#### **NEW EJOURNAL LEAD BY DISTINGUISHED BOARD**

n Fall 2012, Penn IUR launched the *Urban Research eJournal*, published through the Social Science Research Network (SSRN). In this weekly eJournal, Penn IUR's distinguished editorial team selects, gathers, and distributes new research on the issues that surround global urbanization.

The *Urban Research eJournal* is edited by Penn IUR Co-Directors Eugénie Birch and Susan Wachter. The Editorial Board is composed of luminaries in the field of urban research: Elijah Anderson, William K. Lanman, Jr. Professor of Sociology, Department of Sociology Yale University; Gilles Duranton, Professor of Real Estate, Wharton School, University of Pennsylvania; Richard Florida, Director and Professor of Business and Creativity, Martin Prosperity Institute, Rotman School of Management, University of Toronto, and Global Research Professor, New York University; Edward L. Glaeser, Fred and Eleanor Glimp Professor of Economics, Department of Economics, Harvard University; William N. Goetzmann, Edwin J. Beinecke Professor of Finance and Management Studies, Finance Department, Yale University; Michael B. Katz, Walter H. Annenberg Professor of History,

CONTINUED ON PAGE 15

# PENN IUR PANEL SHAPES DISCUSSION OF THE FUTURE OF U.S. HOUSING FINANCE

n Fall 2012, Penn IUR hosted two meetings on the reform of the housing finance system following the Great Recession.

On Sept. 27, members of the Bipartisan Policy Center's (BPC's) Housing Commission met with industry leaders and experts at Penn to discuss the future of multifamily housing finance. BPC, a Washington, D.C.-based

think tank, fosters bipartisan discussions on potentially divisive issues in an effort to develop propositions with broad support; as part of this mission, BPC has created a Housing Commission, which will release a plan in early 2013 with concrete proposals for an overhaul of the housing system. At the September roundtable meeting, the BPC's Housing Commission's Multifamily

CONTINUED ON PAGE 16

**Housing Finance:** Senator Isakson, Michael Berman, Phil Swagel, Barry Zigas and Susan Wachter discuss the nation's housing future.



# EDUCATION REFORM PANEL

n Nov. 5, 2012, Penn IUR and the Graduate School of Education (GSE) hosted a panel of experts for a discussion about what we can learn from research on evidence-based education reform in an event entitled "Community and Education Challenges in Philadelphia: Research and Reform."

The discussion was moderated by GSE Professor Bob Boruch. GSE Dean Andy Porter framed the evening's discussion in his opening remarks: "Connecting research and practice is the 'holy grail' in just about any sector and education is certainly no exception," he said. Following Dean Porter's remarks, Boruch moderated a panel discussion with three GSE professors: Vivian Gadsden, Rebecca Maynard, and Matthew Steinberg. A common theme among the three panelists - the need for better connections between search and practice - is particularly important in evidence-based urban educational reform.

**CONTINUED ON PAGE 5** 

#### INSIDE

INSIDE	
Spring Events >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	2
Faculty Spotlight: Saswati Sarkar >>>>>	3
World Urban Forum >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	6
New Books >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	7
Ecosystem Services >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	8
Tracking Progress >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	8
New Partnerships >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	9
Manny Diaz >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	9
Faculty News >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	10
Energy Research >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	14
Urban Link >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	15
GIS Day >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	16
MUSA Event >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	16
Webinar Series >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	16
Film Screenings >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	17

#### **UPCOMING EVENTS**

visit penniur.upenn.edu for more details.

#### **JANUARY 14, 2013**

Urban Book Talk: Manuel Diaz, *Miami Transformed*National Building Museum, Washington, DC | 12:30pm - 1:30pm
Inn at Penn, Philadelphia, PA | 5:30pm - 7:00pm

In Miami Transformed, award-winning former mayor Manny Diaz shares lessons from governing one of the most diverse and dynamic urban communities in the United States. This firsthand account begins with Diaz's memories as an immigrant child in a foreign land, his education, and his political development as part of a new generation of Cuban Americans. The story of Manny Diaz's efforts to renew Miami will interest anyone seeking to foster safer, greener, and more prosperous cities. Registration required. For the National Building Museum event (Washington D.C.), register here: http://go.nbm.org/site/Calendar/379906866?view=Det ail&id=113721. For the Inn at Penn event (Philadelphia), register here: http://miamitransformed.eventbrite.com.

#### **JANUARY 30. 2012**

## Urban Book Talk: Laura Perna and contributors, *Preparing Today's Students for Tomorrow's Jobs in Metropolitan America*Houston Hall, Golkin Room | 5:30pm - 7:30pm

Preparing Today's Students for Tomorrow's Jobs in Metropolitan America offers insights into how to bridge the higher education gap and provide urban workers with the qualifications and skills they need for real-world jobs. Please join Laura Perna, the book's editor and Professor at Penn's Graduate School of Education, and panelists for a discussion of the book's central themes. Panelists include Thomas Bailey, the George and Abby O'Neill Professor of Economics and Education at Teachers College, Columbia University and Director of the Community College Research Center; Lori Shorr, Philadelphia's Chief Education Officer; Alan Ruby, Senior Fellow, Graduate School of Education, University of Pennsylvania; and Laura Wolf-Powers, Assistant Professor of City and Regional Planning, School of Design, University of Pennsylvania. Registration required: http://preparingstudents.eventbrite.com.

#### **FEBRUARY 28, 2012**

#### **Theaster Gates**

#### Meyerson Hall, Lower Gallery | 6:00pm - 7:30pm

Join Chicago visual artist and cultural planner Theaster Gates, co-creator of *red, black & GREEN:* a *blues*, at the Penn School of Design for a lively discussion on arts and public life. Trained as a multi-modal artist and an urban planner, Gates is now fostering new connections at the University of Chicago, where he is leading efforts to enable collaboration and conversation among Chicago's civic, cultural, and artistic communities. Admission is free, but registration is requested. Please register at theastergates.eventbrite.com. Co-sponsored by Penn Design.

#### **MARCH 4, 2013**

### The Federal Housing Authority and the Future of Affordable Homeownership

#### National Building Museum, Washington D.C. | 10:00am - 12:00pm

Please join speakers Carol Galante, Federal Housing Authority (FHA); Susan Wachter, Penn Institute for Urban Research (Moderator); Sarah Wartell, The Urban Institute; a representative from the Bank of America; and Jonathan Rose, Rose Companies for a discussion of the FHA and the future of affordable home ownership. Co-sponsored by the National Building Museum, Next American City, and The Urban Institute. Register at http://www.NBM.org.

#### **MARCH 13-15, 2013**

### Feeding Cities: Food Security in a Rapidly Urbanizing World Houstan Hall, University of Pennsylvania

Led by Penn IUR, this international conference focuses on the nexus between periurban development and a holistic analysis of food production and security in the face of climate change, population growth, and rapid urbanization. The conference will draw experts from around the globe and will also include a photo exhibit highlighting images from Penn students, faculty, and staff. Visit http://www.feedingcities.com for more information and to register.

#### **MARCH 13, 2013**

#### **Penn IUR Annual Urban Leadership Forum**

#### Penn Museum of Archaeology and Anthropology | 5:30pm - 7:00pm

The Annual Penn IUR Urban Leadership Forum recognizes exemplary thinkers who have demonstrated the vision to revitalize urban centers, respond to urban crises, and champion urban sustainability in the United States and around the globe. The 2013 Forum will celebrate leaders in sustainable urban food systems: Joan Clos, Executive Director of United Nations Human Settlements Programme (UN-Habitat); Yael Lehmann, Executive Director of The Food Trust; and Ridwan Kamil, Founder and Principle, Urbane Indonesia.

#### **APRIL 2012**

#### Science, Ecosystem Services, and Urban Sustainability

Penn IUR, in partnership with the University of Pennsylvania Spatial Integration Laboratory for Urban Systems, is hosting a roundtable on science, ecosystem services, and urban sustainability. The objective is to develop a strategy for applying an ecosystem services framework to inform sustainable land and other resource management decisions in urban areas. Participants will include representatives from the local and federal government (US Forest Service, US Park Service), researchers, interest groups and NGOs.

#### **APRIL 22, 2013**

#### **MUSA GIS Earth Day**

#### Meyerson Hall, Lower Gallery | 11:00am - 2:00pm

This one-day program will feature presentations by students and scholars from across Penn as well as professionals from the Philadelphia region on how GIS is being used in urban sustainability research. Featuring Marc Imhoff, Deputy Director, Joint Global Change Research Institute, Pacific Northwest National Laboratory/University of Maryland who will speak about the impact of urban expansion on carbon cycling. Speakers also include Penn scholars applying GIS to cuttingedge urban research.

#### **MAY 8, 2013**

### Building Energy Efficiency: Finding Strategies that Work SAP Headquarters, Newton Square, PA | 8:30am - 7:30pm

Join us for this one-day conference on innovations in energy efficiency and how strategic environmental management and city planning will help frame future and urban economic growth. Hosted by Initiative for Environmental Leadership (IGEL), Penn Institute for Urban Research (Penn IUR, Wharton Geospatial Initiative and Laboratory (GIS Lab), Wharton Risk Management and Decision Processes Center, and the Wharton Small Business Development Center (SBDC), in partnership with the Energy Efficiency Building (EEB) Hub.

