefan/Publications/Nature/rahmstorf_science_2007.pdf (CD1, Doc. 13);
- Rignot, E. et al, Recent Antarctic ice mass loss from radar interferometry and regional climate modeling, *Nature Geoscience*, 1, 106-110, 2008 (changes in glacier flow at the periphery of the Antarctic Ice Sheet appear to be leading to a net loss of Antarctic ice, implying the potential for more rapid loss of Antarctic ice and accelerated global sea level), available at <http://www.nature.com/ngeo/journal/v1/n2/pdf/ngeo102.pdf;jsessionid=89C973CC639FF018AE9571AE6394A1F> (CD1, Doc. 14).

In addition, there is significant new research on the health related effects, both direct and indirect, of global warming.

at http://www.jamstec.go.jp/frsgc/research/d5/jdannan/comment_on_schwartz.pdf. (CD1, Doc. 9)

- Jacobson, Mark Z., On the causal link between carbon dioxide and air pollution mortality, *Geophysical Research Letters*, 35 L03809, 2008, available at http://www.fypower.org/pdf/stanford_CO2_Jacobson.pdf (global warming is likely to exacerbate ozone levels in the most polluted areas, increasing U.S. annual air pollution deaths by about 1,000 and cancers by 20 to 30 per 1 degree Celsius rise in CO₂-induced temperature) (CD1, Doc. 15);
- Jacobson, Mark Z., Testimony to Select Committee on Energy Independent and Global Warming, United States House of Representatives (2008), available at: <http://www.stanford.edu/group/efmh/jacobson/Testimony0408%202.pdf>; (CD1, Doc. 16)
- Jacobson, Mark Z., Effects of Local Versus Global Carbon Dioxide Emissions on Local Air Quality and Health, Presentation to EPA-Stanford Symposium on Impacts of Climate Change in Air Quality (2008) (effects of locally emitted CO₂ on California air pollution, including modeled quantification of additional ozone and particulate matter death rates due to local CO₂)¹⁵ (CD1, Doc. 17);
- Statement of Howard Frumkin, M.D., DrPH, Director, National Center for Environmental Health, Centers for Disease Control and Prevention and Agency for Toxic Substances and Disease Registry, U.S. Department of Health and Human Service, available at <http://www.cdc.gov/washington/testimony/2008/t20080409.htm>, (describing direct health effects of heat, as well as indirect effects from extreme weather events, air pollution, water and food borne infectious diseases, vector-borne and zoonotic diseases, and differential burden on different populations, with greater risks to children, home-bound, elderly, poor, minority and migrant populations) (CD1, Doc. 18);
- American Lung Association, State of the Air: 2008, Protect the Air you Breathe, available at <http://www.lungusa2.org/sota/SOTA2008.pdf> (describing heat related risks of decreased lung function, respiratory infection, lung inflammation etc., by region of the country and at-risk groups) (CD1, Doc. 19).

¹⁵The results presented are as of May 6, 2008 and the calculations are ongoing (personal communication from Dr. Jacobson to California Deputy Attorney General Fiering, May 9, 2008).

NHTSA must take into account all of the above new research in preparing its EIS.

(2) How NHTSA should estimate potential changes in temperature that may result from changes in CO₂ emissions projected from the proposed standards and reasonable alternatives and how NHTSA should estimate potential impacts of temperature changes on the environment.

NHTSA's question is framed too narrowly, focusing only on the changes wrought by the new rule or alternatives and ignoring the cumulative changes that will occur from the CAFE emissions combined with GHG emissions from other anticipated sources. The *CBD* court held that the impact of the CAFE standard must be assessed "within the context of other actions that also affect global warming." 508 F.3d at 550 (quoting brief of the State of California *et al.*) (See discussion of cumulative impacts, Request (5), *supra.*)

There is a simple and objective methodology for estimating the potential changes in temperature that are expected to result from increases in CO₂ emissions. It relies on the approach outlined in Wigley (2005),¹⁶ which employs a publicly available climate model ("MAGICC") which can be calibrated to the greenhouse warming responses of the more complex, state-of-the-art climate models used in the most recent IPCC report.¹⁷ Users can then specify arbitrary future emissions scenarios and compute the global mean surface temperature changes in response to those emissions scenarios from the model. In conjunction with an additional model ("SCENGEN"), regional climate change scenarios (surface temperature and precipitation changes) can also be generated. Both models can be downloaded from the National Center for Atmospheric Research (NCAR) website at <http://www.cgd.ucar.edu/cas/wigley/magicc/>.

The EIS can then compare the predicted emissions and warming scenarios that will result from the CAFE standard combined with other foreseeable emissions, with the various scenarios forecast by the IPCC. This will enable the Agency and the public to determine whether or not

¹⁶Wigley, T.M.L., The Climate Change Commitment, *Science*, Vol. 307, pp. 1766 - 1769, 2005. (CD1, Doc 20)

¹⁷See Figure 3 of the Summary for Policy Makers of the IPCC Special Report on Emissions Scenarios, 2000 and Figure SPM.5 of the Working Group I Summary for Policy Makers of the IPCC Fourth Assessment Report, available at <http://www.ipcc.ch/ipccreports/sres/emission/index.htm> and <http://www.ipcc.ch/ipccreports/ar4-wg1.htm> (CD1, Docs. 21 and 6)

anticipated emissions and warming will remain below the danger levels and will be consistent with the various governmental efforts to reduce global warming.

