As the Center for Sustainable Development (CSD) celebrates its tenth year, our team thought it was appropriate to begin the practice of reflecting on the year’s activities and accomplishments in an annual report. Over the past year the CSD has been able to engage more students, faculty, and partner organizations than ever before, and we are excited about the future prospects of both our established and developing projects. This report does not encapsulate every project in which the CSD is engaged, but rather highlights examples of our work in a spectrum of arenas. It is meant to report to our colleagues on the core work currently underway, showcase emergent projects with which they could engage, and to serve as a compass to help us to reflect on where we are as a research center in accordance with our mission.

The CSD is a center within The University of Texas at Austin School of Architecture with a mission to lead the study and practice of sustainable development in Texas, the nation, and the world through complementary programs of research, education, and community outreach. The CSD is
unique in our integration of diverse interests to develop creative, balanced, achievable solutions to the physical and social challenges facing the planning, construction, and preservation of buildings, neighborhoods, and regions. Along with our faculty fellows and partners, we see the nature of the “sustainability challenge” as multi-scalar and inherently interdependent, and we attempt—through our projects, interdisciplinary teaching, and ongoing working groups—to better understand the connections between environment, economic prosperity, and social justice.

Our team supports a broad range of dynamic, transdisciplinary projects and programs that grapple with the “wicked” problems of the built world. We strive to connect faculty, students, and partners around salient issues, and to help them realize research, policy, and design-oriented sustainability projects that will make substantive contributions to the field. We are honored to be a convener for innovative projects that reach across disciplines, and for boundary-breaking discussions like that of the Beyond LEED: Regenerative Design Symposium.

As the dialogue around global sustainability challenges continues to mature, it is exciting to be a part of a research center that sits at the nexus of professional and academic practice. We at the Center for Sustainable Development look forward to the next year of growth for the professions, for our School, and for the larger discourse on sustainability.
Ten years ago, in the fall of 2002, the University of Texas at Austin’s School of Architecture announced the creation of the University of Texas Center for Sustainable Development. The Center was formed through the interdisciplinary efforts of two professors in architecture, Steven Moore and Michael Garrison, and two professors in planning, Robert Paterson and Kent Butler, and affiliates from 14 other academic areas, uniting disciplines as diverse as chemical engineering, urban design, integrative biology, business, and art. I had become Dean the year before, and prior to UT had been involved with helping to lay the groundwork for what became an interdisciplinary institute of sustainability at Arizona State, thus I was very supportive of the concept. As a result, I quickly became an advocate for the Center for Sustainable Development and helped secure approval from the university for its establishment. The intent of the Center was to support interdisciplinary research, education, and community outreach relating to the inevitable demands made on the environment by competing interests. The Center for Sustainable Development created a space to cultivate intellectual exchange among scholars not only on the UT campus, but also
throughout North America and the world. In 2002, there was not the widespread interest in sustainability that exists on campus today. UT’s research culture at that time embraced a more silo-based research approach over entrepreneurial cross-disciplinary research, which is the basis of sound sustainability practices. Since then, partially because of groups like the National Science Foundation, the National Institute of Health, and other large federal funders having increasingly emphasized cross-disciplinary and inter-disciplinary work, the culture has shifted and sustainability has become a crucial element of research performed across campus. The center has been at the forefront of this research, acting as the hub for many successful interdisciplinary projects over the years. The Thermal Lab and the Solar Decathlon are examples of collaborative efforts between engineering, architecture, and interior design, facilitated by the center. Projects like the Alley Flat Initiative and Public Interest Design have brought together planning, architecture, and landscape architecture, and the Sustainable Cities Initiative includes the LBJ School of Public Affairs, planning, and engineering in its cross-disciplinary research collaboration.

Looking forward, one direction the conversation of sustainability will likely move towards is regenerative design. The Sustainable Sites Initiative, or SITES, provides an example of regenerative design by going further than merely avoiding harm and maintaining the status quo to actively enhancing life in neighborhoods and ecosystems. SITES is a cooperative effort led by the Lady Bird Johnson Wildflower Center of the University of Texas at Austin with the American Society of Landscape Architects and the U.S. Botanical Garden. Through the recognition of ecosystem values, higher standards for landscape performance can be established, as has already been done with SITES. Last fall, the Center for Sustainable Development held Beyond LEED, a three-day symposium that brought leaders from all over the world to discuss how to extend this concept beyond landscapes to building design and community planning.

In the coming years, we hope to expand the existing broad reach of the Center for Sustainable Development. It has proven itself adept at setting ambitious goals for spreading its expertise, building partnerships, and catalyzing enthusiastic discourse of the ideals of sustainability. We intend to increase our collective ambitions in creating more sustainable practices of development that reach across cultures and disciplines to make an impact here in Austin, in our state, our nation, and far beyond our borders that in meaningful ways will benefit humanity as a whole.
CSD BY THE NUMBERS

2011-2012 Statistics

24 Research Projects Conducted

17 Grants Written

12 Films Shown
$1,885,156
Amount of funding awarded
(with an additional $366,000 pending)

9 Events Held
40 GRAs Employed
17 Portfolio Students
### CENTER FOR SUSTAINABLE DEVELOPMENT

**EXPERTISE MAP**

<table>
<thead>
<tr>
<th>EXPERTISE</th>
<th>REGIONAL</th>
<th>RURAL</th>
<th>BUILDING</th>
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<tr>
<td><strong>SCALE</strong></td>
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<tr>
<td><strong>EXPERTISE</strong></td>
<td>Megaregion Scale Planning</td>
<td>Low-Impact Landscape Planning</td>
<td>Indoor Air Quality</td>
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<td>Carbon Sequestration</td>
<td>Vernacular Landscapes</td>
<td>Space Architecture</td>
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<td>Growth Management</td>
<td>Environmental Security</td>
<td>High Performance</td>
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<td>Water Resources Planning</td>
<td>Informal Settlement Planning</td>
<td>Green Buildings</td>
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<td>Bioregionalism</td>
<td>Natural Resource Management</td>
<td>Solar Geometry</td>
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<td>Infrastructure Planning</td>
<td>Land Suitability Analysis</td>
<td>Historic Preservation</td>
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<td>Climate Change Management</td>
<td>Brownfield Redevelopment</td>
<td>Energy-Efficient</td>
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<td>Travel Behavior Modeling</td>
<td>Defense Planning</td>
<td>Building Information</td>
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<td>Transportation Land-Use Planning</td>
<td>Ecological Restoration</td>
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<td>Ecosystem Services</td>
<td>Historic Resource Management</td>
<td>Sustainable Sources</td>
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**Image:**