#### **FACULTY SPOTLIGHT: SASWATI SARKAR**

aswati Sarkar is a Professor in the Department of Electrical and Systems Engineering. Her research interests are in the science and economics of various classes of networks - communication, social, transportation, power, and economic. She is a Penn IUR Faculty Fellow who has worked closely with Penn IUR, in particular on the June 2011 expert roundtable ("America's Sustainable Future: How U.S. Cities Are Making Energy Work") Penn IUR held to explore the public-private partnership efforts from U.S. cities pursuing innovative energy management and smart grid initiatives. She also does research for the Energy Efficient Buildings (EEB) Hub, an organization with which Penn IUR is also working. She received the National Science Foundation (NSF) Faculty Early Career Development Award in 2003.

# 1. You research smart grids. Can you tell us what smart grids are and how they affect sustainability?

Rapid economic growth, development, and industrialization have steadily increased electricity consumption worldwide for several decades. The electricity demands have typically been satisfied through conventional generation techniques. Conventional generation techniques, however, have led to depletion of fossil fuel reserves and excessive emissions of greenhouse gas associated with detrimental environmental impacts like global warming and ozone layer attrition.

Ground-breaking advances in alternate generation techniques are therefore necessary. However, the environmental impact of alternate sources needs to be carefully investigated before being widely implemented. For example, in the wake of the nuclear disaster in Japan, nuclear generation techniques have been questioned. Some countries, such as Germany, have decided to terminate nuclear energy generation altogether. The emergence of environmentally friendly generation technology (solar energy, wind energy, etc.) promises to satisfy ever-increasing electricity demands while substantially reducing the detrimental impact of conventional and

nuclear sources (emissions and fossil fuel consumption). It is estimated that restructuring electricity generation may reduce carbon emissions by 35 percent.

An important obstacle to the deployment of large-scale generation of renewable energy is the integration of the generation techniques in the existing nationwide power generation and distribution network, also known as the power grid. Overhauling power grids takes time, which has deterred the large-scale proliferation of renewable electricity generation. The emerging framework – consisting of a combination of a smart macrogrid and smart microgrids – may facilitate a gradual transition.

A smart macrogrid, also known as the smart grid, is the nationwide power generation and distribution network, equipped with smart control, resilience, and automated decision and distribution capabilities. A microgrid is a localized grouping of electricity generation, storage, and loads that seeks to satisfy the electricity and heat demands in local communities; a rural town, for example, may be served by one or two microgrids. The generation units in smart microgrids predominantly comprise renewable sources - such as micro-turbines, wind-turbines, fuel cells, photovoltaic cells, solar, thermal, and wind turbines - though they may be seamlessly expanded to include both renewable and non-renewable sources as necessary. Microgrids can also store electricity in limited capacity using storage devices such as batteries, flywheels, super-conducting magnetic energy storage, and super-capacitors. Storage in microgrids is less challenging than storage in the macrogrid due to the scale. While a microgrid normally operates connected to the macrogrid, it may also operate independently – particularly when it needs to protect itself from failure through isolation from the macrogrid during severe overloads.

Scientists envision that future electric networks will consist of a large ensemble of microgrids, either inter-connected through the macrogrid or directly connected to one another. Experimental and pilot installations



of microgrids have already been initiated in the United States, Europe, Japan, and China. Market projections show that, by 2015, over 3 gigawatts (GW) of new microgrid capacity will come online globally, representing a cumulative investment of \$7.8 billion and that the annual market for microgrid systems will be \$2.1 billion. North America will likely constitute the largest market for microgrids in the near future, representing 74 percent of total worldwide capacity by 2015. Several research challenges, however, need to be addressed before the vision of widespread proliferation of microgrids may be transformed to reality. My group's research seeks to contribute to this area of study.

# 2. As a systems engineer, how did you become involved in issues related to sustainable development? What is the intersection between systems engineering and sustainability?

As an Electrical Engineer, my research had in the past largely focused on wireless networks. This specialization led me to research in energy-related sustainable development issues, because the tools (e.g., optimal and stochastic controls, dynamic games, optimization, queuing theory) developed in the design of wireless networks have the potential to constitute the foundation of sustainable energy management strategies.

CONTINUED ON FOLLOWING PAGE

#### CONTINUED FROM PREVIOUS PAGE

The wireless revolution has reduced the space-barrier and smart phones have realized the dream of ubiquitous computing and connectivity. But when first introduced, this wireless technology confronted seemingly insurmountable challenges, such as limitation of resources (spectrum, battery power, memory) and vulnerability to security threats. Fundamental advances in network control prevented these challenges from deterring the pervasive deployment of wireless technology: global performance goals have been met through computationally simple, local-information-based distributed transmission scheduling, power control, management and data routing strategies; smart phones have been protected from security threats through design of optimal malware control strategies; cooperation and spectrum trading have been incentivized and enabled through fundamental advances in dynamic pricing and wireless economics. Such diverse, ground-breaking progress has been accomplished by drawing from, and in the process contributing to, a wide variety of disciplines: stochastic processes, dynamic games, optimal and stochastic control, optimization, and queuing theory. Specifically, sustainable systems have resource constraints that exhibit certain core similarities as wireless networks (specific details differ between the two, of course) - so very similar design approaches often apply.

This is the space in which my research has contributed. Going forward, ideas that emerged in the context of wireless networks can inform nascent research in sustainable development. This connection is greatly important to both, seemingly disparate, fields, since wireless networks have been one of the most transformative technologies in human history and sustainable development will likely have a similar, or even larger, impact in the current millennium and this is exactly what I hope to accomplish in the context of sustainable development.

### 3. What are your current research projects?

Currently, I am participating in re-

search projects directed towards sustainable development and wireless networks. The research projects in wireless networks are directed towards (i) control of malware propagation and (ii) design of an architecture of spectrum trade in wireless networks.

# 4. Can you tell us more about the research you have done with the Energy Efficient Buildings (EEB) Hub on promoting energy efficient technologies? What work are you planning to do with the Hub in the future?

Several research challenges need to be addressed before the vision of widespread proliferation of microgrids becomes reality – I am working to contribute to this field of research, working to design a holistic framework comprising of:

- Smart generation and distribution infrastructure (consisting of conventional and renewable energy resources) for microgrids
- Holistic generation systems, designed using statistical models and demand, that satisfy energy deficits while using conventional energy sources only minimally
- Energy distribution infrastructure that efficiently transmits energy with minimal energy loss by:
- o Attaining an appropriate tradeoff between design of distribution and generation modules, should they operate in conjunction
- o Smart management of consumption through an electronic sensing infrastructure
- o Deploying power meters and sensors that monitor environmental conditions (temperature, humidity, wind-speed, etc.)
- o Deploying a wireless network that is scalable, portable, and robust against failures and security breaches.
- o Utilizing household electrical appliances that can be automated and synchronized with the sensing infrastructure to reduce overall consumption
- Energy trading and dynamic pricing that:
- o Imposes smart management with users' consent in lieu of service discounts and reductions of utility bills
- o Introduces dynamic pricing of energy as well as trading among different concerned entities to make usage more efficient

- o Compensates for energy deficits and excesses (an inevitable result of using microgrids) through electricity trades with other microgrids
- Fault tolerance and resiliency, specifically:
- o Accounting for the impact of regulations on the design of each of the above components

In participating with the EEB, I have investigated energy trading. Specifically, I have considered energy markets comprising of both microgrids and the macrogrid, where microgrids actively trade energy units among each other and also with the macrogrid so as to satisfy their deficits and utilize their energy excesses (with a goal of maximizing their overall financial remuneration). With my colleagues, I have investigated dynamic pricing strategies for such trades, modeled the pricing problem as a non-cooperative game and characterized Nash equilibrium pricing strategies.

## 5. What unique aspects of Penn are enabling you to do the research that is most important to you?

The faculty at Penn consists of eminent engineers, computer scientists, and urban researchers. Penn's work culture actively encourages cross-disciplinary research. For instance, while retaining a primary faculty position at the Electrical and Systems Engineering department, I have been designated as a Faculty Fellow at the Penn Institute for Urban Research (Penn IUR) and as a secondary faculty member in the Computer Science department. It is therefore relatively easy to assemble a multidisciplinary team for pursuing a research agenda that calls for expertise in a wide range of fields. Indeed, the research agenda that I am pursuing - realizing a large-scale proliferation of microgrids - requires expertise across traditional academic departments and even schools; in particular my colleagues and I seek to investigate the interplay between engineering design of sustainable systems and governmental policy regulations. Pursuing the latter has been facilitated through my collaboration with faculty members at Penn IUR.