(3) Reports analyzing the potential impacts of climate change in particular geographic areas of the United States.

The regional differences in global warming impacts are not directly relevant to NHTSA's setting of the CAFE standard, but certainly can inform the Agency and the public of the wide range and severity of impacts that exist, thus highlighting the importance of curbing GHG emissions and slowing global warming. We note that there are significant variations in the impacts of global warming that occur in different regions of the country. In fact, California is particularly hard-hit by the effects of global warming, and has submitted substantial documentation of these effects to the Environmental Protection Agency (EPA), in support of its request for a waiver under the Clean Air Act of its GHG emission regulations. Copies of the reports submitted by the California Air Resources Board's ("CARB") to the EPA, concerning the compelling and extraordinary effects of global warming in California, are provided to NHTSA on a separate CD2 accompanying this letter.¹⁸ In addition to the documents submitted by California to the EPA, current reports issued by government agencies dealing with the global warming impacts in different regions of the United States include:

National Research Council of the National Academies, Potential Impacts of Climate Change on U.S. Transportation (2008), available at http://www.trb.org/news/blurbs_detail.asp?ID=8794 (discussion of climate change and impacts on transportation including effect of global warming on transportation in the following regions: Metropolitan East Coast Assessment, Metro Boston, Seattle, Alaska, Gulf Coast) (CD1, Doc. 22);

The Rocky Mountain Climate Organization and NRDC, Hotter and Drier, The West's Changed Climate, 2008, available at <http://www.nrdc.org/globalWarming/west/west.pdf> (CD1, Doc. 23);

Governor's Delta Vision Blue Ribbon Task Force, Delta Vision: Our Vision for the California Delta, 2008, available at <http://deltavision.ca.gov/DeltaVision-DraftTaskForceVision.shtml> (discussion of climate change impacts on California's Delta region) (CD1, Doc. 24);

¹⁸A list of the documents contained on CD2 is attached to this letter.

U.S. Climate Change Science Program Synthesis and Assessment Product 4.7, Impacts of Climate Change and Variability on Transportation Systems and Infrastructure: Gulf Coast Study, Phase I (2008) available at http://climate.dot.gov/publications/impact_of_climate_change/ (effect of global warming and sea level rise on transportation in Gulf Coast) (CD1, Doc. 25);

New York City Department of Environmental Protection, Assessment and Action Plan: A Report Based on the Ongoing Work of the DEP Climate Change Task Force (May 2008), available at http://www.nyc.gov/html/dep/pdf/climate/climate_complete.pdf (effects of climate change on New York City) (CD1, Doc. 26);

National Research Council of the National Academy of Sciences, Colorado River Basin Water Management: Evaluating and Adjusting to Hydroclimatic Variability at 73-111, 2007, available at <http://www.nap.edu/catalog/11857.html> (discussion of climate change on Colorado River Basin) (CD1, Doc. 27);

ICF International, The Potential Impacts of Global Sea Level Rise on Transportation Infrastructure, Phase 1 - Final Report: the District of Columbia, Maryland, North Carolina and Virginia, 2007, available at <http://www.bv.transports.gouv.qc.ca/mono/0965210.pdf> (effect of global warming and sea level rise on transportation in certain regions of country) (CD1, Doc. 28);

Frumhoff, P.C. et al, Northeast Climate Impacts Assessment Synthesis Team, *Confronting Climate Change in the U.S. Northeast: Science, Impacts and Solutions* (July 2007), at <http://www.climatechoices.org/assets/documents/climatechoices/confronting-climate-change-in-the-u-s-northeast.pdf> (synthesis report based on new research projects; underlying peer-reviewed papers are in press, available at <http://www.northeastclimateimpacts.org/#papers>) (CD1, Doc. 29);

Center for Integrative Environmental Research at the University of Maryland, The U.S. Economic Impacts of Climate Change and the Costs of Inaction (2007) (discussion of economic impacts of climate change as they will be felt in different regions of the country), available at <http://www.cier.umd.edu/climateadaptation/index.html> (CD1, Doc. 30);

Climate Change Research Center, University of New Hampshire, Indicators of Climate Change in the Northeast, 2005, available at <http://cleanair-coolplanet.org/information/pdf/indicators.pdf> (CD1, Doc. 31);

Columbia Earth Institute, Climate Change and a Global City: The Potential Consequences of Climate Variability and Change (July 2001), available at <http://www.ccsr.columbia.edu/cig/mec/> (climate change research in New York Metropolitan Region) (CD1, Doc. 32);

Princeton University, *The Garden State in the Greenhouse: Climate Change Mitigation and Coastal Adaptation Strategies for New Jersey* (January 2007), available at http://www.princeton.edu/~mauzeral/teaching/wws59a_report.pdf (recommending ways to reduce New Jersey's GHG emissions and adapt to climate change impacts along New Jersey's coast, which is at risk of losing up to 9% of its land area by 2100) (CD1, Doc. 33);