**University of Texas at Austin**

**School of Architecture**
<table>
<thead>
<tr>
<th>COMMUNITY</th>
<th>URBAN</th>
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<tr>
<td>Digital Democracy</td>
<td>Urban Ecology</td>
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<td>International Equity Planning</td>
<td>Sustainability Action Planning</td>
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<td>Community Indicator Analysis</td>
<td>Distributed Infrastructure</td>
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<td>Dispute Resolution</td>
<td>Urban Politics</td>
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<td>Economic Development</td>
<td>Public Health</td>
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<td>Integrated Learning Environments</td>
<td>Sociotechnical Systems</td>
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<td>Community-Based Planning</td>
<td>Planning Law</td>
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<td>Environmental Justice</td>
<td>Microclimate Management</td>
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<td>Affordable Housing</td>
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<td>Transit-Oriented Development</td>
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<tr>
<td>Civic Environmentalism</td>
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Barbara Brown Wilson  
**Director**

Barbara oversees the research, educational, and community outreach programs at the CSD. Her background in organizational development and facilitation inform her work administering the many projects underway at the CSD. Wilson has a PhD in Community and Regional Planning and a Masters in Architectural History from UT, and her research interests include value-based building codes, sustainable community development, and green affordable housing. Her current research includes an action-oriented research project extending the work of the Alley Flat Initiative to develop integrated codes for green, affordable infill development in Austin with Dr. Steven Moore, conducting project evaluation for the Texas Rapid Housing Recovery Pilot Project, and working with the SEED Network to build an inclusive platform for socially-oriented green building assessment systems. Wilson also serves as co-director of the Central Texas Sustainability Indicators Project, a joint project of the CSD and Hahn, Texas. She is co-founder of the Austin Community Design and Development Center (ACDDC), a nonprofit design center that provides high quality green design and planning services to lower income households and the organizations that serve them.

Meghan Kleon  
**Assistant Director**

Meghan is a PhD student in Architecture, a Sustainable Cities Doctoral Initiative Fellow, and the coordinator of the Graduate Portfolio Program in Sustainability at the University of Texas at Austin. Her research is focused on the intersection of sustainable design and historic preservation. She has a BA in Architecture from Miami University (Ohio), an MS in Sustainable Design from the University of Texas at Austin, and is a LEED Accredited Professional. She currently serves on the City of Austin Historic Landmark Commission. Prior to her graduate work at UT Austin, Meghan worked as the Architectural Resource Coordinator for the Cleveland Green Building Coalition (now the Northeast Ohio Chapter of the U.S. Green Building Council), where she organized and facilitated the Emerging Green Designers symposium for young design professionals; collaborated with partner agencies to fund, design, and produce affordable green housing; and coordinated green building educational programming.

Sarah Wu  
**Program Coordinator**

Sarah manages the Sustainable Places Project, which is a region-wide collaboration that seeks to build on the region’s previous efforts to create innovative and effective execution strategies to refine and implement the region’s plan and vision for sustainable development. This project is funded by a HUD sustainable communities regional planning grant and will include the development of a sustainable places analytic tool, demonstration projects, and a broad-based community engagement program. Sarah has a BS in environmental science from UC Berkeley and a Masters in Community and Regional Planning from UT. Her research interests include environmental planning, water resources management, and sustainable development. Prior to her work at the CSD, Sarah worked as an environmental and transportation planner for a private consulting firm. While there she prepared NEPA environmental assessments and co-authored a statewide implementation manual on comprehensive development agreements.

### Student Researchers

**Steve Bourne**  
**Research Associate, Thermal Lab Engineering**

Research: the effects of radiant barrier systems in attics, as well as the integration of phase-change thermal storage media into building materials and their impact on peak energy demand

Projects: Thermal Lab

**Conner Bryan**  
**Research Associate, Public Interest Design Program**

Research: new and emerging sustainable technologies in architecture, including smart skins, future building materials, and energy production in architecture

Projects: Public Interest Design Program

**Sam Dodd**  
**Coordinator, Graduate Portfolio Program in Sustainability**

Research: history of American architecture, building technology, and popular culture

Projects: Portfolio Program, Sustainability News
Matt Fougerat
Research Associate, Publications
Research: the dynamics of socioecological systems toward an end goal of biodiversity conservation and ecological restoration.
Projects: Working Paper Series, Central Texas Sustainable Indicators Project, Sustainable Places Project

Tom Hilde
Research Associate, Sustainability Indicators
Research: integrated planning of land use, affordable housing, and transportation, measuring and understanding sustainability through indicators, water resources planning, brownfield redevelopment, and hazards mitigation/adaptation.
Projects: Central Texas Sustainability Indicators Project, Sustainable Places Project

Frances Kellerman
Research Associate, Sustainable Cities and Meadows Curriculum Grant Program Coordinator
Research: environmental and water resources planning, sustainable integrated development.
Projects: Sustainable Cities Doctoral Initiative, Meadows Foundation Curriculum Grant Program

Jeffrey McCord
Research Associate, Thermal Lab Administration
Research: energy-efficient building design, intersections of high- and low-tech sustainable design, analog and digital fabrication, adaptive reuse.
Projects: Thermal Lab

Andrea Roberts
Research Associate
Research: Historic Preservation, Heritage, Community Resilience, Cultural Sustainability, Equity, Economic Development, Community Development
Projects: Development (grant writing, funding), Austin Historical Survey Wiki, Sustainable Cities Fellow

Kristine Stiphany
Research Associate, Design Build Coalition
Research: the relationship between education and housing development for informal settlements in São Paulo, Brazil.
Projects: Design Build Coalition

Rachel Tepper
Research Associate
Research: public art planning, public interest design, graphic communication in planning.
Projects: CSD Film Series, grants and administrative support

Elizabeth Walsh
Research Associate, Events and Outreach
Research: the potential of low-income home renovation programs to enhance environmental justice and sustainability in centrally located, gentrifying neighborhoods.
Projects: UT Campus Sustainability Symposium, Beyond LEED: Regenerative Design Symposium and the accompanying issue of Platform Magazine, Structures for Inclusion Conference

Jane Futrell Winslow
Research Associate, Greening Alleys Demonstration Project
Research: environmental planning and design, healing environments, historic preservation, and urban ecology, the intersection of public health and public space in the development of healthy sustainable communities.
Projects: Greening Alleys Demonstration Project

Faculty Fellows

Dean Almy
Associate Professor of Architecture
Director, Graduate Program in Urban Design
Research: The Dlab and Texas Urban Futures Lab are both investigations into urbanization in the Texas Triangle and the degree to which population growth can be accommodated through sustainable urban strategies.
Projects: Dlab, TUFLab®

Richard Corsi
E. C. H. Bantel Professor for Professional Practice
Projects: Thermal Lab, Healthy Buildings Institute of Texas

Ulrich Dangel
Assistant Professor of Architecture
Research: developing evaluation tools and strategies, which aid in finding design solutions for building skins as components of sustainable, low-energy concepts.
Projects: Thermal Lab
Sarah Dooling  
**Assistant Professor, Urban Ecology, School of Architecture and the Environmental Science Institute**  
Research: patterns and processes associated with urbanization, with an emphasis on vulnerable populations and vulnerable spaces, social and ecological components of urban systems  
Projects: integrated social and ecological consequences of low-income households relocated out of center city neighborhoods in Austin to the urban fringe, establishing multiple sites for long-term monitoring, in order to conduct longitudinal analysis of ecological and social change under conditions of increasing uncertainty