#### CONNECTING RESEARCH AND PRACTICE IN EDUCATION REFORM

CONTINUED FROM PAGE 1

The panel was part of Penn's 2012-13 "theme," The Year of Proof, which considers how proof is established. The Year of Proof mission statement draws attention to the need to better connect research and practice across a multi-disciplinary landscape, one directly applicable to urban educational reform: "Though the approaches and standards for proof differ among disciplines, they share a similar process, involving experimentation, research, gathering evidence, applying general knowledge and common sense...and ultimately, some degree of faith." Each of the panelists discussed recommendations for connecting public education reform research to school and classroom implementation, a particularly challenging endeavor in need of further focus.

The panelists spoke broadly about their experiences and offered recommendations for linking research and practice on both the federal and local levels. Maynard discussed the role that the federal government plays in shaping education policy and em-

phasized that, when it comes to education reform, evidence means different things in different contexts. "We should be very clear about what constitutes credible evidence on different types of [education research] questions," she said. "The type of research needed to establish the efficacy of a program is quite different from what you need to guide schools to efficient implementation of a policy or practice."

Steinberg stressed the need for transparency in the education landscape and the importance of conducting research on issues of immediate, practical concern for schools. "Policymakers should be more intentional in how they design policies – and by intentional I mean with respect to understanding the efficacy of policy," he said. "This is an efficiency issue, particularly, as public resources that are dedicated to one effort necessarily preclude their use for some alternative." Maynard also weighed in concerning fiscal issues in education. "Expenditures for education from pre-K through graduate school total more than \$1.1 trillion dollars –

that's a T!" she said. "We should encourage and incent the use and generation of evidence in program funding decisions."

Focusing on local implementation, Gadsden discussed the pioneering role Penn has played in partnering with schools in West Philadelphia. The Sadie Tanner Mossell Alexander University of Pennsylvania Partnership School, for example, has been labeled the "gold standard" by the National Association of Independent Colleges for linking timely educational research to classroom policy. Despite the success of the Penn Alexander School, she cautioned the audience that further efforts in school partnerships are warranted: "One school is not enough. The strengths within a single setting will not extend to other settings without strategic approaches and sustained support."

You can find video from the event on the Penn IUR website at: http://penniur.upenn.edu/news/2012/12/11/video-education-experts-discuss-the-use-of-evidence-in-education-reform.

# PLEASE JOIN US PENN URBAN DOCTORAL EVENTS

**FEBRUARY 7, 2013** 

Meyerson Hall, G-12 | 4:00pm - 5:30pm

Penn IUR Urban Doctoral Poster Session and Penn IUR Faculty Fellow Reception

This event highlights the work of urban-focused doctoral students from across the University and will celebrate the research contributions of Penn IUR Faculty Fellows. The event will include poster presentations by doctoral students and a responding panel discussion by select Penn IUR Faculty Fellows.

MAY 10, 2013

Penn Urban Doctoral Symposium

Inn at Penn, Regent Room/St. Marks | 11:00am - 2:00pm

Co-sponsored with Penn's Urban Studies program, this symposium celebrates the work of graduating urban-focused doctoral candidates. Graduates present and discuss their dissertation findings.

#### PENN IUR HELPS FORM WORLD AGENDA ON URBAN ISSUES

enn IUR Co-Director Eugénie Birch was re-elected co-chair of the UN-HABITAT's World Urban Campaign (WUC), a global coalition of public, private, and civil society partners acting to promote sustainable urbanization. Her re-election underscores Penn IUR's prominent position in the global conversation on urban issues.

WUC was launched in Rio de Janeiro, Brazil, in 2010, at UN-HABITAT's 5th World Urban Forum (WUF), the world's premier conference on cities. Birch was re-elected at the 6th WUF, held in Naples, Italy Sept.

**KNOWLEDGE** 

to address compelling urban issues, especially informing the safe able city. To this end, Penn IUR is constructing two Internet-based knowledge-sharing platforms devoted to energy; one regional in

The first is for the Energy Efficient Buildings Hub (EEB Hub) he the first is for the Energy Efficient Buildings Hub (EEB Hub) head-quartered in the Philadelphia Naval Yard and established by the U.S. >Department of Energy in 2011. The EEB Hub has the dual mission of ostering deep building retrofit technologies and promoting regional economic growth and job creation. For this knowledge olatform, penn IUR is focusing on building stock inventories and characteristics experty mediating, strategic retrofit management, and

retiff for its focusing on building stock inventioned stics, energy modeling, strategic retrofit manage ment/education to provide the essential narratives for maniformation that are legible to many building industry actors.

with the laiwan institute of Economic Asseatch, rained, wiedge Sharing Platform in March 2012 (www.sci-tor), entralizes research, best practices, and innovative tech

transport, buildings, grids, jobs,

1 - 7, where the thousands of attendees learned a b o u t Penn IUR research and publications through an exhibit and several presentations.

The second platform is for the Energy Smart Communities initiative, launched within the Asia Pacific Economic Cooperation (APEC) Energy Working Group in November 2010. Penn IUR, in partnership with the Taiwan Institute of Economic Research, launched As COchair of WUC, Birch helped launch "Manifesto for Cities" at a Sept. 1 special session that included presentations by Birch, UN-HABITAT Executive Director Joan Clos, and others. The manifesto provides a platform for the creation of a Global Agenda, Urban in preparation for World Habitat III,

the UN's much anticipated conference on housing and sustainable urban development scheduled for 2016. The manifesto emphasizes the prominence of cities in

today's world, and holds that "the battle for a sustainable future will be won or lost in cities."

Birch presented Penn IUR research on sustainable urban development indicators at a WUF networking session on Sept. 3 entitled "Sustainable Urbanization: Using Indicators to Measure Progress." At the session, co-sponsored by the Commonwealth Association of Planners and the U.S. Government, she described Penn IUR's Ford Foundation-sponsored research identifying quantifiable "livability principles"

Department of Transportation (DOT) and Environmental Protection Agency (EPA). She also presented a paper entitled "Ports and Energy, Laboratories of the Future" at an auxiliary meeting on "Ports as Hotspots of Creative Activity," at the University of Naples Federico II.

Penn IUR mounted an exhibit to present current research, recent publications in its City in the 21st Century book series, and innovative projects from the City of Philadelphia in the WUF exhibition hall, which is open to all conference attendees and the public. Penn IUR staff discussed with visitors the Institute's research on vacant land studies, en-

> ergy efficiency initiatives, and sustainable



World Urban Forum: Posters from Penn IUR's exhibit in Naples, Italy,

> for the Partnership for Sustainable Communities, a federal partnership among three U.S. federal agencies: Housing and Urban Development (HUD),

urban development indicators, as well as Philadelphia's innovative Greenworks sustainability plan and the City's efforts to foster the creative economy and improve access to fresh food.

The United Nations Human Settlements Programme (UN-HABITAT) - a United Nations agency that promotes socially and environmentally cities sustainable the goal of providing adequate shelter for all - organized WUF. WUF is held

every two years to bring together leaders from government, NGOs, research, and the private sector to help solve problems of urban sustainability.

#### CITY IN THE 21ST CENTURY SERIES RELEASES THREE VOLUMES

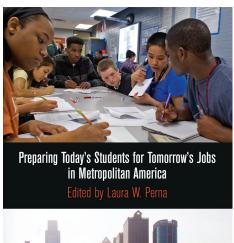
he three latest releases from Penn Press's City in the 21st Century series, Preparing Today's Students for Tomorrow's Jobs in Metropolitan America, Miami Transformed, and The City After Abandonment, address topics of aligning education requirements to meet employer needs, transforming a major American city, and exploring planning issues facing cities in decline.

Preparing Today's Students for Tomorrow's Jobs in Metropolitan America, edited by Laura W. Perna, Professor in the Graduate School of Education at the University of Pennsylvania, offers useful insights into how to bridge the gap between educational attainment and relevancy, and how to best provide urban workers with the educational qualifications and skills they need for real-world jobs. It probes deeply into the misalignment between workers' training and employers' requirements. This volume informs our understanding of the measurement and definition of the learning required by employers, examining the roles that different educational sectors and providers play in workforce readiness and analyzing the institutional practices and public policies that promote the educational preparation of today's students for tomorrow's jobs. The volume also sheds light on several recurring questions, such as: What is the "right" amount of education? What should be the relative emphasis on "general" versus "specific" or "occupational" education and training? Ensuring that today's students have the education and training to meet future career demands is critical to the economic and social well-being of individuals, cities, and the nation as a whole. With recommendations for institutional leaders and public policymakers as well as future research, this volume takes important steps toward realizing this goal.