Gutierrez, S. et al, *Potential for Shoreline Changes Due to Sea-Level Rise Along the U.S. Mid-Atlantic Region* (U.S. Geological Survey, U.S. Dep't of Interior, Report Series 2007-1278), available at <http://woodshole.er.usgs.gov/pubs/of2007-1278/images/report/pdf> (assessing potential mid-Atlantic shoreline change due to rising sea level) (CD1, Doc. 34);

New Jersey Department of Environmental Protection, *Climate Change in New Jersey: Trends in Temperature and Sea Level* (November 2006), available at <http://www.nj.gov/dep/dsr/trends2005/pdfs/climate-change.pdf> (long-term data document a significant increase in average temperature in New Jersey and significant rise in sea level) (CD1, Doc. 35);

Union of Concerned Scientists, *Confronting Climate Change in the U.S. Northeast: Union of Concerned Scientists - New Jersey* (2007), available at http://www.climatechoices.org/assets/documents/climatechoices/new-jersey_necia.pdf (summarizing New Jersey's changing climate and potential effects of climate change, including impacts on coastal communities due to coastal flooding and shoreline change, and impacts on human health due to extreme heat, air quality and vector-borne disease) (CD1, Doc. 36);

Stanley, A. et al., *Holocene Sea Level Rise in New Jersey: An Interim Report* (September 15, 2004), available at <http://www.state.nj.us/dep/dsr/climate/holocene.pdf> (human-induced effects on sea-level in New Jersey are 1-2 mm/year, which is up to ½ of the total observed rate of rise) (CD1, Doc. 37);

U.S. National Assessment of the Potential Consequences of Climate Variability and Change for the Nation, U.S. Global Change Research Program, *Climate Change and a Global City: An Assessment of the Metropolitan East Coast Region* (June 19, 2000), available at http://www.metroeast_climate.ciesin.columbia.edu/reports/assessmentsynth.pdf (continuation of average warming trend of past century will result in increase of average annual temperature for metropolitan east coast region, including New York, New Jersey and Connecticut, by almost 1.0°F by the 2020s, 1.5 °F by the 2050s, and over 2.5 °F in the 2080s) (CD1, Doc. 38);

Environment New Jersey Research & Policy Center, *An Unfamiliar State: Local Impacts of Global Warming in New Jersey* (May 2007), available at <http://www.environmentnewjersey.org/uploads/-/z/wV/-zwV3Jt9hnScxAwZbMymqO/An-Unfamiliar-State---Local-Impacts-of-Global-Warming-in-New-Jersey.pdf> (impacts of global warming, if unchecked, on New Jersey include inundation of low-lying shore lands, beach erosion between 160-500 feet and increased flooding due to forecasted sea-level rise of 16-31 inches, an increase by more than 6% of smog-related deaths, and decline of migratory bird species) (CD1, Doc. 39);

Office of Policy, Planning and Evaluation, USEPA, *Climate Change and New Jersey* (EPA 230-F-97-008dd, September 1997), available at [http://yosemite.epa.gov/oar/globalwarming.nsf/UniqueKeyLookup/SHSU5BVJH3/\\$File/nj_impct.pdf](http://yosemite.epa.gov/oar/globalwarming.nsf/UniqueKeyLookup/SHSU5BVJH3/$File/nj_impct.pdf) (temperatures in New Jersey could increase about 4°F by 2100, with increases in heat-related deaths and illnesses, alternation of coastal wetlands and forested Pine Barrens, contamination of aquifers and decline in water quality, and loss of and extensive damage to coastline, the protection of which would require significant resources and planning) (CD1, Doc. 40);

Mid-Atlantic Regional Assessment Team, U.S. Global Change Research Program, *Preparing for a Changing Climate – The Potential Consequence of Climate Variability and Change – Mid-Atlantic Overview* (March 2000), available at http://www.cira.psu.edu/mara/results/overview_report/index.html#report (last visited

May 22, 2008) (assessing impacts on mid-Atlantic region by climate change) (CD1, Doc. 41);

New Mexico Office of the State Engineer/Interstate Stream Commission, *The Impact of Climate Change on New Mexico's Water Supply and Ability to Manage Water Resources* (2006), available at www.nmenv.state.nm.us/cc/ (CD1, Doc. 42).

These sources should be considered and discussed by NHTSA in preparing its EIS.

(4) Other reasonable alternatives that NHTSA might consider in its NEPA analysis.

One of the primary means of achieving better fuel economy is by making vehicles lighter in weight. To date, NHTSA has considered weight reduction only for vehicles weighing greater than 5,000 pounds, with the weight reductions amounting to no more than 5 percent. The Agency states that it believes that downweighting of lighter vehicles makes them less safe. 73 Fed. Reg. at 24375, 24456.