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Ming-Chun Lee  
**Assistant Professor of Community & Regional Planning**  
Research: community technology, e-government, digital democracy, and issues around media policy and public access to information and communication technology (ICT)  
Projects: community-based technology initiatives, Internet-based online public education and community problem solving tools, value-sensitive design approach to e-government accounting for human values, Sustainable Places Project

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Matt Fajkus  
**Assistant Professor of Architecture**  
Research: daylighting systems, energy-efficient building design  
Projects: Thermal Lab

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Fran Gale  
**Director, Architectural Conservation Laboratory**  
Senior Lecturer in Historic Preservation  
Research: deterioration processes affecting building materials, innovative conservation treatments, preservation of historic cemeteries  
Projects: Architectural Conservation Plan for the University of Texas Forty Acres Preservation Plan

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Michael Garrison  
**Gilbert Cass Centennial Teaching Fellow in Architecture; Professor of Architecture**  
Research: advanced design, environmental controls, sustainable architecture, passive solar systems, building workshop, visual communication  
Projects: Solar Decathlon, Energy Efficient Industrialized Housing, Zero Net Energy Homes Project

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Petra Liedl  
**Assistant Professor**  
**Harrington Faculty Fellow**  
Research: interplay of climate, buildings, comfort, and energy; user-friendly planning tools; interdisciplinary work  
Projects: ClimateDesign

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Talia McCray  
**Assistant Professor of Community & Regional Planning**  
Research: urban transportation issues, youth transportation and employment  
Projects: perceptions of safety and alternative modes of transportation

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Steven Moore  
**Director, Graduate Program in Sustainable Design**  
**Bartlett Cocke Regents Professor in Architecture**  
Research: sociotechnical systems, sustainable architecture and urbanism, codes and the built environment  
Projects: The Alley Flat Initiative

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Elizabeth Mueller  
**Associate Professor of Community & Regional Planning, and of Social Work**  
Research: affordable housing policy, urban politics, equity and sustainability  
Projects: texas housing report card project, new patterns of poverty in growing regions, Sustainable Places Project

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Atila Novoselac  
**Associate Professor of Civil, Architectural, and Environmental Engineering**  
Research: Ventilation and indoor air quality, Modeling of built environment, Building energy analysis, High rise buildings.
Projects: Thermal Lab

Michael Oden
*Associate Professor of Community and Regional Planning*
Research: economic development planning, regional theory, applied planning methods, housing policy
Projects: VMT Reduction Programs—The Next Generation, ARC Telecommunications Analysis Update, Sustainable Places Project

Robert Paterson
*Ph.D. Program Coordinator for Community & Regional Planning, Associate Professor of Community & Regional Planning*
Research: sustainable communities, brownfield redevelopment, environmental impact assessment, environmental dispute resolution
Projects: Envision Central Texas Implementation Toolbox, Lincoln Institute for Land Policy, Smart Growth project, Hogg Foundation, Sustainable Brownfield Development, Sustainable Places Project

Rachael Rawlins
*Lecturer of Community & Regional Planning*
Research: environmental impact assessment law and policy, planning and public health law and policy, including regulatory solutions to toxics in consumer products, and environmental planning and legislative initiatives to reduce green house gas emissions
Projects: Envision Central Texas Toolbox and research on state efforts across the nation to address green house gas emissions

Mark Simmons
*Lecturer of Landscape Architecture Ecologist, Landscape Restoration Program, Lady Bird Johnson Wildflower Center*
Research: using urban greenspace to sequester carbon, using native plants to address design problems, effects of landscape scale prescribed fire, native plants on green roofs, native polycultural turfgrass
Projects: Lady Bird Johnson Wildflower Center, Mueller Airport Redevelopment, San Antonio River Mission Reach Restoration

Bjørn Sletto
*Associate Professor of Community & Regional Planning*
Research: indigenous territoriality and politics of representation in Latin America, natural resource conflict and environmental planning in Venezuela, the micro-politics of participatory planning processes.
Projects: service learning and community-based development in informal settlements in Santo Domingo, Dominican Republic; participatory environmental justice assessment in Austin; best practices in service-learning and GIS education.

Frederick Steiner
*Dean, School of Architecture Henry M. Rockwell Chair in Architecture*
Research: environmental planning, urban and landscape ecology, land suitability analysis
Projects: Envision Central Texas, Sustainable Sites Initiative, Texas Triangle

Patricia Wilson
*Professor of Community & Regional Planning*
Research: civic engagement and dialogue, participatory planning, international development, community development, sustainable social development
Projects: Participatory neighborhood recovery planning in New Orleans and women’s empowerment for collaborative leadership in rural India

Ming Zhang
*Graduate Advisor for Community & Regional Planning Associate Professor*
Research: urban transportation planning, urban form and travel behavior, GIS applications in planning, international planning
Projects: cost characteristics and land use impacts of bus vs. rail mass rapid transit, value capture and land redevelopment in rail transit station areas, current practice and future potential in chinese cities, The State of the Practice in Land Use Transportation Integration in Chinese Cities—A National Survey Design, CAMPO Transit Oriented Development Study, Transit Oriented Development in Latin America, TOD and Regional Transportation Planning, Sustainable Places Project

Robert Young
*Assistant Professor of Community & Regional Planning*
Research: urban and regional planning, sustainable economic development, green infrastructure, and urban ecology, specifically advancing the transition to sustainable urban regions and economies
Projects: investigating best practices in financing green infrastructure, exploring green growth coalition dynamics and their relation to traditional metropolitan growth coalitions
Ongoing research endeavors that reflect the desire to integrate the CSD’s core interests with one another in the most relevant manner possible.
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ALLEL REGENERATION

Overview
Building on the success of the Alley Flat Initiative—which fosters the sustainable design and development of small, detached secondary residential units across Austin accessed from its extensive network of underutilized alleys—the Alley Regeneration project is focused on using urban alleyways to reduce resource consumption and improve social equity and system management. After over five years of design studies conducted by students and faculty with the CSD, in September 2011 the City of Austin committed funds to an alley demonstration project that would integrate Alley Flat infill housing by homeowners and not-for-profit housing developers with alley greening interventions redesigned and reconstructed by the city to sequester and treat storm water, increase public safety, and provide new venues for public art and urban agriculture.

Why the Research Is Important
Historically, Austin’s alleys were conceived as infrastructure conduits to serve storm-water evacuation, electrical distribution, solid waste collection, and private access, but due to municipal budget constraints after 1990, the City gradually abandoned maintenance of these public spaces and most have become places of social and environmental degradation.