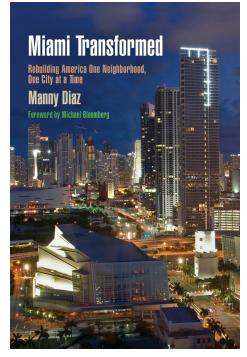
Miami Transformed: Rebuilding America One Neighborhood, One City at a Time, by former Mayor Manny Diaz shares lessons learned from governing one of the most diverse and dynamic urban communities in the United States. When Diaz took office in 2001, the city was paralyzed by a notoriously corrupt police department, unresponsive government, a dying business district, and heated ethnic and racial divisions. During Diaz's two terms as Mayor, Miami was transformed into a vibrant, progressive, and economically resurgent world-class metropolis. This firsthand account begins with Diaz's memories as an immigrant child in a foreign land, his education, and his political development as part of a new generation of Cuban Americans. Diaz also discusses his role in the controversial Elián González case. Later he details how he managed two successful mayoral campaigns, navigated the maze of municipal politics, oversaw the revitalization of downtown Miami,

and rooted out police corruption to regain the trust of businesses and Miami citizens. Part memoir, part political primer, *Miami Transformed* offers a straightforward look at Diaz's brand of holistic, pragmatic urban leadership that combines public investment in education and infrastructure with private sector partnerships.

The City After Abandonment, edited by Margaret Dewar and June Manning Thomas, both Professors of Urban and Regional Planning at the University of Michigan, investigates conditions of former manufacturing centers of the Northeast and Midwest and why some improvement efforts in these disinvested places have greater impact than others. The book brings together essays from top urban planning experts focusing on policy and planning issues related to declining or shrinking cities and cities with long-term property abandonment. Questions addressed throughout the book include: What are cities becoming after abandonment? Why these outcomes? What should abandoned areas of cities become? This book assesses widely cited formulas for addressing vacancy; analyzes the sustainability plans of Cleveland, Buffalo, Philadelphia, and Baltimore; suggests an urban design scheme for shrinking cities; and lays out ways policymakers and planners can approach the future through processes and ideas targeted to declining cities.









# PENN IUR'S CONTRIBUTIONS TOWARD RESEARCH ON ECOSYSTEM SERVICES IN AN URBAN ENVIRONMENT

enn IUR organized an expert roundtable on the provision of ecosystem services in an urban environment at a biannual conference on methods, tools, and processes for assessing and incorporating ecosystem services into public and private decisions. The ACES and Ecosystem Markets 2012 conference held in Fort Lauderdale, Florida from Dec. 10-14, was organized by A Community for Ecosystem Services (ACES), the Ecosystem Markets Conference and the Ecosystem Services Partnership, three networks all working toward better and more efficient provision of ecosystem services.

Ecosystem services are those resources and processes provided by natural systems; they include, for example, water purification through soil infiltration. In spearheading the "Ecosystem Services in an Urban Environment" session, Penn IUR

brought to bear its expertise on urban sustainability and evidence-based policy, drawing together experts in the measurement of different ecosystem services, the development of sustainability indicators, and best practices in community programs.

Scientists and policy analysts attended this session, which was moderated by Richard Bernknopf, Ph.D. Research Professor in the Department of Economics at the University of New Mexico in Albuquerque. From Houston Advanced Research Center (HARC) in Woodlands, TX, President and CEO Jim Lester presented on a decision support tool that measures the value of ecosystem services in cities, especially the value of urban wetlands in mitigating stormwater overflow, and can be used to identify the impact that real estate development has on these services. Scott Bernstein, President and Co-Founder of the Center

for Neighborhood Technology in Chicago, and Steve Wise, Executive Director of the Sandy River Basin Watershed Council in Portland OR, presented on the creation of green infrastructure. In particular, Bernstein and Wise discussed how to implement stormwater management and flood alleviation policies. Katherine Wolf, Research Scientist in Environmental and Forest Sciences in the College of the Environment at the University of Washington in Seattle, discussed the measurement of public health and cultural service benefits provided by urban "wildlands." Penn Design doctoral student Amy Lynch, who is working closely with Penn IUR Co-Director Eugénie Birch, closed the session with a presentation on the urban sustainability indicator initiative on which Penn IUR is currently working. This year, Lynch was a recipient of the prestigious ACES Fellowship Award.

#### PENN IUR HELPS COMMUNITIES TRACK PROGRESS TOWARD SUSTAINABILITY

Penn IUR, with funding from the Ford Foundation, is working with The Partnership for Sustainable Communities (PSC) to create a comprehensive catalog of sustainability indicators available throughout the United States.

PSC is part of an interagency partnership with the U.S. Department of Housing and Urban Development (HUD), Department of Transportation (DOT), and Environmental Protection Agency (EPA). Working together, these federal agencies encourage a comprehensive approach to transportation, housing, and land use planning that result in safer, greener, and more livable communities. Municipalities and local governments that receive PSC funding often must conduct performance mea-

surement as a part of their grant. Many other communities are interested in order to track their progress towards sustainability and livability. Penn IUR has partnered with HUD to identify sustainable urban development indicators that these communities can use.

In 2010-11, Penn IUR reviewed 22 systems with 377 indicators across the categories of social wellbeing, economic opportunity, and environmental quality. Ultimately, the Penn IUR research team identified a database of 145 suitable indicators. By reviewing the existing literature of best practices as well as applying their own analytic framework, the team was able to provide quantitative measures for often abstract "livability principles" like providing more transportation choices, promoting affordable housing,

enhancing economic competitiveness, supporting existing communities, and valuing neighborhoods.

Penn IUR, with Foundation funding, has been asked to develop a catalog based on the previous work. This web-based, searchable database - entitled "The Sustainable Communities Indicator Catalog" - will provide a wide range of indicators to a variety of potential users. In creating this tool, Penn IUR will assist communities and the PSC in evaluating the value of their investments and prioritizing future investment. With this project, Penn IUR continues to use its expertise in best practices in knowledge transfer and performance metrics to develop increasingly evidence-based sustainability policies.

#### PENN IUR'S NEW PARTNERSHIPS

his Fall, Penn IUR partnered with the New Cities Foundation and UBM Future Cities. In entering into these agreements, Penn IUR contributes intellectual capital drawn from the research and publications of its associates including faculty, students, and governing board members.

The New Cities Foundation is a nonprofit Swiss institution dedicated to improving the quality of life and work in the twenty-first-century global city, with a particular focus on new cities in Asia, the Middle East, Latin America, and Africa. It sponsors an annual summit and undertakes research on a variety of topics. Among the NCF partners are such corporations as Cisco, GE and GDF Suez, the Ford Foundation, and a number of academic institutions including University of Southern California, MIT, and NYU.

The UBM Future Cities is a multimedia portal featuring a wide variety of content via video, blogs, infographics, research reports, and webinars founded by UBM, a multinational media company based in London. The UBM Future Cities site – http://www.ubmfuturecities.com/ – has ten sections ranging from buildings to utilities and encompassing such topics as economy, education, energy, government, health care, real estate, safety and security, and transport.

#### **MIAMI CELEBRATES MANNY DIAZ**

n November 16, 2012, Manny Diaz, two-term former Miami mayor and author of Penn IUR and Penn Press's City in the 21st Century series book *Miami Transformed*, returned to Miami's Freedom Tower, now the Miami Dade College Cultural Center, to discuss his book at the 29th Miami Book Fair International. Before a standing-room-only crowd, Diaz discussed with Penn IUR Co-Director Eugénie Birch his early life as a Cuban refugee and his accomplishments as Miami's chief executive.

Seated in the front row was his mother, Elisa. Her face beaming, she was flooded with memories of the years gone by. As a penniless immigrant, she had come with her six-year-old son to the Freedom Tower when it served as a dispensary for surplus food bricks of cheese, bags of flour and cans of Spam — for the newcomers. She filled her bag and took it home to feed her family. Now that son was center stage, toasted for his transformation of his adopted city. Also in the audience were Diaz's classmates from Belen Jesuit Prep School, the school that has now made Miami Transformed required reading for the juniors and seniors, preparatory to Diaz's addressing their January assembly. After the talk, former city officials, old friends, civic leaders, and former Penn students greeted Diaz, thanking him for his work in Miami and urging him to take on more roles in the city. The day before the event, Andres Viglucci, Miami Herald reviewer, had written: Former "Miami mayors don't usually write books anyone would want to publish, much less read. Then there's Manny Diaz. Whether you admire him like many in Miami and across the country do, or excoriate



**Miami Transformed:** Former Mayor Manny Diaz speaks in Miami.

him as some at home did, Diaz was hardly shy about embracing big plans and notions. And few would disagree that the city was a far different place when he exited City Hall in 2009 after two terms in office. So it should come as no surprise that Diaz has written a book for a national audience, recapping his greatest hits as mayor. Recall police reform and Irishcop Chief John Timoney, Midtown Miami, the downtown condo boom, the 'mega-plan' and the innovative Miami 21 zoning plan. It's been published by the über-serious University of Pennsylvania Press. No vanity press project, this." Viglucci goes on to say that the book "is no policy wonk-fest, either. A breezy read at just over 200 pages — index and foreword by New York mayor and Diaz buddy Michael Bloomberg included." He concludes that the book serves as a concise case study of transformation, to be celebrated nationally and internationally.