There is strong evidence that this view is wrong. According to the Rocky Mountain Institute, lighter vehicles can achieve substantial fuel economy without compromising safety, size, performance, or comfort.¹⁹ There have been significant advances in light weight steels and polymer composites that are stronger and tougher than steel but one-fourth as dense,²⁰ and can achieve fuel economy of up to 45 mpg for non-hybrid cars and 62.4 mpg for hybrid cars at costs within the range of normal variations in the market.²¹

¹⁹See Lovins, B. et al, *Winning the Oil Endgame*, 45-46, 2004 (Rocky Mountain Institute) (hereafter "Oil Endgame Report"), available at <http://nc.rmi.org/NETCOMMUNITY/Page.aspx?pid=269&srcid=269> (CD1, Doc. 43)

²⁰*Id.* at 55-72,

²¹*Id.* at 68, 72.

A recent expert report by David L. Greene,²² submitted by California to the U.S. EPA describes new research²³ that demonstrates that there is no statistically significant effect on traffic fatalities of reducing the weight of passenger cars and light trucks by 100 pounds. Rather, the recent research indicates that weight reduction is estimated to *decrease* fatalities. In contrast, wheelbase and track reduction is estimated to increase the overall number of fatalities. The Greene report notes that, based on recent studies, “automobile manufacturers have the option to use carefully designed material substitution to reduce vehicle weight in order to increase fuel economy while improving occupant safety.”

Thus, as one of the alternatives, NHTSA should consider a standard that includes downweighting for all vehicles, not just vehicles greater than 5,000 pounds.

Finally, for each alternative, including the proposed CAFE standard, NHTSA should report, not only the emissions that will result if each manufacturer meets the standard, but the emissions that will result if a series of other reasonably foreseeable events occur, including: (1) if

²²On Vehicle Weight, Fuel Economy and Safety, Expert Report by David L. Greene, *Central Valley Chrysler-Jeep v. Witherspoon* (E.D. CA) No. CIV-F-04-6663 (April 30, 2006). (CD1, Doc. 44) Dr. Greene is one of the authors of the dissent to the National Academy of Sciences Report, National Research Council, “Effectiveness Impact of Corporate Average Fuel Economy (CAFE) Standards Appendix A, Dissent on Safety Issues: Fuel Economy and Highway Safety, which stated that there has been no documented link between increased fuel economy and traffic fatalities.

²³Van Auken R.M. and J.W. Zellner, Supplemental Results on the Independent Effects of Curb Weight, Wheelbase, and Track on Fatality Risk in 1985-1998 Model Year Passenger Cars and 1985-1997 Model Year LTVs, DRI-TR-05-01, *Dynamic Research, Inc., Torrance, California*, 2005 (CD1, Doc. 45); Van Auken, R.M. and J.W. Zellner, A Review of the Results in the 1997 Kahane, 2002 DRI, 2003 DRI and 2003 Kahane Reports on the Effects of Passenger Car and Light Truck Weight and Size on Fatality Risk, DRI-04-02, *Dynamic Research, Inc., Torrance, California*, 2004 (CD1, Doc. 46); Van Auken, R.M. and J.W. Zellner, An Assessment of the Effects of Vehicle Weight and Size on Fatality Risk in 1985 to 1998 Model Year Passenger Cars and 1985 to 1997 Model Year Light Trucks and Vans, 2005-01-1354, *Dynamic Research, Inc., Torrance, California*, 2004 (CD1, Doc. 47); Van Auken, R.M. and J.W. Zellner, A Further Assessment of the Effects of Vehicle Weight and Size Parameters on Fatality Risk in Model Year 1985-98 Passenger Cars and 1985-97 Light Trucks, DRI-TR-03-01, *Dynamic Research, Inc., Torrance California*, 2003. (CD1, Docs, 48, 49, 50)

manufacturers do not meet the standard for particular model years, and decide to use credits stored from previous years or pay penalties instead, see 73 Fed. Reg. at 24461-64, 24473-75; (2) if manufacturers use the additional “dual-fuel” incentive to raise their average fuel economy up to 1.2 miles a gallon higher than it would otherwise be; or (3) if manufacturers respond to market demand by upsizing their light trucks beyond what is anticipated by NHTSA. Under each of these circumstances, or a combination of all three circumstances, the GHG emissions will be larger than estimated by NHTSA. NHTSA must therefore report, not just a single level of emissions based on the standard, but a range of emissions based on how the standard may operate in the real world.

(5) How the Agency should assess cumulative impacts:

A federal agency is required to evaluate whether a project's impacts, though individually limited, are cumulatively significant. *See* 40 C.F.R. § 1502.16. A cumulative impact:

is the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.

Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Id. § 1508.7.

The assessment of cumulative impacts is critical within the context of global warming. As the Ninth Circuit noted, “[t]he impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct. Any given rule setting a CAFE standard might have an ‘individually minor’ effect on the environment, but these rules are ‘collectively significant actions taking place over a period of time.’” *CBD*, 508 F.3d at 550 (quoting 40 C.F.R. § 1508.7). The Ninth Circuit ultimately held that NHTSA “must provide the necessary contextual information about the cumulative and incremental environmental impacts of the [CAFE rule] in light of other CAFE rulemakings and other past, present and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions.” *CBD*, 508 F.3d at 550.