Next Steps
• Empirical testing of the effectiveness of regenerative design for increasing the coupled ecological and social capacities of urban alleys systems in Austin, and
• Continuing to work with the City of Austin Office of Sustainability on applied sustainability projects within the urban core, and
• Design is currently underway for a test project in an alleyway in East Austin, selected through collaborative research conducted by the CSD and the City of Austin.

For more information, please contact Barbara Brown Wilson at bbwilson@austin.utexas.edu.
BEYOND LEED

Overview

January 28-29, 2012, the Center for Sustainable Development hosted “Beyond LEED: Regenerative Design,” a high profile national dialogue about the future of judgment in architecture. Thirteen renowned sustainable design leaders each shared a presentation and white paper articulating their vision for sustainable design of the built environment. 130 on-site participants joined the dialogue, as well as others participating remotely via the online streaming conference. Event proceedings, including videos of each panel’s presentations and dialogue and panelists’ white papers are available to the public at www.beyondleed.org. The 2012 issue of the School of Architecture’s Platform magazine presents the themes and proposed collaborative research agenda of Beyond LEED in more depth.

Why the Research Is Important

The dialogue emerged in response to growing concerns among leaders that current green building rating systems are insufficient to lead designers of the built environment in creating a sustainable future. The design and management of our built environment threatens the health of social and ecological systems. To address these challenges, a plethora of building rating systems and guidelines for sustainable building has emerged over the past decade, each with different priorities, metrics, and methods. These rating systems have expanded public awareness of the need for sustainable development, built a learning network among green building practitioners, and have had significant market influence. While these successes are important, they have not yet been enough to transform the built environment.

Next Steps

Through the dialogue, a number of calls for research and action emerged:

- Expansion of “regenerative design”—design that goes beyond simply reducing negative ecological and social impacts by actually generating benefits, and
- Creation of new tools to support adaptive management and systems thinking in support of regenerative design—design that goes beyond simply reducing negative ecological and social impacts by actually generating benefits, and
- Development of an online platform to support the systems-thinking and broad collaboration essential for regenerative design.

For more information, please visit the website www.beyondleed.org
Overview

Every semester, the Center for Sustainable Development (CSD) hosts the Sustainable Development Film Series to show sustainability-related movies, documentaries, and short films and have student-led discussions after each film. The Film Series began as an educational effort in the fall of 2009, and the CSD is currently coordinating its 7th season. Overall, over 40 full-length sustainability-related films have been shown as well as a handful of student-produced short films.

Why the Research Is Important

The intention of the film series is to connect sustainability themes to experiences in students own lives, provide a forum for students to network with outside professionals, and to foster multi-disciplinary discussions after the film that lead to interdisciplinary action. The film series also makes an effort to bring in local speakers and activists from the community to inform students about ways they can get involved.

Next Steps

The summer 2012 Film Series showcased three films related to climate change: Climate Refugees, Queen of the Sun, and Flow. The first film, Climate Refugees, was co-sponsored by the Central Texas Chapter of the US Green Building Council (USGBC) and the City of Austin. Students were encouraged to attend the USGBC reception to network with professionals.

In the Fall of 2012, the film series will extend its reach by collaborating with the Campus Environmental Center and the Community and Regional Planning Student Organization (CRPSO) to bring a wider audience to the events. In addition, the film series is looking into ways to connect the films to classrooms by inviting professors to lead discussions after the films.

For more information, please visit the website: www.soa.utexas.edu/csd/education/film-series.

2011-2012 Film Schedule

September 8, 2011  The End of Suburbia
September 22, 2011 Baraka
October 6, 2011  The Real Dirt on Farmer John
October 20, 2011 Flow: For Love of Water
November 3, 2011 Logan’s Run
November 17, 2011 Student-Produced Films
December 1, 2011 Powaqqatsi
March 8, 2012 King Corn
April 5, 2012 Eating Alaska & The Shrimp
April 26, 2012 The Garden
June 21, 2012 Climate Refugees
July 11, 2012 Queen of the Sun
THE CENTRAL TEXAS SUSTAINABILITY INDICATORS PROJECT (CTSIP)

Overview
The Central Texas Sustainability Indicators Project (CTSIP) promotes sustainability by providing data and analysis on the interdependent nature of social equity, environmental health, economic balance, and civic engagement in the Central Texas region. Since the project’s launch in 1999, data reports have been released on a roughly biennial basis, providing updated information on the region’s quality of life in the form of community indicators. The indicators are based on trend data and provide a comprehensive view of the region, and represent the following themes of sustainability: public safety, education and children, social equity, engagement, economy, environment, health, and land use/mobility.

Why the Research Is Important
CTSIP is intended to increase regional awareness and commitment to sustainability. The project hopes to foster an ongoing public discussion that:

• defines Central Texas residents’ vision of sustainability,
• creates quality of life indicators that allow the region to track its progress, and
• acts as a catalyst for increasing the effectiveness of community engagement

CTSIP data and analysis provide a comprehensive view of our region and indicate where leaders need to focus our efforts toward a sustainable future, as well as where action is needed to reverse a declining trend or preserve success.

Next Steps
CTSIP is working in partnership with the Center for Sustainable Development to publish the Eighth Edition of the data report in the fall of 2012. The new report will track 40 indicators utilizing over 120 measures mined from a large community opinion survey and online data sources. Key themes of the report include faster-than-projected population growth highlighted by the 2010 Census, continued effects of the economic recession, lack of action to confront environmental trends, and a profound impact of race and ethnicity on the perception of issues and the distribution of resources in the Central Texas region.

CTSIP will also be making its data and analysis available as an interactive web tool in order to offer community members a more dynamic way to explore the information contained in the data reports. In addition to making the information more accessible for interested residents and organizations, the project will eventually serve as a data warehouse to be utilized by other partner regional entities.

To view and download a copy of the 2012 Central Texas Sustainability Indicators Report, visit the weblink: www.centex-indicators.org
TWO VIEWS OF A SINGLE ROOM
Illumination mapping and a rendered view
- 20% reflective ceiling
- 20% reflective wall
- Low e glass
- 20% reflective floor

TWO TIMES OF YEAR
June 21st: summer and winter solstices
December 21st

TWO ORIENTATIONS
Western and southern sun

THREE APERTURE TREATMENTS
Open, exterior light shelf, and interior light shelf

TWO SUN CONDITIONS
- Overcast and clear sky
- Clear sky
- Overcast

THREE LATITUDES
Not climate based
- 50°N
- 30°N
- 10°N

SOUTHERN FACING
- 11:00 AM
- 14:00 PM

WESTERN FACING
DANCE WITH THE SUN: ARCHITECTURAL SCIENCE AND PHENOMENOLOGY

Overview

*Dance with the Sun* explores the intersection of physics, climate, and perception in architecture. The primary task of this book will be to provide the designer with essential tools and knowledge to address the central architectural challenge of our time: combating climate change through the design of low-energy buildings. The text will cover principles of architectural science related to the sun, the foundation of high-performance building design. The book will cover topics such as thermal comfort, solar geometry, passive design, and daylighting.