In succeeding weeks, Diaz has offered interviews at home and abroad, including several talks in Miami, a three-part series for UBM's City Futures (http://www.ubm-futurecities.com/), talks at Washington's

National Building Museum, at Penn, at New York's Bloomberg Foundation and at the U.S. Conference of Mayors annual meeting. His Miami presentations have evoked many comments:

- From the General Counsel of Miami-Dade College: "...although I have known you for years ... watching you speak before that audience gave me new perspective. As always, you were thoughtful and pragmatic, but I saw you as a true leader in today's arena. There were so many young people there and they all looked to you with such intent and inspiration I could see it in their faces. Your analyses of the issues and solutions are hard to dispute. In short, you were great. I am sure I am not the first to encourage you to soar to higher places.... But count on me as a fan and a supporter for any future plans that you are pondering..."
- From a master's student of public administration: "Your many gutsy decisions chronicled in Miami Transformed perfectly illustrate your leadership as well as inspires the next generation (myself included) to 'leave a nation much greater than the one left to us' (page 206)."
- And from staff in the city planning department: "I thoroughly enjoyed the event tonight. It is always inspiring to hear you speak, especially to those of us who are still at the City and feel, at times, that all has been lost."

Whether from those who have known and worked with him for years or from people who saw him speak for the first time, the word "inspirational" repeatedly came up in comments. Manny Diaz's leadership in Miami and his ongoing engagement on urban issues continues to be inspirational.

#### **Jonathan Barnett Publishes on Jane Jacobs**



Jonathan Barnett, Professor of Practice in City and Regional Planning, and Director of Penn's Urban Design Program, was named a Guest Professor at Southeast University in Nanjing, where he recently gave a series of lectures on *Advanced Urban Theory*. He also contributed a chapter, "Jane Jacobs and Designing Cities of Organized Complexity," to *The Urban Wisdom of Jane Jacobs*, edited by Sonia Hirt and Diane Zahm.

## **Eugénie Birch Named Chair of National Task Force**



Mitch Silver, President, American Planning Association, has appointed Eugénie Birch Chair of the Emerging Trends National Task Force, with a portfolio to explore national priorities for planning and report their findings to the APA Board and the general public at the APA National Conference in April. In the past months, she has given a number of talks including "International Trends in Energy and Domestic Impacts: Critical Issues in Urban Sustainability,"

Daniel Burnham Memorial Lecture, National Building Museum, September 2012; "Energy and the United States," Mellon Visiting Professor, Goucher College, October 2012; "Resilience and Livability, Exercises in a University Setting," Global Livability Resilient City Network Meeting, Bellagio, Italy, November 2012; and "We Have the Tools... So Let's Use Them," New York City: Sink or Swim, Principles and Priorities for Waterfront Restoration in a Post-Sandy Era, December 2012.

#### **Philippe Bourgois's Book Wins Prize**



Richard Perry University Professor of Anthropology and of Family Medicine & Community Health Philippe Bourgois's most recent book, *Righteons Dopefiend*, won the Society for Urban Anthropology's Anthony Leeds book prize. In completing his long-term fieldwork project on segregation, poverty, hyper-incarceration, substance abuse, and HIV risk on a block in one of the poorest corners of Puerto Rican

North Philadelphia, Bourgois will embark on a new book writing project.

#### **Carolyn Cannuscio Appears on Radio**



Carolyn Cannuscio, Assistant Professor of Family Medicine and Community Health, spoke as part of the WHYY/ NewsWorks.org series "Designs on Health," explaining the intersection between the built environment and health and the research being done to pinpoint communities' health attributes.

#### Vivian L. Gadsden Named Editor of Educational Researcher



Vivian L. Gadsden, William T. Carter Professor of Child Development and Education, became Editor of the *Educational Researcher*, the major publication of the American Educational Research Association.

#### **Joseph Gyourko Researches Housing Markets**



Joseph Gyourko, Martin Bucksbaum Professor of Real Estate, Finance and Business and Public Policy, Chairperson, Real Estate Department, and Director of the Samuel Zell and Robert Lurie Real Estate Center, recently concluded his role as Co-Director of the NBER Project on Housing Markets and the Financial Crisis by organizing a July 2012 conference in Cambridge that included new research on causes of the housing boom and bust. His other recent research includes work

on homeowner mobility and negative equity in the United States, and conditions in Chinese housing markets. Gyourko is helping develop a new index of land prices for thirty-five major markets in China, and has lectured in Singapore, Beijing, and Shanghai on that topic.

#### Ira Harkavy Appointed to NSF Committee



Ira Harkavy, Associate Vice President and Director of the Netter Center for Community Partnerships, has been appointed to the Advisory Committee on Equal Opportunities in Science and Engineering of the National Science Foundation and to the National Advisory Board for Public Service of Harvard College. In addition, The Netter Center recently hosted its 20th Anniversary conference "The Role of Higher Education-Community-School Partnerships in

Creating Democratic Communities Locally, Nationally, and Globally." He published three articles, including "Democratic Devolution: How America's Colleges and Universities Can Strengthen Their Communities," (with Rita Axelroth Hodges) in the *Progressive Policy Institute*.

#### **Shaun Harper Wins Award**



Shaun R. Harper was appointed Associate Editor of Educational Researcher, the flagship publication of the American Educational Research Association. His article, "Race Without Racism: How Higher Education Researchers Minimize Racist Institutional Norms," was published in The Review of Higher Education and he also recently published two policy reports: A Role for Policymakers in Improving the Status of Black Male Students in U.S. Higher Education and Black Male Student-Athletes and Racial

Inequities in NCAA Division I Revenue-Generating College Sports. He also won The National Association of Student Personnel Administrators Robert H. Shaffer Award for Faculty Excellence.

#### **David Hsu Selected as Fulbright Scholar**



David Hsu, Assistant Professor and Associate Chair of City and Regional Planning in the School of Design, was selected a Fulbright NEXUS Scholar to Brazil in 2012-13, where he is working with a group of energy researchers across the Americas on the energy-poverty-climate nexus. Hsu was also recently named a member of the APA's Emerging Trends National Task Force.

#### **Robert P. Inman Publishes on South Africa**



Robert P. Inman, Richard King Mellon Professor of Finance and Economics at the Wharton School, published two papers this fall: "Federal Institutions and Democratic Transition: Learning from South Africa," (with Professor Daniel Rubinfeld) in *The Journal of Law, Economics, and Organizations,* and "Understanding the Democratic Transition in South Africa," (forthcoming, with Daniel Rubinfeld) in *American Law and Economics Review.* He also

made two presentations: "Local Deficits, Local Jobs: Can States Run Their Own Stabilization Policies?" (with Gerald Carlino) at the Carnegie-NYU-Rochester Macroeconomics Policy Conference and "The Do's and Don't's of City Finances," at the National Tax Association Annual Conference.

#### John MacDonald Wins Award



John MacDonald, Chair of the Department of Criminology and Associate Professor of Criminology, won the David N. Kershaw Award from the Association for Public Policy Analysis and Management, which was established to honor individuals under forty who have made significant contributions to the field of public policy analysis and management.

#### **Randall Mason Wins Rome Prize**



Randall Mason, Associate Professor of Historic Preservation in the School of Design, was awarded the National Endowment for the Arts' 2012-13 Rome Prize. He will be researching the urban work of Gustavo Giovannoni, a pivotal figure in 20th-century conservation. Mason also received, in October 2012, a *doctor honoris cansa* degree from the University of Gothenburg in Sweden and has lectured extensively throughout the world, including in Dortmund, Oslo,

Gothenburg, Ottawa, Istanbul, and at the University of Georgia.

## Afaf I. Meleis Appointed Co-Chair of Commission on Women and Health



Afaf I. Meleis, the Margaret Bond Simon Dean of Nursing, was appointed Co-Chair of the Harvard-Penn-Lancet Commission on Women and Health. She also received the Phyllis N. Stern Distinguished Lectureship, which recognizes an internationally-renowned leader in women's health issues for their contributions to women's health and wellbeing. She recently published two papers – "Improving Women's Cardiovascular Health: A Position Statement from

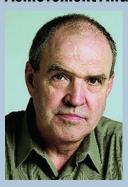
the International Council on Women's Health Issues" in *Health Care for Women International* (with P.M. Davidson, S. McGrath, M. Digiacomo, T. Dharmendra, H.V. Puzantian, M. Song, and B. Riegel) and "Empowering Expatriate Nurses: Challenges and Opportunities – A Commentary," (with C.G. Glickman) in *Nursing Outlook*. Additionally, she presented extensively on women's health.

#### **Laura Perna Awarded Presidential Fellowship**



Laura Perna, Professor at the Graduate School of Education, was awarded a Presidential Fellowship to participate in the Salzburg Global Seminar, "Optimizing Talent – Closing Education and Social Mobility Gaps Worldwide: Higher Education and Lifelong Learning." She gave the Alumni Lecture at the Rackham Centennial Celebration at the University of Michigan on "Understanding the role of public policy in improving higher education performance: Findings from a state policy review project."