Here, an examination of other projects that substantially contribute to GHG emissions would be more than “useful”; it is absolutely essential. GHG emissions from the U.S. transportation sector overall represents over a third of all transportation emissions worldwide and

10% of all energy related GHG emissions worldwide.²⁴ NHTSA itself notes that

since 1999, the transportation sector has led all U.S. end-use sectors in emissions of carbon dioxide. Transportation sector CO₂ emissions in 2006 were 407.5 million metric tons higher than in 1990, an increase that represents 46.4 percent of the growth in unadjusted energy related carbon dioxide emissions from all sectors over the period. Petroleum consumption, which is directly related to fuel economy, is the largest source of carbon dioxide emissions in the transportation sector.

Fed. Reg. at 24455. Further, GHG emissions from the United States overall grew by more than 16 percent from 1990 to 2005.²⁵

As required by NEPA, the impact of NHTSA's CAFE decision can only be fully evaluated in combination with these other emissions. Thus, the EIS must combine the anticipated GHG emissions from the CAFE standard over the lifetime of the model year cars, with other anticipated emissions from the United States overall during this same time period. NHTSA must then input into the Wigley *et al.* model the cumulative emissions in order to calculate the potential change in temperature that will result, and compare the temperature change with the climate scenarios outlined by the IPCC. See discussion *supra* at p. 11 & n. 16.

CONCLUSION

As noted by James Hansen, one of the preeminent researchers on climate change, the "stark conclusions about the threat posed by global climate change and implications for fossil fuel use are not yet appreciated by essential governing bodies. . . . In our view, there is an acute need for science to inform society about the costs of failure to address global warming, because of a fundamental difference between the threat posed by climate change and most prior global

²⁴U.S. EPA, A Wedge Analysis of the U.S. Transportation Sector, 2007, at 1, available at <http://www.epa.gov/oms/climate/420f07049.htm>. (CD1, Doc. 51)

²⁵UNFCCC Framework Convention on Climate Change, National greenhouse gas inventory data for the period 1990-2005, available at <http://unfccc.int/resource/docs/2007/sbi/eng/30.pdf>. (CD1, Doc. 52)

Docket Management Facility, M-30
U.S. Department of Transportation
May 27, 2008
Page 20

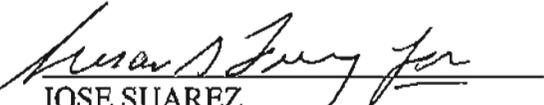
threats.”²⁶ The EIS presents both a challenge and an opportunity for NHTSA to begin to bridge the gap noted by Dr. Hansen between the scientific reality and the governmental and public understanding of climate change. While NEPA does not require NHTSA to reach a particular conclusion about the CAFE standard, it does require the Agency to analyze fully and inform the public about the implications of its decision. As set forth above, we urge NHTSA to comply with NEPA by issuing an EIS that enables the Agency and the public to determine whether NHTSA has done its part to reduce GHG emissions, or whether the Agency has made decisions that will keep us on a “business as usual” trajectory that will lead to environmental disaster.

Sincerely,

EDMUND G. BROWN JR.
Attorney General of California

By: 
SUSAN S. FIERING
Deputy Attorney General
1515 Clay St., 20th Floor, P.O. Box 70550
Oakland, CA 94612-0550
Telephone: (510) 622-2142
Facsimile: (510) 622-2270

RICHARD BLUMENTHAL
CONNECTICUT ATTORNEY GENERAL

By: 
JOSE SUAREZ
Assistant Attorney General
P.O. Box 120
55 Elm Street
Hartford, Connecticut 06141-0120
Telephone: (860) 808-5250
Facsimile: (860) 808-5386

²⁶Hansen, *supra* note 9, at 2308.

Docket Management Facility, M-30
U.S. Department of Transportation
May 27, 2008
Page 21

FOR THE STATE OF NEW JERSEY
LISA P. JACKSON, COMMISSIONER
ANNE MILGRAM
ATTORNEY GENERAL

By: 
JUNG KIM
Deputy Attorney General
Richard J. Hughes Justice Complex
25 Market Street, P.O. Box 093
Trenton, NJ 08625
Tel: (609) 292-1557

GARY K. KING
NEW MEXICO ATTORNEY GENERAL

By: 
STEPHEN R. FARRIS
JUDITH ANN MOORE
Assistant Attorneys General
Water, Environment, and Utilities Division
P.O. Box 1508
Santa Fe, NM 87504-1508
(505) 827-6601

Docket Management Facility, M-30
U.S. Department of Transportation
May 27, 2008
Page 22

FOR THE STATE OF OREGON
HARDY MYERS
Attorney General

By: 
PHILIP SCHRADLE
Special Counsel to the Attorney General
PAUL S. LOGAN
Assistant Attorney General
1162 Court Street, N.E.
Salem, OR 97301
Telephone: (503) 378-6002
Facsimile: (503) 378-4017

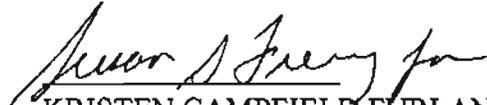
PATRICK C. LYNCH
ATTORNEY GENERAL OF RHODE ISLAND