Energy-efficiency alone is an insufficient goal for the built environment, however. Building on the work of classics such as Lisa Heschong’s *Thermal Delight in Architecture* and Juhanni Pallasmaa’s *The Eyes of the Skin*, *Dance with the Sun* starts from the premise that great architecture goes beyond energy performance and the visual-aesthetic to engage all of the senses. Much of the power of work by masters such as Glenn Murcutt, Peter Zumthor, and Sigurd Lewerentz, for example, results from their skill at designing fulfilling multi-sensory experiences. Given that the stimuli to which our senses respond are physical phenomena such as light, heat, and sound, the design team must manipulate these parameters through craft of building form and technology to create the desired qualitative experience. This book will help the designer develop the skills to do so.

Why the Research Is Important

Part analytical handbook, part inspiration source for schematic design, *Dance with the Sun* will fill two gaps in the literature. First, while there are numerous books covering passive design strategies, these books generally do not provide adequate grounding in the fundamental principles governing the performance of such building techniques. The engineering literature, on the other hand, includes many texts on building physics, but the material tends to be presented in a highly technical manner inaccessible to the design community and disconnected from design applications. This gap leaves many architects without the tools to properly evaluate the applicability of specific techniques to unique conditions and hinders sustainable design innovation. *Dance with the Sun* will serve as a detailed reference on the principles of architectural science for the design community.

The book will fill a second niche by taking a specific and analytical approach to sensory phenomenology where other works on the topic have tended to be more general and conceptual. The objective is to connect the designer with the sensory experiences that physical phenomena create. *Dance with the Sun* will facilitate excellence in integrated design by providing architects with the skills to translate back and forth between quantitative data and qualitative experience, thus serving designers whether working with an intuitive approach or applying the powerful simulation tools readily available today.

The book will make use of experiments using the UT School of Architecture Facade Thermal Lab to illustrate principles discussed. It will also employ case studies of notable buildings analyzing actual measured data. Excellent graphics will facilitate comprehension for visual learners.

To dance with the sun is to synthesize physics, climate, program, and perception to create high-performance buildings that provide superlative experiences for their users. This book will serve design practitioners, academics, and students as a guide for performing this synthesis.
Project Status

The *Dance with the Sun* project is currently nearing completion of Phase 2 research.

Phase 1 developed a substantial portion of the manuscript and graphics. The scope of work in Phase 1 included: research on topics covered in the book and gathering sources, several Thermal Lab experiments, gathering of illuminance field data, setting up graphic standards, calculation and simulation models, dynamic three-dimensional models for creation of multiple diagrams, and an information management system.

Phase 2 continued this work. Nearly all of the remaining diagrams for the manuscript are complete as well as additional work on the manuscript and supporting research. The figure on the adjacent page is an example of the work completed in this phase. This is a study comparing daylighting for various building geometries at different latitudes. This particular study involved simulating daylight conditions for each of 20 building geometries under two different sky conditions at three latitudes. It is part of a series of similar comparative matrix analyses to be used as design reference tools by designers.

Next Steps

Phase 3 began September 1, 2012 and will concentrate on completing the manuscript for the remaining chapters and editing.

The *Dance with the Sun* team—Professor Matt Fajkus and Lecturer Dason Whitsett—wishes to express our profound appreciation for the support we have received from the Center for Sustainable Development.

For more information, please contact Matt Fajkus at matt.fajkus@austin.utexas.edu.
Overview
The Public Interest Design (PID) Program connects an interdisciplinary team of advanced students from across the globe interested in the built environment and public service with leading practitioners in public design. Students are empowered to become leaders in the field—using public service as a lens to expand the purview of the design professions and using their skills to develop innovative solutions to complex social and environmental problems. The work of the 2011 PID Program has already won awards from several different professional organizations and has led to a larger demonstration project greening the alleys with the City of Austin.

The summer 2012 PID program was an eight week program that included a research-oriented seminar, a service-oriented practicum, and an externship opportunity in San Francisco with Public Architecture, where students wrote critical professional reports documenting the community impact of public interest design projects in the Bay Area.

Why the Research Is Important
There is a critical link between design and the future of our planet. It is clear that design can contribute to the environmental challenges of sustainability, but those challenges are inextricably linked to social challenges that the profession is just beginning to explore. PID helps students and community partners understand how design can positively impact the social and economic well-being of our communities.

Next Steps
Along with national partners, the UTSoA will continue to serve as a hub for innovative thinking about the nature, ethics, and boundaries of public design through research partnerships with Public Architecture, the offering of place-based interdisciplinary design courses, and through lectures and community service projects.

For more information, please visit the website: http://soa.utexas.edu/csd/PID/.
ROOM 1.120
SMART BUILDING OFFICE

CURRENT ENERGY
17.75 kWh

TOTAL AVERAGE
5.76 kWh

3.14.2010
16.23

WEEK 1   WEEK 2   WEEK 3   WEEK 4
Overview
The UT Smart Building Initiative is a multi-disciplinary project about technology and energy that builds a framework in which to affect positive change on the UT campus. With over 250 sensors installed in classrooms, offices, lecture halls, and studio spaces, Sutton Hall is the only building on campus where energy usage, including light, plug, and HVAC consumption can be monitored in real-time. This offers an unusual opportunity for research involving sustainability issues that encompasses questions of energy, human behavior, material structures, and communication.

Why the Research Is Important
The Smart Building Initiative also enables UT to create a holistic energy picture of Sutton Hall as a model for campus-wide use; to translate these total energy costs and consumption data in a meaningful manner to the clients of the building; to conduct new studies in how to more effectively engage the user in being individually responsible for energy consumption; and to assist the administration in class scheduling to optimize energy usage in Sutton Hall.

The project has met several goals: the selection and installation of an energy monitoring system in Sutton Hall; creating a stream of energy usage data for UT Facilities Management and building users to access; design and continued development of information/communication devices directed towards building occupants. During the extension of the project (2011-2012), work has focused upon the incorporation of additional (chilling and steam) real-time and monthly data, identifying metering discrepancies between building-level and room level data, development of a three-level physical/digital communication model for building occupants, and discussions with UT Facilities personnel in charge of behavior change and resource conservation. The development and launch of the UTSBI website established a truly unique and important open-access reference and tool for all users to understand granular data, including floor-by-floor real-time energy consumption and conversion metrics to help understand kilowatt hours in everyday terms.

Next Steps
Current plans for 2012-2013 include field work regarding the effect of the room-level status monitors upon building occupants and further development of communication devices through participatory design methods. Extensions of this project include involvement in a Green Fee-funded campus dorm energy challenge, and there are discussions about implementation of an information system as a part of the upcoming Battle Hall renovations project. Students have benefited from the established data environment in classes in Design and the School of Information, which have used the project as a living working space for student projects about sustainability and information environments. The Sutton project is also scheduled to be used in an upcoming Rhetorics class studying relationships of building occupants to energy data and work space as well as a School of Architecture Graduate Design Studio course that will use the project’s research data as a base for design projects.

