

Coordinating Group on Scenarios and Interpretive Science

Workshop Towards Scenarios of U.S. Demographic Change

June 23, 2014



United States
Global Change
Research Program



Workshop Overview

Goal: Assess key factors involved in the production of long-term scenarios of U.S. demographic change for use in interdisciplinary analysis of social and environmental issues.

Objectives: Improving our understanding of:

- Key user needs for population scenarios, in order to guide the scenario production effort,
- Feasibility of producing projections of various population characteristics and geographic scales, limitations and opportunities in terms of data and methods, and
- Pros and cons of linking U.S. scenarios to global scenario exercises, consider what other socioeconomic factors would be important to demographic projections, and recommend process for carrying forward the U.S. scenarios activity.



The “Scenarios Group” Mission

“Building the foundations for a coordinated U.S. scenario science enterprise to respond to shared agency information needs for quantitative and qualitative scenario-related products aligned around regions, sectors, systems, and topics over spatial and temporal scales of interest ”

- Advancing collaborative science on critical gaps
- Enhancing methodologies for use-inspired scenario development, risk framing, and contextual interpretation
- Developing the next generation scenario work products for model inter-comparisons, assessments, and analyses
- Improving interagency communications, coordination, and accessibility to knowledge, work products, and technical resources

Advancing collaborative science on critical gaps

- Advance the foundational science and the corresponding data products and tools for global change scenario development and use.
- Synthesize and incorporate new understanding of societal (e.g., economic development, human behavior, technology evolution, engineered systems) and broader environmental research into a more expansive set of scenarios while continuing to improve physical climate scenarios.
- Support and forge collaborations with other key USCGRP elements to improve modeling and integrated analysis, robust risk framing, and uncertainty characterization centered around scenarios and scenario development (e.g., IGIM and INCA).

Enhancing methodologies for use-inspired scenario development, risk framing, and contextual interpretation

- Improve understanding of agency and other major use-inspired needs aligned by spatial scales and geographic regions, sectors, systems, topics, and time horizons of critical interest.
- Develop and test broadly applicable scenarios methodologies for translating USGCRP research into contextually relevant scientific information, including risk framing and uncertainty characterization for agencies and other major users.
- Target methodologies and develop guidance around critical multi-scale challenges where scenario information at defined spatial and temporal scales inform and are informed by adjacent scales (e.g., nested scenarios).
- Ensure that user feedback and evaluation is continuously incorporated into improvements of the methodologies.

Developing the next generation scenario work products for model inter-comparisons, assessments, and analyses

- Develop targeted scenarios and scenario products for and influenced by major inter-agency, coordinated uses such as the NCA, IPCC, and CMIP.
- Provide broadly applicable scenario work products and capabilities that respond to ongoing agency needs and potentially broader, major uses for research, assessments, and decision support at sub-national, national, and international scales.



Near-Term Focus Areas

- 1) Human Dimensions (strong push)
 - Land use/land cover change (June workshop)
 - Population/migration and, later (June workshop)
 - Regional economics

- 2) Climate/environmental systems (coordination)
 - Regional climate outlooks
 - Regional sea level rise (DOD)

- 3) Scenarios for CMIP 6 and nesting/boundary issues for U.S. scenarios activities
 - RCPs and Shared Socioeconomic Pathways
 - Other issues and summer workshop series

- 4) Fundamental methodologies, interpretation, risk-based framing and contextual basis



Summary

- Welcome to the workshop – look forward to the next few days
- Thank you:
 - Brian and Richard
 - SCC
 - All participants
 - Agency colleagues on the FCG
 - Big thanks to Alison, Susan, and Andrew
 - And most of all to Anne, my interagency planning partner who carried a major and disproportionate load in planning this workshop.

