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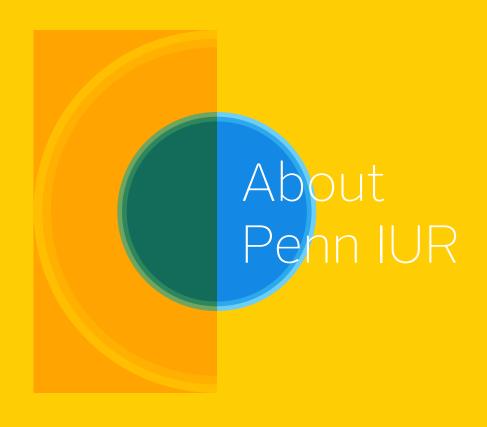
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Penn IUR is a university-wide body that informs decision-making and public policy on issues of sustainable urban growth and development based on multi-disciplinary research, instruction, and outreach.

As the global population becomes increasingly urban, understanding cities is vital to informed decision-making and public policy implementation at the local, national, and international levels. Affiliated with all 12 schools of the University of Pennsylvania and with the world of practice, Penn IUR fosters collaboration

among scholars and policymakers across disciplines to address the needs of an increasingly urbanized society. By providing a forum for collaborative scholarship and instruction at Penn and beyond, Penn IUR stimulates research and engages with urban practitioners and policymakers to inform urban policy.

This annual report details Penn IUR's accomplishments from July 2016 through June 2017 and looks ahead to future initiatives.



## A MESSAGE FROM

The Provost & Vice Provost for Research

The Penn Institute for Urban Research generates powerful new knowledge that makes a tangible impact on urban environments around the world. In doing so, it exemplifies the University's core values of inclusion, innovation, and impact.







Vice Provost for Research; Henry Robinson Towne Professor of Engineering and Applied Science, School of Engineering and Applied Science



As inequality grows more extreme, the world warms, and demographics and technology evolve, it becomes ever more difficult to improve cities for everyone. These complicated and intertwined dynamics require collaborations across multiple disciplines. By working with all 12 schools at the University, Penn IUR creates the networks and connections essential to addressing these challenges. For example, this year's event "Media, Communication, and the City" featured an interdisciplinary discussion among three Penn deans, representing Communication, Design, and Social Policy & Practice.

Penn IUR also works closely with other university-wide hubs to generate knowledge and connections: for example, this year's collaboration with Perry World House in support of its inaugural research theme, "Global Shifts: Migration, Urbanization, and Demography." Its essential mission of disseminating knowledge takes many forms—from books, journal articles, briefs, and special reports to digital forums and electronic publications—and expands into dozens of public events and expert symposia, including this year's hosting of an exhibit at Habitat III, the United Nations Conference on Housing and Sustainable Urban Development in Quito, Ecuador.

Penn IUR also offers critical support for the work of urban-focused faculty and students. The Penn IUR Faculty Fellows network and Humanities+Urbanism+Design Initiative create hubs for cross-

disciplinary conversations. The Undergraduate Urban Research Colloquium and Master of Urban Spatial Analytics, along with numerous opportunities for Ph.D. students to network and present their research, help train the next generations of urban scholars and practitioners.

In all these ways and many more, Penn IUR forms a vital part of the University's commitment to inclusion, innovation, and impact. We congratulate Penn IUR on its accomplishments in 2016–2017 and look forward to another highly productive year ahead.

## A MESSAGE FROM

Penn IUR's Co-Directors & Advisory Board Chair

Over the 2016–2017 academic year, Penn IUR has strengthened its ongoing commitment to inform issues of critical importance to cities. The research initiatives you will read about in this report apply cutting-edge scholarship to real-world practice to advance sustainable and inclusive urban living.





Co-Director, Penn Institute for Urban Research, Lawrence C. Nussdorf Professor of Urban Research and Education, Department of City and Regional Planning, School of Design



## SUSAN WACHTER

Co-Director, Penn Institute for Urban Research Sussman Professor, Professor of Real Estate and Finance, The Wharton Schoo



## **EGBERT PERRY**

Advisory Board Chair, Penn Institute for Urban Research, Chairman and CEO, The Integral Group, LLC





From the Land for Public Good in Emerging Economies Initiative, which looks at the rapid urbanization challenges of the developing world, to the Innovation and Entrepreneurship in Higher Education Initiative, which examines the potential for university-led innovation, to Transforming Our Economies for Opportunity, which addresses how to build shared prosperity, we are examining broad policy as well as implementation.

To further foster urban practice and policy formation, Penn IUR brings together experts at Penn and around the world to exchange ideas and move forward on a host of wide-ranging urban issues. Through Penn IUR's Expert Roundtable series, thought-leaders this year have tackled such topics as community building post-disaster, innovations in remote sensing for resilience and sustainability, pensions and urban fiscal stability, and urbanization in China and Indonesia. Through Penn IUR's annual Urban Leadership Forum, we honored internationally renowned experts who are making cities inclusive and accessible. Through a unique lecture series, we provided rare insight into the life of a transformative mayor. In addition, Penn IUR has hosted 30 public lectures and panel discussions over the year exploring subjects as varied as city dynamics ranging from innovations in data and governance, rising sea levels and resiliency, the role of the new United Nation's Sustainable Development Goals (SDGs), reforming the U.S. mortgage market, and climate change and forced migration.