For more information, please contact Matt Fajkus at matt.fajkus@austin.utexas.edu.
**Overview**

Through a grant from HUD, the Sustainable Places Project team is building a tool to help policy leaders examine growth scenarios for activity centers across Central Texas. An innovative scenario-planning analytics tool is being developed by the CSD to identify the long-term effects of the various scenarios on municipal budgets and the health of communities. The tool will be piloted in activity centers in Austin, Dripping Springs, Elgin, Hutto, and Lockhart, and civic leaders will use this analysis to develop plans that take advantage of aligning housing, jobs, and transportation options in a way that complements existing community values.

**Why the Research Is Important**

The analytic tool will measure the impact of different development scenarios, including the impact on municipal budgets, as well as a myriad of important social and environmental sustainability indicators. Scenario-based planning provides an immediate feedback loop to participants on “what if” land use scenarios so that inappropriate or incompatible development can be avoided or minimized. The new software program also suggests alternative design and planning solutions for civic leaders when adverse effects of a proposed project arise in its indicator report system.

**Next Steps**

UT faculty and graduate research assistants are working to develop pop-up windows for each sustainability indicator that explain the theory behind each indicator, the connections between the indicator and livability concerns, and links to design solutions via hypertext links to online sources and a bibliography.

Working with Fregonese Associates, the University of Utah Metropolitan Research Center, the UT Texas Advanced Computing Center, the Texas Capital Area Council of Governments, and the Capital Area Metropolitan Planning Organization, the CSD will continue growing the software system well beyond the end of the HUD grant period in 2013, evolving eventually into the open source GIS environment.

Consortium members plan to seek out additional grant funds to refine and continually improve the software system so that it may be a long-term resource for the Central Texas region.

For more information, please visit the project website: www.sustainableplacesproject.com.
Overview

Environmentally sustainable design has become increasingly prevalent in developed countries, specifically in high-end projects for wealthy private clients. Yet more and more, sustainability in design is being considered holistically through the lens of humanitarian efforts, such as the work of non-profits like Architecture for Humanity. This movement has trickled down to architecture schools, which are increasingly participating in design exchanges that create lasting connections with cultures in developing countries, fostering collaborative design and sharing of knowledge between students and their clients. The University of Texas at Austin’s School of Architecture, under the guidance of professor Michael Garrison, has partnered with Robin Young of Home4Kids to design a school in Tororo, Uganda, with a practical curriculum centered on sustainable, high-yield agricultural practices.

In 2011, a group of architecture graduate students and their faculty adviser Professor Michael Garrison, has partnered with Robin Young of Home4Kids to design a school in Tororo, Uganda, with a practical curriculum centered on sustainable, high-yield agricultural practices.

Why the Research is Important

Texas Impact Design is a graduate architecture independent design studio undertaken by seven architecture students in the spring of 2012 to design a rural school in Uganda, Africa, working late at night in addition to their regularly-scheduled design studios. The students worked collaboratively on the school design with a non-profit African NGO on all phases of the project from programming, design, and construction documents, to helping secure the funding to build the project. The students traveled to Uganda this summer to start the building process in the Bursia district of Uganda.

The design of the building was driven by local circumstances such as the orientation of the site, the people’s living traditions, their construction skills, and access to local materials. With an emphasis on sustainability, the students designed a complex based around courtyards with shading verandas, conditioned by natural ventilation, and daylighting. The design also includes a rainwater collection system, drip irrigation gardens, and photovoltaic panels. The goal of the school is sustainability and not dependency.

Next Steps

Following a photo safari, the team toured Building Tomorrow’s Academy of Gita, the Academy of Sentigi, and the Nkosi School. In addition, the team presented a paper on their work at the international Sustainable Futures Conferences in Kampala and constructed a new playground at the the Smile Africa School site in Tororo. The team will return to Uganda next summer to participate in the construction of the school.

For more information, please contact Michael Garrison at mgarrison@utexas.edu.
THERMAL LAB

Overview
The Center for Sustainable Development’s Thermal Lab is an experimental laboratory complex that allows for research on innovative façade design, glazing, shading, window treatments, and other energy-efficient building technologies. Completion of Thermal Lab II is scheduled for Fall 2012.

Why the Research Is Important
Reducing our emissions of CO2 and other greenhouse gases as well as our dependence on fossil fuels is among the most challenging tasks of the 21st century. Buildings are the single largest contributor to climate change, as they consume over 70% of the electricity used each year. Developing concepts for “energy-positive buildings” will have a tremendous impact on reducing the use of fossil fuels and the subsequent emission of greenhouse gases.

Next Steps
The Thermal Lab will conduct performance experiments on various materials and designs in an effort to test the efficiency of many of the modern technologies, such as:

• integrated energy and daylighting models,
• the performance of various window treatment and glazing materials,
• components and systems for the building skin, and
• advanced technical solutions for heating, cooling, ventilation, and heat storage in buildings

The Thermal Lab will also develop robust industry partnerships to further push the development of architectural technology and disseminate knowledge gained through this indispensable research tool.

For more information, please contact Petra Liedl at pliedl@utexas.edu.
What might a metric or rating system for sustainable preservation look like, how it might be implemented, and what might its impact be on the LEED rating system?
U.S. GREEN BUILDING COUNCIL RESEARCH TO PRACTICE

Overview

The U.S. Green Building Council Research to Practice Program aims to engage the higher education community in investigative green building research through multi-disciplinary student teams working on their campuses and communities to transfer project-based knowledge to practice through the development of tangible tools or resources.

Launched in the fall of 2011, the program attracted teams from 35 higher education institutions. The School of Architecture’s Center for Sustainable Development was selected to be one of the inaugural teams for both Phase I and Phase II research during the 2011-2012 year.

The CSD’s Phase I research focused on the interconnection between historic preservation and sustainability in the context of two historic buildings within the School of Architecture complex at the University of Texas at Austin. During this phase, the project team analyzed whether specific Leadership in Energy and Environmental Design (LEED) credits would be likely to be achieved in the upcoming renovation of Battle Hall and the West Mall Building. The analysis showed that the historic rehabilitation project has the potential to earn a LEED Gold rating, with up to 76 points achieved. The Phase I research team concluded that the rehabilitation and renovation of the Battle Hall/West Mall Building complex also presents an opportunity to further explore how historic preservation might be better integrated into LEED rating systems.

Phase II research took up this idea, asking students in the spring 2012 Research Seminar in Sustainable Preservation: “What might a metric or rating system for sustainable preservation look like, how it might be implemented, and what might its impact be on the LEED rating system and on existing buildings on the UT Austin campus?”

