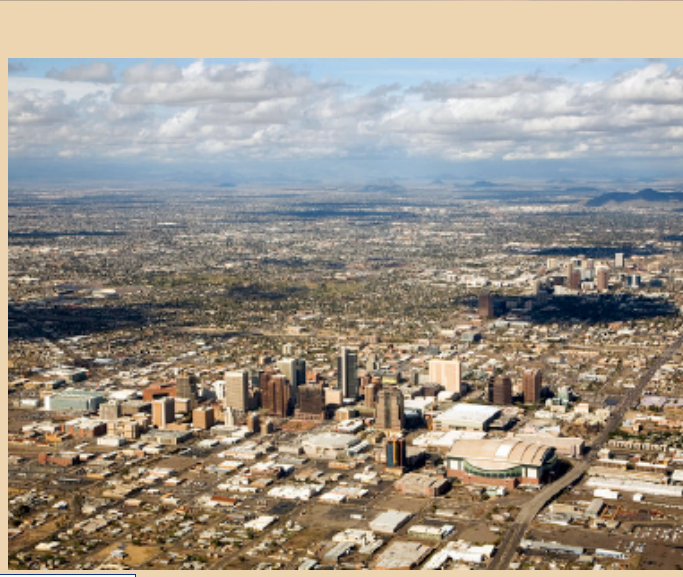
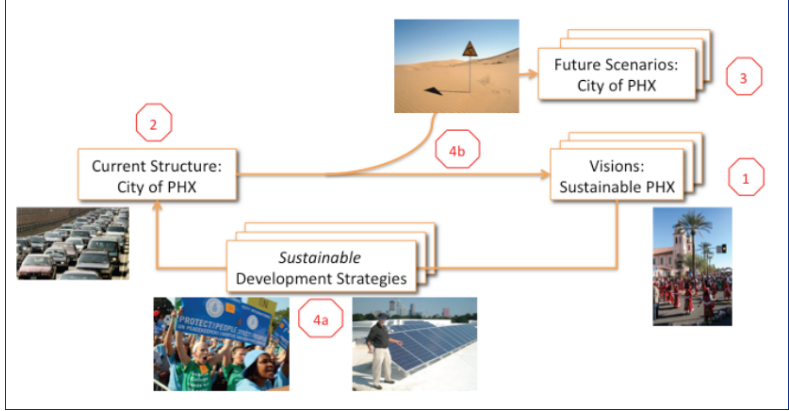


Sustainable Anticipatory Governance: A New Governance Model for Urban Development

Cities across North America face persistent and interdependent sustainability challenges, including loss of economic opportunities, increasing infrastructure requirements, issues of resource scarcity, climate change impacts, poverty and violence. Emerging technologies, such as nanotechnology, have the potential to remake cities from the bottom up, but come with their own risks. Add in demographic shifts and a lagging U.S. economy, and it is clear that urban "planning as usual" is likely to fail to address such complex issues. Phoenix, Arizona faces all of these large-scale systemic challenges to planning for a sustainable future.



The Center for Nanotechnology in Society at Arizona State University is partnering with ASU's School of Sustainability to collaborate with the City of Phoenix in the development of a new governance model for the city's long-term development. *Sustainable anticipatory governance* integrates ideas of sustainability governance with anticipatory governance. Sustainability governance is a guiding principle for actions that balance socio-economic demands with maintaining a critical quantity and quality of natural resources and ecosystem services. The community is designed in such a way that its material and social structures do not interfere with nature's ability to sustain life.



Anticipatory governance maintains that addressing sociotechnical dilemmas early on affords greater opportunities for creating positive societal outcomes. The process is informed by a future-oriented capacity for deliberation. Together, *sustainable anticipatory governance* embraces more democratic and transparent decision and policy-making, so that risk is dealt with proactively, with creative anticipation.

The overall objective of this project is to develop sustainable development strategies for the city of Phoenix. Four research questions will be addressed: (1) What is a coherent sustainability vision for Phoenix? (2) What is the current state of the city? (3) What are potential future pathways of the city over the next 25 years? What are anticipated path dependencies, and what critical sustainability challenges might emerge? (4) What would be the critical coordinated steps to transition to the future vision? This project kicked off in Spring, 2010 with a workshop course co-taught by the PIs on "Future Scenarios, Anticipatory Governance, and Sustainability – Urban Development in Phoenix."

Arnim Wiek
Assistant Professor
School of Sustainability,
Arizona State University

Cynthia Selin
Assistant Research Professor
The Center for Nanotechnology in Society
Arizona State University