

Purpose & Goals The **purpose** of the Baden Pilot Project is to **ameliorate historic, inequitable spatial practices through the strategic redevelopment of green infrastructure**. Baden is a neighborhood in north St. Louis City that is characterized by *exactly* the kinds of challenges (e.g. high crime rates, poor health and educational outcomes, etc.) that the FASF has been deployed to address. As the first greenspace redevelopment effort of the City of St. Louis' Urban Vitality and Ecology Initiative (UVEI), the Baden Pilot Project is an ideal opportunity to investigate best practices and develop strategies for implementing such projects in ecologically informed and socially responsible ways. Those strategies will be used to transform greenspace in under-resourced St. Louis neighborhoods with the *express purpose of using sustainable urban design to address the racial, economic, and political issues* that are clearly affected by environmental conditions, starting in Baden and then moving to other sites throughout the city.

A team of WU faculty became involved in the project at the request of the UVEI collaborative. With funding support from I-CARES, this multidisciplinary team is currently conducting research to characterize the complex interactions between the local social and environmental conditions in order to develop a fully integrated, spatially explicit model of urban development. One outcome of this on-going work will be the creation of conceptual designs that are informed by data collected from the project site. This is a novel approach that has the potential to transform not only how landscape architects design a space, but also how we at WU collaborate across disciplines to effectively conduct community-engaged, multidisciplinary research that addresses contemporary local challenges related to sustainability. Concept designs will be completed during the Spring 2016 graduate Landscape Architecture Studio, led by Rod Barnett.

With additional support from the FASF we will: 1) develop concepts from the Spring '16 studio course into an implementable master plan, and 2) integrate public health and business perspectives into the matrix of conditions that inform the development of a healthy and productive urban community. There are clear links between access to green space and equitable public health outcomes, and understanding the localized context will be essential to creating a high-impact plan. Feedback from the community has illuminated the importance of economic and organizational factors in implementing any redevelopment proposal, particularly in creating a sustainable model for urban development.

WU Project Partners & Contribution

Principal Investigator: *Rod Barnett*, Professor & Chair, Landscape Architecture. Responsibilities: overall project implementation, mentoring the Landscape Architecture RAs (1 graduate, Alisa Blatter & 1 undergraduate, TBD).

Key Collaborators: *Amy Eyler*, Assistant Professor & Assistant Dean for Public Health. Responsibilities: mentor Brown School Graduate RA (TBD), synthesize collected data in collaboration with project partners. *Daniel Bentle*, Center for Experiential Learning. Responsibility: mentor MBA students (TBD) developing economic and organizational recommendations. *David Fike*, Associate Professor & Environmental Studies Director. Responsibilities: supervise Project Coordinator (Rachel Folkerts), assist with overall project implementation, manage relationships with community partners.

Additional I-CARES Collaborators: *Kim Medley*, Interim Director, Tyson Research Center; *Bill Lowry*, Professor, Political Science; *Scott Krummanacher*, Post Doctoral Fellow & Lecturer, Political Science/Environmental Studies; *Dan Giammar*, Professor, EECE. I-CARES collaborators will contribute to the integration and synthesis of data on an on-going basis.

Community Partnerships

1. Antoinette Cousins, CEO of Riverview West Florissant Development Corporation (RWFDC)

In our work so far, Ms. Cousins has served as an invaluable point of contact with the local community. RWFDC supported WU and Missouri Botanical Garden to host a community engagement event in July 2015. During the event, WU faculty discussed their research in the Baden Pilot Project with residents. Residents toured the new community garden (implemented through a partnership between MBG & RWFDC) and participated in an ecological survey of the neighborhood. RWFDC also hosted a Brown School Practicum Student, Stephanie Gutierrez, in Summer 2015. The WU Baden Pilot Project Coordinator, Rachel Folkerts, continues to work closely with Ms. Cousins on community engagement efforts in Baden, including involvement in activities at the Baden Enrichment Center (an afterschool youth program). RWFDC will continue to serve as a key point of contact to the local community.

2. Partners of the Urban Vitality & Ecology Initiative (UVEI), including: Deborah Frank, Missouri Botanical Garden (MBG); Tracy Boaz, Missouri Department of Conservation (MDC); Catherine Werner, City of St. Louis Office of the Mayor.

In Winter 2014, UVEI partners invited faculty from Washington University and other local institutions (including Saint Louis University, University of Missouri-St. Louis, and St. Louis Zoo) to participate in an initial stakeholder meeting to discuss overall goals and identify opportunities for collaboration. As a result, a team of WU faculty came together around the Baden Pilot Project, which seeks to redevelop portions of the Baden neighborhood that are targeted for buy-out and demolition as a result of chronic flooding and sewage backups. The UVEI team will manage implementation of the proposed master plan, as well as coordinating City-wide UVEI. We have outlined shared goals and expected outcomes of this partnership in a Letter of Understanding, which can be provided to the grant review committee upon request.