Why the Research Is Important

By exploring how LEED design standards might best be integrated into historic preservation projects and what new standards for sustainable preservation projects might look like, the team sought to better understand the ways in which historic preservation and sustainability can draw upon each other to achieve their common goals of stewardship of our cultural heritage as well as stewardship of the environment. Ultimately, this research will help to inform a more nuanced approach to re-using particular materials and assemblies sustainably in other non-historic projects, both on campus and off.

Next Steps

Although the R2P2 program ended in spring 2012, the CSD has continued to explore possibilities for research and curriculum development related to the Battle Hall/West Mall Building renovation project, including how to make the building a nationally recognized showcase for advanced green preservation research and practice. The project provides a unique opportunity for the UTSOA to lead the national discussion around sustainable preservation and to inform best practices as they develop.

For more information, please contact Michael Holleran at holleran@mail.utexas.edu.
EMERGING PROJECTS

Budding projects currently in development that have the potential to produce innovative results
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BATTLE HALL AND WEST MALL BUILDING RENOVATION:
RESEARCH AND CURRICULUM

Overview
Designed in 1909 by Cass Gilbert, Battle Hall is the only academic building on the UT Austin campus listed on the National Register of Historic Places. It is home of the Architecture and Planning Library, the Alexander Architectural Archive, and the Center for American Architecture and Design. The West Mall Office Building, constructed in 1961, contains the School of Architecture’s CSD, Materials Lab, and Preservation Lab.

Both buildings are currently slated for major renovation. The Battle Hall-West Mall Owner’s Project Requirements—which define the objectives for the renovation project—call for the renovation project to exemplify best practices in combining historic preservation with sustainable design. They also call for making the finished project, as well as the development process, an opportunity for both research and teaching.

The CSD is working with our faculty and fellows to identify innovative and cutting-edge ideas for projects that could be tied into the renovation project.

Why the Research Is Important
This project advances the larger goal of leveraging the Battle Hall-West Mall Building complex to enhance curriculum and advance research at the School of Architecture. It also supports the goal of making the buildings into a nationally recognized living lab for green preservation practice. Similar green building “living labs” have been used successfully to promote university research agendas, enhance program prestige, attract top faculty and students, and enrich the education of students.

Next Steps
After participating in the U.S. Green Building Council’s Research to Practice Program in Fall 2011 and Spring 2012 with a focus on the Battle Hall/West Mall Building renovation, the CSD has continued to explore possibilities for research and curriculum related to the renovation project. During summer and fall 2012, the project team is:

• identifying and meeting with faculty interested in engaging with aspects of the project
• creating a “wish list” of project ideas and affiliated faculty champions
• identifying external funding opportunities to support research and curriculum development

A full project report will be produced in late 2012. For more information, please contact Michael Holleran at holleran@mail.utexas.edu.
Overview

The Building Material Accountability Project (MAP) is a nascent collaborative effort between the School of Architecture’s Center for Sustainable Design and the Cockrell School of Engineering’s Building Energy and Environments (BEE). The primary mission of the Building MAP will be to identify material and material systems most suited for long-term performance of healthy and productive buildings, including climate adaption and resiliency. In doing so we will investigate entire life cycle costs, encourage and promote materials appropriate to building cause, and engage with regulatory structures to assist with the mature adoption of building materials that are not just suitable, but also high performing in terms of their interactions with the entire building system, inclusive of occupants.

Why the Research Is Important

Interior and envelope building materials play central roles in the health and sustainability of buildings. They can influence indoor air quality, energy transport, moisture buffering, capital and recurring costs, and human psychology, performance and health.

In order to design and build healthy, regenerative buildings, practitioners must be armed with more data on how to accurately specify and positively affect material attributes. But the development and deployment of new building materials is far outpacing even rudimentary scientific analysis of those materials. It is critical that this gap be closed through a robust new paradigm for material evaluation that includes (1) testing across a spectrum of conditions that materials encounter during their lifetime, (2) longitudinal field-tracking of material performance in actual buildings, (3) a systems-based approach to assessing the interactions of building materials with other building components and occupants, and (4) assessment of the true life cycle costs of building materials.

Next Steps

• Establish a state-of-the-art materials testing protocol with proof of concept testing on several high-volume building materials and a testing plan for future material assessments,
• Create a healthy and high-performance materials data base,
• Develop software tools to assist with selection of building materials given building-specific needs and conditions, as well as the materials true life cycle costs,
• Implement novel protocols for long-term field testing of material performance in buildings,
• Design webinars, short courses, and workshops to educate architects and building professionals on healthy and high performance building materials’ and their relationships to other building system components.

For more information, please contact Barbara Brown Wilson at bbwilson@austin.utexas.edu.
INTERNATIONAL PARTNERSHIPS

Overview
The Center for Sustainable Development continues to cultivate its already strong international partnerships with top universities including: the Centre for Energy Efficient and Sustainable Design and Building (Technical University Munich), National University Pedro Henríquez Ureña (Dominican Republic), Anadolu University (Turkey), Tsinghua University (China), Universidad del Zulia (Venezuela), and several universities in Brazil. In May 2012, in partnership with two domestic and three international academic partners, the University of Texas School of Architecture submitted a multi-million dollar research grant to the National Science Foundation to foster innovative inter-institutional research and pedagogical strategies to mitigate the effects of climate change on vulnerable populations around the world.

Why the Research Is Important
Addressing the complex problems associated with the effects of climate change across the globe requires innovative, collaborative, and interdisciplinary research on green infrastructure and design practices. Our international partnerships provide a formal network for collaboration and long-term cooperative research and education to advance sustainability.

Next Steps
- Beginning in 2012, doctoral fellows from several universities in Brazil, sponsored by the Brazilian government, will be hosted at the UTSoA to study and conduct research.
- The UTSoA is partnering with Anadolu University to support a research proposal to the Scientific and Technological Research Council of Turkey to investigate the effects of global warming in Turkey.
- The CSD will continue to support ongoing research by faculty fellows and students into indigenous land rights and environmental conflict on the Colombia-Venezuela border.
- The UTSoA will continue to foster summer Design and Planning Workshop Courses for its students in China and in Germany, with Chinese and German students traveling to UT to complete the educational exchange.

For more information, please contact Barbara Brown Wilson at bbwilson@austin.utexas.edu.

Emerging Projects
Overview

The Texas Urban Futures Lab (TUFlab®) began in Dallas as the Dallas Urban Laboratory, and has now expanded its scope of research into the larger mega-region of the Texas Triangle: Dallas, Austin, San Antonio, and Houston. Looking to applied research models, we have sought to establish a laboratory at the University in conjunction with these Texas cities as a non-partisan institution set up to engage in the debate about the urban future of the mega-region.

Under the Center for Sustainable Development, the Lab looks at the ongoing research and growth projections, and asks how this kind of data and subsequent policy recommendations and decisions may affect the form and space of our cities. The Lab also endeavors to bring in experts from the professions of architecture, landscape architecture, and urban planning, among other disciplines, in order to examine urbanization in Texas, go beyond the public initiatives, and represent precisely what kind of urban environments are possible given these high pressure development forces acting across the state.

