1. Design for Sustainability. Includes research related to balancing the relationships among the effects of population growth; the uses and re-uses of natural resources; and the sustainability of the built and natural environment. Address design strategies at the level of systems and their interrelationships with other systems. Expand design thinking to consider and measure the impact of life cycle choices about communication, products, and environments. Develop models of design response that manage complexity and anticipate the forces of change from within and outside systems.