Intellectual Underpinnings/Relevance to Sustainable Urbanism Since the 1980s, research in environmental psychology, environmental justice, policing, and public health has revealed that many of the root causes of civil unrest and poverty can be traced to inequitable spatial practices in the development of cities. Our project combines environmental justice and ecological urbanism to investigate through action-research whether or not issues of access, provision, participation, and ecological integrity can be combined to promote the creation of a more resilient urban community.

Project Objectives & Methodology/Approach¹

Objective 1. Produce an implementable master plan that, among other things, integrates ongoing multidisciplinary research and meets community needs and desires.

We will first review concept plans with the community, WU researchers, and other stakeholders. We will combine proposed solutions and feedback into a master plan, which will include a set of finite and feasible design proposals, complete with drawings and specifications that will enable implementation by community participants and selected contractors. The final plan will be discussed with the community and stakeholders. This work will be completed by graduate landscape architecture RA under the supervision of Rod Barnett. An undergraduate RA will assist in these efforts by conducting additional research and providing project management support.

¹ The scope of proposed project activities assumes full funding, per the *Budget Addendum* below. If additional funds are not awarded, project activities and associated deliverables will be scaled back accordingly.

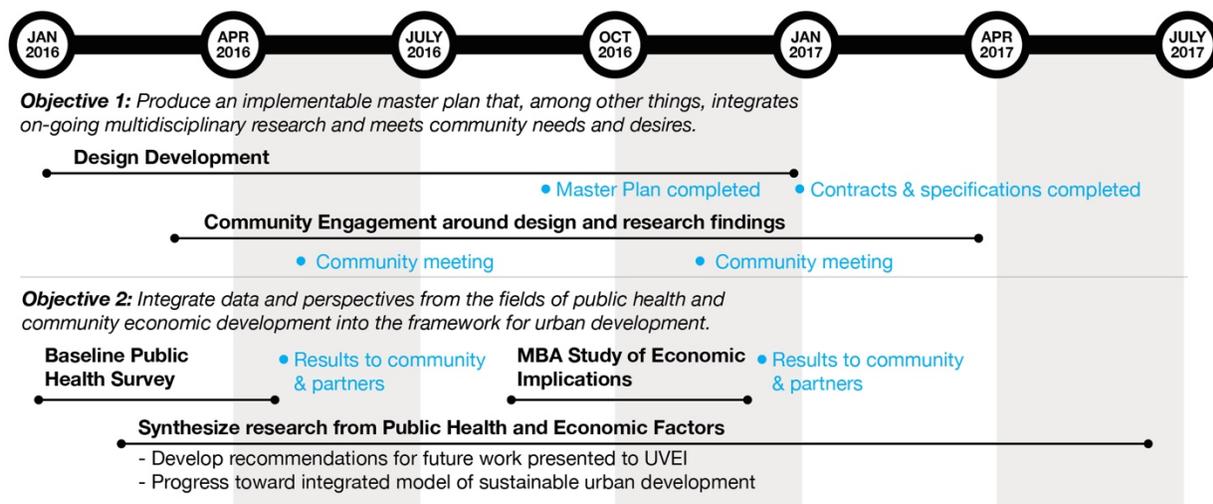
Objective 2. Integrate data and perspectives from the fields of public health and community economic development into the framework for urban development.

A graduate RA, mentored by Amy Eyster, will conduct a baseline survey to assess local perceptions of health and well-being, including physical activity and relationships to greenspace. We aim to reach 10% of the population, primarily through in-person interviews at community gatherings. In-depth interviews may be conducted with invested community members.

Through the Center for Experiential Learning, MBA students will assist community partners (UVEI, RWFDC) to assess and make recommendations related to the economic and organizational implications of the redevelopment proposal. This work will be based on the greenspace/green infrastructure master plan.

Table of Activities, Outputs/Deliverables + Project Timeline

Project success will be evaluated based upon completion of the activities and achievement of the deliverables (in blue) outlined in the timeline below.



Challenges & Limitations (1) Multidisciplinary research coordination. Given the number of collaborators that span multiple departments, communication across disciplines is an on-going challenge. A Project Coordinator has been hired to coordinate research efforts. **(2) Coordination with UVEI partners and other project partners external to WU.** We are fostering frequent and ongoing communication and building strong relationships with these organizations, facilitated by our Project Coordinator. **(3) Community engagement.** Creating an informed design requires meaningful engagement with residents, which is not an institutional strength. We are tackling this challenge by partnering with existing assets and groups in Baden (through RWFDC, MBG).

Budget Personnel: \$5,500 **Community Meetings/Events:** \$2,000 **TOTAL:** \$7,500

Budget Addendum² Personnel: \$32,500 **Community Meetings:** \$3,500 **TOTAL:** \$36,000

² Includes additional matching funds from the Olin School of Business (2:1), Institute of Public Health (1:1), and support for a graduate RA from the Brown School of Social Work and an undergraduate RA.