By: 
TRICIA K. JEDELE
Special Assistant Attorney General
150 South Main Street
Providence, Rhode Island 02903
(401) 274-4400, ext. 2400
tiede@riag.ri.gov

Docket Management Facility, M-30
U.S. Department of Transportation
May 27, 2008
Page 23

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL
PROTECTION
SUSAN SHINKMAN
Chief Counsel

By:



KRISTEN CAMPFIELD FURLAN

ROBERT "BO" REILEY

Assistant Counsel

Rachel Carson State Office Building, 9th Floor

P.O. Box 8464

Harrisburg, Pennsylvania 17105

(717) 787-7060

MICHAEL A. CARDOZO

Corporation Counsel of the City of New York

100 Church Street, Room 6-133

New York, NY 10007 (212) 788-0771

By:



CARRIE NOTEBOOM

SCOTT PASTERNAK

Assistant Corporation Counsels

Environmental Law Division

**Comments of Attorney General of California *et al.* to NHTSA
Scoping Notice
May 27, 2008**

**EXHIBIT 1
INDEX TO CD1**

CD1 Document Index
Comments on Supplemental Notice of Public Scoping for an EIS for New CAFE Standards

Document ID	Title/Description	Hyperlink	Notes
001	National Oceanic & Atmospheric Administration, Trends in Atmospheric Carbon Dioxide - Mauna Loa	http://www.esrl.noaa.gov/gmd/ccgg/trends/	See Footnote 3, p. 3
002	Fourth Assessment of the IPCC, WG1, Frequently Asked Questions	http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-faqs.pdf	See Footnote 4, p. 3
003	Hansen, J.H. et al, Dangerous human-made interference with climate	http://pubs.giss.nasa.gov/docs/2007/2007_Hansen_et_al_1.pdf	See Footnote 5, p. 4 Footnote 9, p. 5
004	Hansen, J.H. et al, Climate change and trace gases	http://pubs.giss.nasa.gov/docs/2007/2007_Hansen_et_al_2.pdf	See Footnote 5, p. 4
005	Center for Health & the Global Environment, Climate Change Futures, Health Ecological and Economic Dimensions	http://www.climatechangeutures.org/pdf/CCF_Report_Final_10.27.pdf	See Footnote 8, p. 5
006	Fourth Assessment of the IPCC, WG1, "The Physical Science Basis," Summary for Policymakers	http://www.ipcc.ch/ipccreports/ar4-wg1.htm	See Footnote 10, p. 6; Footnote 17, p. 11
007	Lutsey, N. et al., America's bottom-up climate change mitigation policy	http://pubs.its.ucdavis.edu/publication_detail.php?id=1135	See Footnote 13, p. 7
008	Dernbach, J.C. et al., Developing a Comprehensive Approach to Climate Change Policy in the US	http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1020740	See Footnote 13, p. 7
009	Foster, G. et al., Comment on 'Heat Capacity, time constant, and Sensitivity of Earth's Climate System'	http://www.jamstec.go.jp/frsgc/research/d5/jdanna/ccomment_on_schwartz.pdf	See Footnote 14, p. 8
010	Rahmstorf, S. et al., Recent Climate Observations Compared to Projections	http://pubs.giss.nasa.gov/docs/2007/2007_Rahmstorf_et_al.pdf	See Peer-reviewed scientific study, p. 9
011	Barnett, T.P. et al., Human-Induced Changes in the Hydrology of the Western U.S.	http://tenaya.ucsd.edu/~dettinge/barnett08.pdf	See Peer-reviewed scientific study, p. 9
012	Barnett, T.P., et al., When will Lake Mead go Dry?	On-line link unavailable	See Peer-reviewed scientific study, p. 9
013	Rahmstorf, S., Semi-Empirical Approach to Projecting Future Sea-Level Rise	http://www.pik-potsdam.de/~stefan/Publications/Nature/rahmstorf_science_2007.pdf	See Peer-reviewed scientific study, p. 9
014	Rignot, E. et al., Recent Antarctic ice mass loss from radar interferometry and regional climate modelling	http://www.nature.com/ngeo/journal/v1/n2/pdf/ngeo102.pdf;jsessionid=89C973CCC639FF018AE9571AE6394A1F	See Peer-reviewed scientific study, p. 9
015	Jacobson, Mark Z., On the casual link between carbon dioxide and air pollution mortality	http://www.fypower.org/pdf/stanford_CO2_Jacobson.pdf	See Peer-reviewed scientific study, p. 10
016	Jacobson Mark. Z., Testimony to Select Committee on Energy Independence & Global Warming	http://www.stanford.edu/group/efmh/jacobson/Testimony0408%202.pdf	See Testimony, p. 10

CD1 Document Index
Comments on Supplemental Notice of Public Scoping for an EIS for New CAFE Standards