#### Witold Rybczynski Wins Lifetime Achievement Award



Emeritus Professor of Urbanism Witold Rybczynski received a Lifetime Achievement Award from the Zell-Lurie Real Estate Center of the Wharton School. In September 2012 he completed his term as a member of the U.S. Commission of Fine Arts, where he served since 2004. He was a featured speaker at the Leadership on Sustainability Conference in Portland, Oregon, organized by the Design Futures Council. His article, "The Dawn

of Market Urbanism," appeared in the Summer 2012 issue of the *Wilson Quarterly*. His essay on Moshe Safdie's Crystal Bridges Museum, "A Humble Architect," appeared in the October 2012 issue of *The Walrus*, a Canadian monthly. He contributed a chapter on "Civility and Architectural Propriety," to *Civility and Democracy in America*, edited by Cornell Clayton and Richard Elgar. He has just finished a new book, *How Architecture Works*, which will be published by Farrar, Straus & Giroux in Fall 2013.

#### **Heather J. Sharkey Lectures in France**



Heather J. Sharkey, Associate Professor in the Department of Near Eastern Languages and Civilizations (NELC), is spending the 2012-13 year on sabbatical in France, giving lectures at French institutions in the fields of Middle Eastern and African history. She has been awarded a Visiting Professorship at the Institut d'études de l'islam et des sociétés du monde musulman (IISMM) of the École des Hautes Études en Sciences Sociales (EHESS) in Paris during this academic year.

#### Marilyn (Lynn) Sommers Appointed to NIH Study **Section**



Marilyn (Lynn) Sommers, the Lillian S. Brunner Professor of Medical-Surgical Nursing and Director of Penn School of Nursing's Center for Global Women's Health, has been appointed a charter member of the National Institutes of Health study section, "Health Disparities and Equity Promotion Study Section" (HDEP). She and a team from the Center for Global Women's Health were honored by U.S. Ambassador to Greece Daniel Smith for their work near

Thessaloniki, Greece, where they work with health clinics that screen women and children for a variety of health problems.

#### **Dana Tomlin's Book Reissued**



ESRI Press has recently released an allnew edition of Dana Tomlin's GIS and Cartographic Modeling. Tomlin, Professor of Landscape Architecture and Co-Director of the Cartographic Modeling Laboratory, was also invited to contribute a chapter on the Fundamentals of Geospatial Algorithm Design for a publication celebrating the 50th anniversary of the Urban and Regional Information Systems Association.

#### Susan Wachter Publishes, Speaks on **Housing Finance**



Susan Wachter delivered the keynote address at the "Maxwell Policy Research Symposium - Housing Issues in the 21st Century," for the anniversary of the Maxwell Center for Policy Research at Syracuse University. She spoke on "Keys to a Sustained Housing Recovery" at the National Press Club. Her article "Real Estate Prices in Beijing, 1644 to 1840" (co-written with Dan Raff from The Wharton School and Se Yan from Peking University) will be published in

Explorations in Economic History. The paper "Why Housing?" (with Adam Levitin) will be published in Housing Policy Debate.

#### **Barbra Man Wall Wins Best Edited Book Award**



Barbra Mann Wall, Associate Professor, Evan C. Thompson Endowed Term Chair for Excellence in Teaching in the School of Nursing and Associate Director, Barbara Bates Center for the Study of the History of Nursing, won the 2012 Mary Roberts Award for Best Edited Book: Nurses on the front lines: When disasters strike, 1878-2010 (with A.W. Keeling). She gave two talks: "How Our Past Shapes Our Future," Keynote speaker, Bon Secours Health Systems

Advance in Richmond, VA in November 2012 and "Bridging Cultural Divides: Meeting Health Care Challenges in Rural Africa, 1938-2000," American Association for the History of Nursing Conference in Savannah, GA in September 2012.

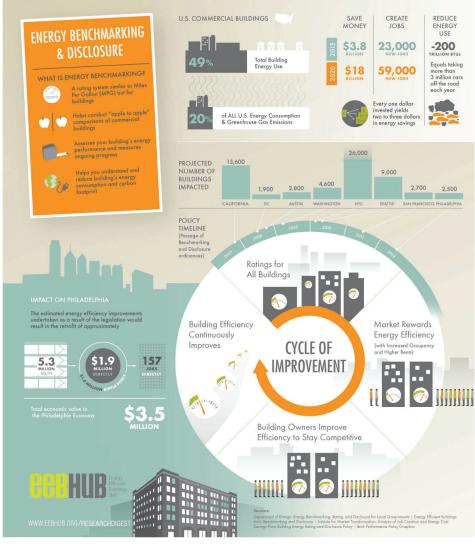
#### PENN IUR DISSEMINATES RESEARCH ON ENERGY EFFICIENCY

n late 2012, Penn IUR prepared to launch the Research Digest on Energy Efficient Buildings (EEB). Developed for the EEB Hub, the Research Digest was created to share with the public cutting-edge information on energy efficiency in buildings. The Research Digest can be found at http://www.eebhub.org/researchdigest.

The EEB Hub was established in 2011 in Philadelphia by the U.S. DOE with the dual mission of improving energy efficiency in buildings and promoting regional economic growth and job creation; because of the enormous potential for energy savings in existing small- and mid-size commercial buildings, the EEB Hub focuses especially on improving this under-served portion of the building stock. To make significant improvements in energy efficiency, the EEB Hub relies on market forces to pull investment into building retrofits. To inform the market, the EEB Hub has engaged in a strong outreach effort this includes Penn IUR's creation of the Research Digest.

Building retrofits are complicated both technically, logistically, and financially. The EEB Hub Research Digest presents these challenges clearly and concisely, highlighting the work that the EEB Hub and its partner organizations are doing to address them and providing tools that building owners, operators, tenants, investors, designers, contractors and policymakers can use.

One Research Digest research piece, produced by Penn IUR, discusses the Benchmarking and Disclosure ordinance recently passed in Philadelphia. This piece of legislation requires that owners of buildings larger than 50,000 square



**Benchmarking and Disclosure:** An infographic on the evolution of benchmarking and disclosure legislation and its potential impact onenergy efficiency in buildings.

feet report their buildings' energy and water use to the City, which then discloses that information to the public. The EEB Hub has been a vocal supporter of this legislation as it promises to improve market transparency. The Research

Digest's research piece is accompanied by an infographic that illustrates the evolution of benchmarking and disclosure legislation throughout the United States and the potential impact of this law on building energy efficiency.

#### THE CITY IN THE 21ST CENTURY

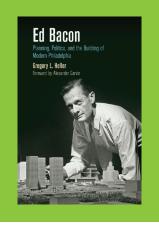
FORTHCOMING BOOKS IN THE SERIES

AVAILABLE FROM PENN PRESS AT PENNIUR. UPENN. EDU/PUBLICATIONS

**Policy, Planning, and People: Promoting Justice in Urban Development** Naomi Carmon and Susan S. Fainstein, Editors

Locked In, Locked Out: Gated Communities in a Puerto Rican City Zaire Zenit Dinzey-Flores

Ed Bacon: Planning, Politics, and the Building of Modern Philadelphia Gregory L. Heller. Foreword by Alexander Garvin



#### PENN IUR INTRODUCES URBAN LINK, A MONTHLY DIGEST OF NEWS & EVENTS

In Nov. 2012, the Penn Institute for Urban research launched *Urban Link*, a monthly electronic digest that features expert commentary on urban topics and highlights Penn IUR's news and events in the context of pressing urban issues.

The first issue featured an editorial about urban recovery in the wake of Hurricane Sandy, written by Penn IUR Co-Directors Eugenie Birch and Susan Wachter, editors of Rebuilding Urban Places After Disaster, Lessons from Katrina. The December issue featured a story on the new Barnes Foundation, co-

written by David Brownlee, Penn IUR Faculty Fellow and author of *The Barnes Foundation: Two Buildings One Mission*, and Greg Scruggs, a Penn IUR Research Associate. Future issues will offer commentary and perspectives from urban experts, including many of Penn IUR's Faculty Fellows, on a range of timely urban topics.

Urban Link offers readers insight into the deep and varied urban knowledge of Penn IUR's Faculty Fellows and associated scholars, and will provide a forum for experts to reflect on topics affecting today's cities. Urban Link will also capture and disseminate Penn IUR's work by giving readers a glimpse of recent events – often through video – as well as news of Penn IUR's newest books, research, and projects. And, of course, each issue provides readers with information about Penn IUR's upcoming and future events.

To read recent issues of *Urban Link*, visit the archive at http://www.penniur.upenn.edu/news/Urban+Link. To receive *Urban Link* in your inbox, sign up at http://www.penniur.upenn.edu/mailinglist. If you have any questions about the publication, please contact Deborah Lang at dlang@upenn.edu.

#### PENN IUR LAUNCHES URBAN RESEARCH EJOURNAL

CONTINUED FROM PAGE 1

Department of History, University of Pennsylvania; Catherine L. Ross, Harry West Professor of City and Regional Planning, Georgia Institute of Technology; Saskia Sassen, Robert S. Lynd Professor of Sociology, Department of Sociology, Columbia University; Michael H. Schill, Dean and Harry N. Wyatt Professor of Law, University of Chicago Law School; and Anthony Yeh, Dean of the Graduate School, University of Hong Kong Graduate School.

