Webinar Summary Report: Mitigation: Avoiding and Reducing Long-term Risks National Chapter

Introduction
The Fourth National Climate Assessment (NCA4), currently in development, will assess the science of climate change and its impacts across the United States. It will document climate change-related impacts and responses for various sectors and regions, with the goal of better informing public and private decision-making at all levels.

To ensure that the assessment is informed by and useful to stakeholders, engagement webinars were planned for many of the 17 National Chapters. These webinars provided stakeholders an opportunity to provide input to and exchange ideas with the chapter author team on key message formulation, share relevant resources, and give individual feedback on issues of importance to the chapter topic.

Webinar Structure
National chapter webinars were organized and hosted by the coordinating lead authors (CLA) and chapter leads (CL) with coordination from NCA4 staff from the U.S. Global Change Research Program (USGCRP). Invitations to the webinars were distributed by the hosts, author team, and USGCRP staff to their stakeholder networks.

Mitigation: Avoiding and Reducing Long-term Risks Engagement Webinar
On March 6, 2017, the NCA4 Mitigation: Avoiding and Reducing Long-term Risks chapter team held a public engagement webinar. The objectives of the webinar were to gather input from stakeholders, including authors of the regional chapters, to help inform the writing and development of NCA4, and to raise awareness of the process and timeline for NCA4.
Overview and Topics of Discussion

David Reidmiller opened the webinar by giving an overview of USGCRP, the structure of NCA4, and timeline for completion.

Jeremy Martinich provided a summary of the objectives for the Mitigation chapter of NCA4, including what the chapter will and will not cover. The chapter focuses on the science informing mitigation, and will discuss issues and provide quantitative summaries on how potential mitigation pathways can avoid or reduce long-term risks. This focus responds to research needs identified in NCA3, as well as those identified in retrospective gap analyses conducted since NCA3. The chapter will not 1) repeat the mitigation content from NCA3 or issues covered in key mitigation reports and venues; 2) assess policy options; 3) recommend future policy mechanisms or pathways, or; 4) discuss the adequacy or feasibility of current and future mitigation policies and activities.

The proposed structure of the chapter (subject to change) was presented as follows:

1. **Context setting.** Clarifying the scope of the chapter while pointing to other resources for additional mitigation information at the national scale. A brief overview of known policies, including new developments since NCA3 and the Climate Science Special Report (CSSR), would also be given.

2. **Framing.** This includes 1) timing considerations regarding the effects of reductions in long-lived and short-lived climate forcers; 2) co-benefits of mitigation actions; 3) avoiding risk through climate intervention/geoengineering/CO2 direct removal; 4) potential consequences of changing climate conditions on mitigation strategies, and; 5) brief, qualitative discussion of some indirect effects of mitigation strategies on existing infrastructure and land-use.

3. **Advances in avoid impacts quantification.** This includes highlighting recent multi-sector coordinated modeling frameworks and other recent studies on avoided or reduced risks and valuation. It would also assess literature on how large-scale mitigation can affect adaptation costs, and how adaptation may reduce mitigation costs. The chapter can indicate directions for future research by noting limitations and gaps of current impacts quantification efforts, describing merits of coordinated impacts modeling analyses, and identifying advancements to address NCA3 response section research needs.
Key Information Resources

The presenters addressed the importance of reviewing and assessing a wide range of information resources. Chapter authors intend to utilize the following resources, among others, as they develop their chapter: 1) public comments on the prospectus for NCA4; 2) technical inputs for NCA4 submitted by the public, including recent multi-sectoral impacts modeling projects; 3) the CIRA2.0 draft Technical Report; 4) the American Climate Prospectus; and 5) the database of recent literature assembled by USGCRP (1000+ research papers).