Document ID	Title/Description	Hyperlink	Notes
017	Jacobson, Mark Z., Effects of Local v Global CO2 Emission on Local Air Quality and Health	On-line link unavailable	See Presentation, p. 10
018	Statement of Howard Frumkin, MD, DrPH5/16/2008 Climate Change and Public Health, 2008	http://www.cdc.gov/washington/testimony/2008/t20080409.htm	See Statement, p. 10
019	American Lung Association, State of the Air: 2008	http://www.lungusa2.org/sota/SOTA2008.pdf	See Report, p. 10
020	Wigley, T.M.L., The Climate Change Commitment	On-line link unavailable	See Footnote 16, p. 11
021	IPCC Special Report on+B2 Emissions Scenarios, 2000, Summary for Policymakers	http://www.ipcc.ch/ipccreports/sres/emission/index.htm	See Footnote 17, p. 11
022	National Research Council, Potential Impacts of Climate Change on US Transportation	http://www.trb.org/news/blurb_detail.asp?ID=8794	See reports, p. 12
023	Rocky Mountain Climate Organization, Hotter and Drier - The West's Changed Climate, March 2008	http://www.nrdc.org/globalWarming/west/west.pdf	See reports, p. 12
024	California Blue Ribbon Task Force, Delta Vision, 2008	http://deltavision.ca.gov/DeltaVision-DraftTaskForceVision.shtml	See reports, p. 12
025	U.S. Climate Change Science Program, Impacts of Climate Change and Variability on Transportation Systems and Infrastructure: Gulf Coast Study, Phase I, 2008	http://climate.dot.gov/publications/impact_of_climate_change/	See reports, p. 13
026	New York City Department of Environmental Protection, Climate Assessment & Action Plan Report, May 2008	http://www.nyc.gov/html/dep/pdf/climate/climate_complete.pdf	See reports, p. 13
027	National Research Council, Colorado River Basin Water Management: Evaluating and Adjusting to Hydroclimatic Variability. 2007	http://www.nap.edu/catalog/11857.html	See reports, p. 13
028	ICF International, The Potential Impacts on Global Sea Level Rise on Transportation Infrastructure, 2007	http://climate.dot.gov/publications/potential_impacts_of_global_sea_level_rise/index.html	See reports, p. 13
029	Frumhoff, P.C., et al., Confronting Climate Change in the US Northeast, 2007	http://www.climatechoices.org/assets/documents/climatechoices/confronting-climate-change-in-the-u-s-northeast.pdf	See reports, p. 13
030	Center for Integrative Environmental Research, US Economic Impact of Climate Change and the Costs of Inaction, 2007	http://www.cier.umd.edu/climateadaptation/index.html	See reports, p. 13
031	Climate Change Research Center, Indicators of Climate Change in the Northeast, 2005	http://www.cleanair-coolplanet.org/information/pdf/indicators.pdf	See reports, p. 14
032	Columbia Earth Institute, Climate Change and a Global City: The Potential Consequences of Climate Variability and Change, July 2001	http://www.ccsr.columbia.edu/cig/mec/	See reports, p. 14

CD1 Document Index
Comments on Supplemental Notice of Public Scoping for an EIS for New CAFE Standards

Document ID	Title/Description	Hyperlink	Notes
033	Princeton University, The Garden State in the Greenhouse, Climate Change Mitigation & Coastal Adaptation Strategies for New Jersey, 2007	http://www.princeton.edu/~mauzeral/teaching/wws591a_report.pdf	See reports, p. 14
034	Gutierrez, S. et al., Potential for Shoreline Changes due to Sea Level Rise, 2007	http://woodshole.er.usgs.gov/pubs/of2007-1278/images/report.pdf	See reports, p. 14
035	NJ Dept. of Env'tl Prot., Climate Change in NJ, Trends in Temperature and Sea Level	http://www.nj.gov/dep/dsr/trends2005/pdfs/climate-change.pdf	See reports, p. 14
036	Union Concerned Scientists, Confronting Climate Change in New Jersey, 2007	http://www.climatechoices.org/assets/documents/climatechoices/new-jersey_necia.pdf	See reports, p. 14
037	Stanley, A. et al., Holocene Sea Level Rise in New Jersey, 2007	http://www.state.nj.us/dep/dsr/climate/holocene.pdf	See reports, p. 15
038	U.S. National Assessment, Climate Change and a Global City: Assessment of Metropolitan East Coast Region, 2000	http://metroeast_climate.ciesin.columbia.edu/reports/assessmentsynth.pdf	See reports, p. 15
039	Environment New Jersey Research and Policy Center, An Unfamiliar State, Local Impacts of Global Warming New Jersey 2007	http://www.environmentnewjersey.org/uploads/-/wV/zwV3Jt9hnScxAwZbMymqQ/An-Unfamiliar-State---Local-Impacts-of-Global-Warming-in-New-Jersey.pdf	See reports, p. 15
040	US EPA, Climate Change and New Jersey	http://yosemite.epa.gov/oar/globalwarming.nsf/UniqueKeyLookup/SHSU5BVJH3/\$File/nj_impct.pdf	See reports, p. 15
041	Mid-Atlantic Regional Assessment Team, Preparing for a Changing Climate, 2008	http://www.cira.psu.edu/mara/results/overview_report/index.html#report	See reports, p. 15
042	New Mexico Office of the State Engineer, The Impact of Climate Change on New Mexico's Water Supply, 2005	http://www.nmenv.state.nm.us/cc/	See Reports, p. 16
043	Lovins, B. et al., Winning the Oil Endgame, 2004	http://nc.rmi.org/NETCOMMUNITY/Page.aspx?pid=269&srcid=269	See Footnote 19, p. 16
044	On Vehicle Weight, Fuel Economy and Safety, Expert Report of David L. Greene, 2006	On-line link unavailable	See Footnote 22, p. 17
045	Van Auken, R.M., et al., DRI-TR-05-01 Supplemental Results on the Independent Effects of Curb Weight, etc. 2005	http://www.theicct.org/documents/DynamicResearch_WeightFatality_2005.pdf	See Footnote 23, p. 17
046	Van Auken, R.M., et al., DRI-TR-04-02 A Review of the Results in the 1997 Kahane . . . Reports, 2004	http://www.theicct.org/documents/DynamicResearch_WeightFatalityES_2004.pdf	See Footnote 23, p. 17
047	Van Auken, R.M., et al., 2005-01-1354 An Assessment of the Effects of Vehicle Weight and Size on Fatality Risk, 2005	http://www.sae.org/technical/papers/2005-01-1354	See Footnote 23, p. 17