The eJournal serves as a single point of access for the growing literature in urban research, assembling urban-focused papers across numerous disciplines, including economics, history, planning, political science, and sociology. Penn IUR welcomes submissions to the eJournal.

Launched on Oct. 10, 2012, the *Urban Research eJournal* has approximately 900 subscribers.

SSRN, the premier open access repository for social science re-

search, is a website dedicated to early and rapid dissemination of social science research.

To subscribe, visit http://hq.ssrn.com/jourInvite.cfm?link=Urban-Research. If you are not already an SSRN member, you will be prompted to create an account. As a member with a subscription to Penn IUR's *Urban Research eJournal*, you will receive a new electronic issue each week, comprising approximately five papers.

# 2013 PENN IUR UURC TEAMS

The Undergraduate Urban Research Colloquium (UURC) is an advanced research seminar for undergraduates working on urban-focused research. Students team up with a faculty mentor with expertise in their areas of interest. Students and faculty pairs come from academic departments throughout the University.

Alexandra Bendheim, Urban Studies Dr. Eugenie Birch, PennDesign Smart City Initiatives

Alyssa Bonnell, Public Health and Biology Dr. Carolyn Cannuscio, School of Medicine

Evaluation of the ArtWell Education Program

Jenny Chen, Economics
Dr. Domenic Vitiello, PennDesign
Urban Agriculture and Community
Gardening in Chicago

Kelsey Liburd, Nursing
Dr. Bridgette Brawner, Nursing
A Spatially-Based Approach To
Understanding HIV/AIDS in Urban
Environments

Ellie Sun, Religious Studies Dr. Shahana Chattaraj, Wharton Informal Housing and Real Estate Markets in Mumbai

Juan Visser, Urban Studies
Dr. Andrew Mondschein,
PennDesign
Transit Oriented Development in
the Washington Metro Area

Taryn Williams, Urban Studies Dr. Eric Schneider, Arts and Sciences Homicide in Philadelphia in 2012

#### PENN IUR SHAPES DISCUSSION OF THE FUTURE OF U.S. HOUSING FINANCE

CONTINUED FROM PAGE 1

Housing Finance Working Group sought feedback on their draft report on proposed reforms to the multifamily housing system.

The roundtable was co-organized by Penn IUR, The Bipartisan Policy Center, and The Wharton School. Nic Retsinas, Co-Chair of the BPC Housing Commission and Director Emeritus of Harvard University's Joint Center for Housing Studies, and Susan Wachter, Wharton Professor and Penn IUR Co-Director, led the roundtable. Participants included representatives from Fannie Mae, Freddie Mac, the Federal Housing Finance Agency, the U.S. Treasury Department, the Consumer Federation of America, CW Capital, the Mortgage Bankers Association, and the PNC Financial Services Group.

Discussion focused on reforming the multifamily housing finance system, which provides two-third's of the nation's rental units. Given the current state of the housing market, interest in the rental market is high. The demand for rental units is strong and expected to continue growing, leading to an increase in the construction of multifamily units. In the aftermath of the housing finance crisis, most multifamily housing finance comes from Fannie Mae and Freddie Mac. Roundtable participants discussed the appropriate role for the federal government in the multifamily housing finance system.

On Oct. 25, U.S. Senator from Georgia Johnny Isakson, along with a panel of experts, took part in a discussion, moderated by Susan Wachter, on the U.S. Housing System and the possibility of consensus in Washington for housing system reform. Co-organized by Penn IUR, the Institute for Law and Economics, the Wharton School, and Next American City, this panel discussion was open to the public and attended by approximately 150 Penn students and faculty as well as interested parties from outside the university.

Senator Isakson, who previously worked in real estate, has been closely involved in federal housing policy since joining the Senate. He discussed the importance of attracting more people to the housing market, emphasizing that failure to do so will have "a significant impact on the U.S. economy for decades to come."

"My message today is that we've had a serious problem," said Isakson. "We have worked our way out of the problem to a point where we have equilibrium in the housing market but not a robust competition. Values in many areas are depressed and that's only going to get solved by attracting more people to the marketplace."

Senator Isakson's remarks were followed by a panel discussion that included panelists from government and the private sector: Michael Berman, former Chairman, Mortgage Bankers Association; Philip Swagel, former Assistant Secretary for Economic Policy (2006-09), U.S. Department of the Treasury; and Barry Zigas, Director of Housing Policy, Consumer Federation of America. The panel discussed the appropriate roles government regulation and private capital can play in reinvigorating the housing market and outlined key points of consensus and disagreement.

Overall, participants in the panel and audience members who participated in the question and answer period afterward showed cautious optimism about the possibility of Congress passing legislation to rebuild a stronger housing finance system - one that would ensure sustainable access to capital and that would win broad support from both industry groups and consumer advocates.

These two events are part of an ongoing Penn IUR series whose goal it is to contribute to the national discussion about the future of the U.S. housing system. You can find video of the Oct. 25 event on the Penn IUR website http://penniur.upenn. edu/news/2012/11/10/georgia-senatorjohnny-isakson-discusses-the-nation-shousing-future.

### MAY 8, 2013 BUILDING ENERGY EFFICIENCY: FINDING STRATEGIES THAT WORK

This one-day conference focuses on innovations in energy efficiency and how strategic environmental management and city planning will help frame future and urban economic growth. It is hosted by Initiative for Environmental Leadership (IGEL), Penn Institute for Urban Research (Penn IUR, Wharton Geospatial Initiative and Laboratory (GIS Lab), Wharton Risk Management and Decision Processes Center, and the Wharton Small Business Development Center (SBDC), in partnership with the Energy Efficiency Building (EEB) Hub.

SAP HEADQUARTERS, NEWTON SQUARE, PA | 8:30AM - 7:30PM

#### MUSA'S PENN GIS DAY ATTRACTS INTEREST OF NATIONAL GEOSPATIAL LEADERS

Penn Design's Master of Spatial Analytics (MUSA) program regularly hosts outside practitioners in geospatial fields for lectures, brownbag lunches, GIS days, and other events. As in past years, Fall 2012 events attracted national leaders in the field, a testament to the growing clout of the MUSA program. A highlight of the semester included a brownbag lunch at which Oak Ridge Laboratory's Lead Researcher Eddie Bright spoke.

Jointly administered by Penn IUR and Penn Design's City Planning Department, the one-year MUSA program combines top-tier instruction in GIS and spatial modeling with an area of concentration in an urban-focused discipline of the student's choosing. The unique combination allows individuals with a passion for a variety of urban issues to explore the complexity of urban systems through GIS and associated analytical techniques.

On Wednesday, Oct. 3, Penn IUR and MUSA brought Eddie Bright, lead researcher in Oak Ridge National Laboratory's LandScan Population Distribution Program, to speak at the first Brown Bag Lunch of the 2012-13 academic year. LandScan uses a wealth of GIS data – including census data, traffic volumes, and employment statistics –

in concert with remote sensing techniques to generate estimates of population density. Unlike traditional approaches to estimating population density, which focus on permanent residence, LandScan generates twenty-four-hour models that account for population movement throughout the day, allowing Bright and his team to estimate both nighttime and daytime population density for a geographic area.

If you missed GIS Day, you can find videos on the Penn IUR website: http://penniur.upenn.edu/news/2012/12/12/video-google-s-michael-t-jones-talks-maps-and-gis.

#### **MUSA EVENT WITH OAK RIDGE LEAD RESEARCHER**

ov. 14 marked the second annual Penn GIS Day hosted by Penn IUR and Penn Design's Master of Spatial Analytics (MUSA) program. This year's event drew 200 attendees – making it Penn's largest GIS Day to date. The event coincided with National GIS Day (an initiative organized by ESRI, the developer of ArcGIS, to raise awareness of the power of GIS to address environmental, social, and economic questions).

Michael T. Jones, Chief Technology Ambassador at Google, was the keynote speaker. Jones – part of the team that developed the technology behind Google Earth – has been instrumental in bringing map-making into the twenty-first century: making maps fully interactive and growing their capacity to provide live data on traffic, weather, and other user-relevant information. He is now involved in Google's groundbreaking work to develop technology that provides users with information about their surroundings. Powered by smart phones' built-in location intelligence, "Field Trip" and other apps allow users to interact with digital maps on real-world scale, alerting users based on their locations about nearby historical and cultural attractions as well as shopping and dining opportunities.

Fall 2012 Penn GIS Day also featured presentations by Penn Design Professor Dana Tomlin on developing geospatial algorithms; City and Regional Planning doctoral fellow Ken Steif on his research on price premiums for housing in the catchment area for the Penn Alexander School in West Philadelphia; Penn Professor Amy Hillier on research addressing supermarket access; and Paul Amos, Managing Director of Wharton GIS Lab, and Christine Murray, the Social Sciences Data Librarian in Penn's Van Pelt Library, on GIS resources available through Penn. The event ended with a career panel, moderated by City Planning Professor John Landis, including panelists Guy Thigpen, Assistant Director of the Philadelphia Redevelopment Authority; Pravin Mathur, GIS Asset Manager for the City of Richmond; and Bradley Songer, Account Executive at ESRI.