Why this Research Is Important

The TUFlab® is searching for an integrated middle ground between the disciplines of urban planning, architecture, urban design, and landscape architecture, each of which may play a role in the construction of the urban environment. We do this by breaking the city down into urban systems, evaluating and optimizing each, while beginning to understand the city, not only as a hybridization of systems, but as an animated and multivalent place.

In design-based, applied research the primary way of evaluating the urban potentials of a project is through research into best practices. The design process is not just about invention; it’s also about principles. What one knows has worked, why, and where? What is the applicability of those tactics here? The understanding of best practices as examined within systems affecting the mobility, density, landscape, or public space in the city, and then testing them on a particular problem in a specific site, as a form of applied research, is in fact a constant process of evaluating and exposing the potential of a place. Still, that evaluation is largely tied to an intuitive knowledge that builds up over time, either though harnessing local knowledge or drawing upon disciplinary expertise. It is this kind of knowledge, coupled with design rigor, research and a service-oriented perspective, that the Laboratory strives to nurture in practice.

For more information, please contact Dean Almy at dja3@utexas.edu.
RESOURCES & EDUCATION

Longterm programming the CSD administers to support new funded research and transdisciplinary education
The Portfolio Program provides students with a cohesive plan of study in sustainability, prepares them for leadership roles in academic and professional practice, and assists them in publishing research on sustainability topics.
GRADUATE PORTFOLIO PROGRAM IN SUSTAINABILITY

Overview

The Graduate Portfolio Program in Sustainability provides master and doctoral students with a trans-disciplinary framework to study and research issues related to sustainability. To be eligible to participate in the portfolio program, students must be admitted into one of the university’s graduate degree programs. The portfolio program is similar to a minor area of study or a certificate program at other institutions. The requirements for the program include coursework, a scholarly paper, and a presentation. Additionally, a minimum portfolio GPA of 3.0 and a minimum overall GPA of 3.0 must be maintained.

Over the last academic year, the program hosted a series of campus-wide events, including three research lunches, a Grant Writing Workshop in March (co-hosted by the CSD), and the annual Sustainability Symposium in April.

Why the Research Is Important

The portfolio program is one of the CSD’s core education initiatives. It provides students with a cohesive plan of study in sustainability, prepares them for leadership roles in academic and professional practice, and assists them in publishing research on sustainability topics. The program also fosters research and dialogue between graduate students and faculty members. The program’s steering committee is made up of eleven faculty members from programs in architecture, planning, geography, public policy, engineering, health, and the natural sciences. In 2012, the committee welcomed two new members: Jessica Cance (Assistant Professor of Kinesiology and Health Education) and Daene McKinney (Professor in Environmental and Water Resources Engineering).

The student body is equally diverse. Last year, the program admitted eight graduate students (five masters; three doctoral) from programs in architecture, landscape architecture, geography, engineering, and geoscience. In May 2012, three students completed their program requirements. The graduates included a Public Policy doctoral student who now coordinates a sustainability program at the University of Jackson, a Public Policy master’s student who researches ecotourism in South America, and a master’s student in historic preservation who worked on the Austin Historical Survey Wiki.

Next Steps

The program continues to promote collaboration between graduate students and faculty across the University. Beginning in fall 2012, the portfolio program will begin hosting one guest speaker each semester; the Grant Writing Workshop will also be offered annually. There are plans to team up with other portfolio programs to combine the different spring symposia into a daylong event.

For more information, please contact Steven Moore at samoore@austin.utexas.edu
In 2011-2012, the CSD helped to write and submit 17 grants, and secured $1,885,156 in funding, with an additional $366,000 pending.
GRANTS AND FUNDING

Overview
The Center for Sustainable Development offers our fellows and faculty at the School of Architecture support in finding funding, preparing grants, and program administration. Our staff has experience administering successful grants for a variety of different project types, as well as backgrounds in various research areas at the University of Texas School of Architecture. We also provide assistance with graphic development of research concepts for the purposes of persuading funders, as well as the publication of your research results. In 2011-2012, the CSD helped to write and submit 17 grants and secured $1,885,156 in funding, with an additional $366,000 pending.

Why the Research Is Important
Though faculty at the UTSoA may never be at a loss for ideas, it can be difficult to find and acquire the funding necessary to research these ideas and provide the necessary funds for faculty release time, travel, expenses, and the student assistants that contribute in so many ways to the research efforts. Proposal writing can be a time-consuming and laborious effort, and the web of university regulations can feel like an onerous addition to the task of preparing a proposal. CSD staff work with faculty to identify funding, develop a proposal, successfully navigate the application process, and administer their project funding— supporting the productivity of our faculty and their ability to attract funded research.

Next Steps
In addition to offering one-on-one assistance year-round, the CSD offers several resources for faculty and students seeking funding:

- an annual Graduate Student Grant Workshop,
- the CSD newsletter, published twice per month, which includes calls for proposals and abstracts related to sustainability issues,
- a faculty grants newsletter, published each semester, featuring the latest funding opportunities and requests for proposals in architecture and design, sustainability, historic preservation, architectural history, planning, transportation, and faculty fellowships.

For more information, please contact Barbara Brown Wilson at bbwilson@austin.utexas.edu.
Partners
American Institute of Architects
American Society of Landscape Architects
AREA Real Estate
Austin Community Design and Development Center
Austin Energy
BNIM
Center for Maximum Potential Building Systems
The City of Austin
Dell Social Innovation Challenge
Design Corps
Guadalupe Neighborhood Development Corporation
International Interior Design Association (IIDA) TX OK Chapter
The Lady Bird Johnson Wildflower Center
Lake|Flato Architects
L. M. Scofield Company
People Organized in Defense of the Earth and her Resources
Public Architecture
Technische Universität München
Texas Environmental Defense Fund
Texas Low Income Housing Information Service
Texas Society of Architects
The University of British Columbia
The University of Utah
U.S. Green Building Council
UT Office of Sustainability
Zachry Construction Corporation

Invest in the CSD
Your financial support of the CSD helps us to fulfill our mission of designing, constructing, and conserving a more sustainable built world through our many outreach projects, cutting-edge research initiatives, and interdisciplinary teaching endeavors. An investment in the CSD is an investment in developing sustainable solutions to the ecological, social, economic, and policy issues facing our buildings, neighborhoods, and regions.

Our previous funders include entities such as: the City of Austin, the Environmental Protection Agency, Ford Foundation, Getty Foundation, Graham Foundation, Hogg Foundation, Houston Endowment, Lincoln Institute of Land Policy, Longhorn Innovation Fund for Technology, Meadows Foundation, National Endowment for the Arts, National Science Foundation, Oak Hill Fund, the Rockefeller Foundation, and the U.S. Department of Housing and Urban Development.

For more information, please contact Sarah Wu at sarahwu@austin.utexas.edu.