CD1 Document Index
Comments on Supplemental Notice of Public Scoping for an EIS for New CAFE Standards

Document ID	Title/Description	Hyperlink	Notes
048	Van Auken, R.M. et al., DRI-TR-03-01 VOLUME 1 A Further Assessment of the Effects of Vehicle Weight, etc., Executive Summary	On-line link unavailable	See Footnote 23, p. 16
049	Van Auken, R.M., et al., DRI-TR-03-01 VOLUME 2 A Further Assessment of the Effects of Vehicle Weight, etc., Technical Report	On-line link unavailable	See Footnote 23, p. 17
050	Van Auken, R.M. et al., DRI-TR-03-01 VOLUME 3 A Further Assessment of the Effects of Vehicle Weight, etc., Appendices	On-line link unavailable	See Footnote 23, p. 17
051	U.S. EPA, A Wedge Analysis of the US Transportation Sector, 2007	http://www.epa.gov/oms/climate/420f07049.htm	See Footnote 24, p. 19
052	UNFCCC, National greenhouse gas inventory data for the period 1990-2005 USA	http://unfccc.int/resource/docs/2007/asr/usa.pdf	See Footnote 25, p. 19

**Comments of Attorney General of California *et al.* to NHTSA
Scoping Notice
May 27, 2008**

**EXHIBIT 2
INDEX TO CD2**

CD2 Document Index

Documents Submitted by California Air Resources Board to U.S. EPA on Compelling and Extraordinary Effects of Global Warming in California

Document ID	Title/Description
001	California Environmental Protection Agency, Climate Action Team Report to Governor Schwarzenegger and the California Legislature, Executive Summary, 2006
002	California Environmental Protection Agency, Climate Action Team Report to Governor Schwarzenegger and the California Legislature, Full Report, 2006
003	Kleeman, M. <i>et al.</i> , Interim Report, Impact of Climate Change on Meteorology and Regional Air Quality in California, 2005
004	Schneider, S.H., California State Motor Vehicle Pollution Control Standards; Request for Waiver of Federal Preemption: The Unique Risks to California from Human-Induced Climate Change, 2007
005	California Environmental Protection Agency, Environmental Protection Indicators for California, 2002
006	Hayhoe, K. <i>et al.</i> , Emissions pathways, climate change, and impacts on California, Proceedings of the National Academy of Sciences of the United States of America, 2004
007	Cayan, D. <i>et al.</i> , Scenarios of Climate Change in California: An Overview, a Report from California Climate Change Center, 2006
008	Steiner, A. <i>et al.</i> , Influence of future climate and emissions on regional air quality in California, <i>Journal of Geophysical Research</i> , 111, 2006
009	Motallebi, N. <i>et al.</i> , Climate change Impact on California On-Road Mobil Source Emissions
010	Westerling, A. <i>et al.</i> , Climate Change and Wildfire In and Around California: Fire Modeling and Loss Modeling, Report from California Climate Change Center, 2006
011	Westerling, A. <i>et al.</i> , Warming and Earlier Spring Increases Western U.S. Forest Wildfire Activity, <i>Science Express</i> , July 2006
012	Mott, J. <i>et al.</i> , Wildland forest fire smoke: health effects and intervention evaluation, Hoopa, California, 1999, <i>West J Med</i> , 176, 2002
013	Luers, A. <i>et al.</i> , Our Changing Climate, assessing the risks to California, Report from California Climate Change Center, 2006
014	Cayan, D. <i>et al.</i> , Projecting Future Sea Level rise, Report from California Climate Change Center, 2006
015	Schmidt, C., California Out in Front, <i>Environmental Health Perspectives</i> , 115, No. 3, A145-47, 2007
016	Union of Concerned Scientists, Global Warming and California Wildfires, 2006
017	Franco, G. <i>et al.</i> , Climate Change and Electricity Demand in California, Report from California Climate Change Center, 2006