#### **SSF WEBINAR SERIES**

s a core member of the Security and Sustainability Forum's (SSF's) "urbanization learning partnership," The Penn Institute for Urban Research is leading the University of Pennsylvania's contribution to the ongoing five-part SSF *Urbanization in a Growing World* webinar series.

Eugénie Birch and Susan Wachter, Co-Directors of Penn IUR, took part on June 28, 2012 in the series' inaugural webinar, *Urbanization and Growth* on a Finite Planet, providing a critical overview of urban food security, infrastructure development, finance, and governance in the twenty-first century. Alan Kelly, Penn IUR Faculty Fellow and Dean Emeritus of Penn's School of Veterinary Medicine, presented on Sept. 6, 2012 as part of the series' second installment, Food Security in an Urbanizing World. Most recently, Birch outlined trends in sustainable urban planning and energy infrastructure in the Growing Urban Infrastructure with a Shrinking Footprint session in Oct. 2012.

The Security and Sustainability Forum is a public interest educational

organization that convenes global experts and hosts free events to address threats to society from climate and other disruptions to natural systems. In addition to Penn IUR and its affiliates, the *Urbanization in a Growing World* series featured speakers from Abt Associates, The World Bank, and the International Housing Coalition, among others.

Information on the final two webinars, as well as a video archive of all presentations, are available free on the SSF website: http://securityandsustainabilityforum.org/.

#### PENN IUR SCREENS THREE FILMS ON URBAN ISSUES

n Fall 2012, Penn IUR provided the Penn community with the opportunity to see three films on topics of import to urban America: Overdraft, on the national debt; This Space Available, on commercial messages in public space; and Envisioning Home, on public housing. A discussion session following each screening generated conversation and debate on the issues raised.

On Oct. 8, 2012 Penn IUR, in partnership with Wharton and The Travelers Institute, a think tank founded by Travelers Insurance Company, presented Overdraft, a documentary about the national debt crisis. The PBS documentary, which is being screened at more than twenty colleges nationwide starting with Penn, provides an overview of how the housing crisis, the resulting economic downturn, and unchecked government spending have contributed to the national debt. The film raises awareness about our national debt and aims to inspire citizens, particularly students, to understand and address this critical issue.

Penn President Amy Gutman and Chairman and Chief Executive Officer of Travelers Companies Jay Fishman spoke before the screening, emphasizing the importance of political compromise on this divisive issue. Following the film, Wharton's William and Jacalyn Egan Professor of Management Michael Useem, who also directs Wharton's Center for Leadership and Change Management, moderated a panel discussion.

On Nov. 19, Penn IUR, with the Center for Public Health Initiatives and the Leonard Davis Institute of Health Economics, hosted a screening of This Space Available, followed by a discussion with Executive Producer Marc Gobé. Amy Hillier, Assistant Professor in City and Regional Planning, PennDesign, introduced the film, which examines the dominance of billboards and commercial messages in public space and tells the stories of people around the world fighting to reclaim these spaces. This Space Available questions the influence of the built environment and media messaging on the dignity of cities and the wellbeing of individuals.

On Dec. 7, Penn IUR, in partnership with Next American City, presented Envisioning Home: The Jean King and Richard Baron Story, a documentary about American public housing. The film focuses on the relationship between Jean King and Richard Baron, two unlikely partners whose decades-long relationship began in the Fall of 1968 preceding the St. Louis public housing rent strikes. The film traces the history of public housing in the United States from the infamous Pruitt-Igoe development in St. Louis to more recent projects conducted by Richard Baron's development firm, McCormack Baron Salazar, in cities across the country. Several national housing figures, including former Housing and Urban Development (HUD) Secretary Henry Cisneros, weigh in as well.

The screening was followed by a question and answer session with Jean King, Richard Baron, and filmmaker Daniel Blake Smith, which was moderated by Penn IUR Co-Director Eugénie Birch. The audience, including many members of the city planning community at Penn, engaged the panelists on issues ranging from public housing density to federal funding programs in public housing to the impact of public housing reform on other issues such as education and crime. As at the other screenings, the conversations sparked during the discussion following the screening continued after the event.







Generating Debate: Above, after the screening of Overdraft, a panel of experts discussed the film. From left to right: Michael Useem, William and Jacalyn Egan Professor of Management at Wharton, Editor of Wharton Leadership Digest, and Director of the Center for Leadership and Change Management; Richard Marston, James R.F. Guy Professor of Finance at Wharton; Jay Fishman, Chairman and CEO The Travelers Companies; Jeremy Siegel, Russell E. Palmer Professor of Finance at Wharton; and Kent Smetters, Boettner Professor of Business Economics and Public Policy at Wharton. Photo credit: Shira Yudkoff. Top eft, still from This Space Available. Left bottom, still from Envisioning Home: The Jean King and Richard Baron Story.



An international conference examining the critical relationship between urbanization and food security throughout the world.

WITH A SPECIAL EXHIBITION
WITH A SPECIAL EXHIBITION
PARESENTED BY PENNIUR
EXHIBITION
PARESENTED BY PENNIUR
EXHIBITION

WHAT DOES FOOD SECURITY LOOK LIKE?



#### **About Penn IUR**

Comprehensive in scope and integrative in practice, the Penn Institute for Urban Research (Penn IUR) is dedicated to fostering understanding of cities and developing new knowledge vital to charting the course of local, national and international urbanization. Drawing on the University's unique strengths, Penn IUR addresses the many challenges, opportunities and creative possibilities of urban life and has a special focus on developing knowledge in two critical areas: the sustainable 21st-century city and anchor institutions in urban development.

#### **Penn IUR Directors & Staff**

Eugénie L. Birch Co-Director;
Lawrence C. Nussdorf Professor
of Urban Research and Education,
Department of City & Regional
Planning, School of Design
Susan M. Wachter Co-Director;
Richard B. Worley Professor of Financial
Management; Professor of Real Estate
and Finance, The Wharton School
Amy Montgomery Associate Director
Alon Abramson Project Manager
Cameron Anglum Program Coordinator
Cara Griffin Editor, Publications Manager
Alexander Keating Project Manager
Deb Lang Communications Manager

#### **Contact Information**

G-12 Meyerson Hall
210 South 34th Street
University of Pennsylvania
Philadelphia, PA 19104-6311
phone 215.573.8386
fax 215.898.5731
penniur@pobox.upenn.edu
www.penniur.upenn.edu
www.facebook.com/penniur.upenn
www.twitter.com/penniur
www.linkedin.com/groups/PennInstitute-Urban-Research-3919080
www.vimeo.com/penniur
www.slideshare.net/pennurbanresearch

#### **Penn IUR Executive Committee**

Chair: Vincent Price, Provost Rebecca Bushnell, Dean, School of Arts & Sciences

Jeffrey Cooper, Vice President, Government & Community Affairs Dennis Culhane, Professor, School of Social Policy & Practice

**John DiIulio**, Professor, School of Arts & Sciences

Michael Fitts, Dean, School of Law Richard J. Gelles, Dean, School of

Social Policy & Practice

Michael Gibbons, Deputy Dean, The Wharton School

**Joseph Gyourko**, Professor, The Wharton School

Michael Katz, Professor, School of

Arts & Sciences

**Shiriki Kumanyika**, Professor, School of Medicine

**Janice Madden**, Professor, School of Arts & Sciences

**Afaf I. Meleis**, Dean, School of Nursing

**Andrew Porter**, Dean, Graduate School of Education

**Thomas J. Sugrue**, Professor, School of Arts & Sciences

Marilyn Jordan Taylor, Dean, School of Design

**David Thornburgh**, Executive Director, Fels Institute of Governmet

#### **Penn IUR Advisory Board**

**Chair: Egbert Perry** The Integral Group, LLC

**Susan Block Casdin** Hassenfeld Center, New York University

Patrick Brett Citigroup

**Manuel A. Diaz** former Mayor, City of Miami, Florida

Paul Farmer American Planning

Association

Michael Glosserman The JBG

Companies

Andrew Halvorsen Private Investor Evan Heller Private Real Estate Investor & Advisor

Virginia Hepner Woodruff Arts Center

J. Robert Hillier J. Robert Hillier John T. Livingston AECOM and Tishman Construction

Kelly Kennedy Mack Corcoran Sunshine Marketing Group

Marc H. Morial, Esq. National Urban League

Lawrence C. Nussdorf, Esq. Clark Enterprises, Inc.

Philip Pilevsky Philips International

**Preston D. Pinkett III** City National Bank of New Jersey

**Richard P. Richman** The Richman Group, Inc.

Mark Rosenberg MHR Fund Management LLC

**Molly Rouse-Terlevich,** Community Volunteer and Political Fundraiser

**Alan D. Schnitzer** The Travelers Companies, Inc.

Michael Tabb Red Rock Global John Timoney Law Enforcement Advisor