Scenario design through interdisciplinary community-research-teaching collaborations.

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Introduction
Scenario planning results in nuanced, multidimensional visions of the future. In order to capture the richness of these visions, visual depictions of a desirable future state are valuable because they connect easily with a variety of audiences. In this poster, we present the process of co-creating design vignettes for scenario visions created with city and community leaders in South Mountain Village (SMV), Phoenix, around the themes of heat resilience, eco-hydrological connectivity, social connectivity, equity, and green gentrification.

Pedagogical Model
A 4th year landscape architecture studio at The Design School was engaged to further develop five scenario visions into landscape designs for SMV. To deepen students’ understanding of the SMV’s social-ecological system, we developed an iterative pedagogical model (figure1) that included the following sequence of phases:

1. Problem identification
2. Analysis
3. Design
4. Problem re-examination at a smaller scale

This process of conceptual design development is unique in that it involved collaboration between researches from the Central Arizona-Phoenix Long-term Ecological Research (CAP LTER) project, Urban Resilience to Extremes Sustainability Research Network (URExSRN) (figure 2) and an upper level landscape architecture studio in a process that combined hands-on and experiential pedagogical approaches, research, and community outreach.

Scenarios
Some Like it Hot: Residents envisioned a future that addressed issues of heat equity and community health.

Equity District: Residents envisioned a future that leveraged their legacy of organizing around justice issues.

Just Green Enough: Residents envisioned a future with greening efforts that combated gentrification.

Connected and Mobile: Residents envisioned a future with more equitable transit.

Mountain to River: Residents envisioned a future that re-establishes connectivity between South Mountain and the Salt River (see detail to the right).

Mountain to River: [examples below]

SMV is the land between the mountain and the river. Yet connectivity of people, water, and organisms across this land has not been well developed. The mountain is a desert remnant, while the river has two established “restoration” projects (Tempe Town Lake and Rio Salado) and “accidental wetlands”. Participants in this scenario identified the following priorities:

•Development recognizing community-held, environmentally, historically, culturally sensitive vision;
•Create a healthy watershed;
•Integrated systems approach to watershed management reducing risk and providing benefits;
•Eco-hydrological connectivity aligns with human mobility;
•Access to mountain and to the flowing Salt River;
•People of South Phoenix are water-aware.

Conclusion
-Using this pedagogical model, students benefited from access to expertise, data, and future scenarios.
-Researchers benefited from an infusion of new ideas, deepening of scenario narratives, and visualization.
-The outputs of the collaborative studio will feed back into future CAP LTER & URExSRN scenario workshops, informing participants on alternative futures.
-The studio trained designers to actively participate in scenario workshops more broadly.