To reach wide and diverse audiences and aid those making an impact across the globe, Penn IUR publishes research in long and short form, in scholarly journals and in popular pieces, and in print and digitally. To personally introduce those engaged in global sustainable urban development, Penn IUR traveled to Habitat III in Quito, Ecuador and mounted an exhibit of current research from Penn.

Behind all of the efforts highlighted in this report is the vibrant and energetic network of people who make up Penn IUR—from Penn IUR's pathbreaking Faculty Fellows and Scholars and Penn's knowledgehungry students to Penn IUR's supportive and knowledgeable consultative boards and generous donors. They make this work possible through their collaborative spirit, substantive contributions, and support of interdisciplinary urban research and solutions.

We look back at the past year with great appreciation for the contributions of our many associates and look forward to laying new ground with old and new partners.



## Land for Public Good in Emerging Economies

In many regions of the world, rapid urbanization has resulted in costly unplanned development characterized by the uncontrolled spread of crowded informal settlements in ecologically vulnerable areas. These places often lack access to basic infrastructure (transportation, electricity, water, sewage), urban services (education, health), and public space (parks and space for community facilities such as schools and health care centers).

These conditions have resulted in part from the failure of national governments to define appropriate spheres of activity for each level of government in urban development and to provide the enabling framework that properly distributes responsibilities. Additionally, many national governments have not planned for national infrastructure construction or for ecosystem protection.

Penn IUR's Land for Public Good in Emerging Economies Initiative addresses this problem, wrestling with the complex governing, planning, and financing issues related to land use in rapidly urbanizing areas. The project explores methods of creating large, orderly, well-serviced land for anticipated urban development and for upgrading existing informal settlements. To this end, Penn IUR is identifying and evaluating governmental, regulatory, and financing structures that promote efficient and equitable urban development techniques in the face of rapid urbanization.

In 2016–2017, Penn IUR advanced this work by launching a project entitled Renewable Energy, Nutrition, Environment, Water, and Waste (RENEWW) Innovation Zones in Rapidly Urbanizing Places,

in partnership with the U.S. Department of State, the National Renewable Energy Laboratory, Context Partners, Future Earth, World Resources Institute, The City of Oakland, Texas A&M University, Stanford University, MIT, and others. With Penn IUR serving as the secretariat, this alliance conceptualizes a "RENEWW Zone" as a decentralized, closed-loop, multipurpose model for recycling waste and water, while producing energy and food within a designated area within or contiguous to a slum.

To stimulate the adoption of RENEWW Zones, Penn IUR and partners are developing an Urban Prosperity Prize competition. Currently, the alliance is in the process of growing the public–private coalition to launch and run the competition, which will catalyze the development of one to three pilot RENEWW Zones in geographically, environmentally, and sociologically diverse informal settlements by 2020. By working with UN Habitat, the alliance will ensure that each winning team and host city will receive the financial and governmental commitments necessary build the RENEWW Zone. The Ford Foundation hosted the RENEWW project's kick-off meeting on March 31, 2017.

Beyond the RENEWW project, Penn IUR furthered work on the Land for Public Good in Emerging Economies Initiative through engagement with a broad variety of stakeholders at Habitat III. Through an exhibition and speaker series, Penn IUR brought University of Pennsylvania research to an audience keenly interested in this topic. The exhibition featured a section on the Land for Public Good in Emerging Economies Initiative, synopses of research relevant



Penn IUR's Land for Public Good in Emerging Economies Initiative wrestles with the complex governing, planning, and financing issues related to land use in rapidly urbanizing areas.

to issues of rapid urbanization, and hosted a well-attended talk by David Gouverneur, Associate Professor of Practice, on planning for rapid urban development. (For more information on the Habitat III exhibition, see page 31.)

A third, recently launched prong of this initiative is Penn IUR's participation as a partner in the GEO Human Planet Initiative: Spatial Modeling of Impact, Exposure and Access to Resources, led by the EU's Joint Research Center. This partnership is forwarding the use of the recently launched Global Human Settlements Layer, an open source remote sensing tool that links real-time built environment and population data, to monitor the spatial dimensions of urban development worldwide. Penn IUR Co-Director Eugénie Birch with Penn IUR Affiliated Doctoral Student Chandan Dueskar and Penn IUR Faculty Fellow Kenneth Steif, Program Director, Master of Urban Spatial Analytics, School of Design tested its application in measuring the sprawl indicator to be used in monitoring the planning target of Goal 11 ("Make cities and human settlements inclusive, safe, resilient and sustainable") in the UN's 2030 Agenda for Sustainable Development whose results are published in *The Atlas of the Human* Planet 2016. Birch chairs the GEO Human Planet Initiative's Working Group on New Global Settlement Data and Civil Society.



## For more information, visit: ghsl.jrc.ec.europa.eu/atlas2017Overview.php

Additionally, Penn IUR Co-Director Susan Wachter took part in two workshops related to this initiative: a conference entitled "The Rise of the City in China," held at the Penn Wharton China Center, Beijing on November 4, 2016, and a symposium entitled "Urbanization, Urban Housing, and Housing Finance in Indonesia: Lessons Learned and Critical Thoughts to Move Forward" held in Jakarta on November 7, 2016. The conference in Beijing focused on new design and financing mechanisms for urban development in China; the symposium in Jakarta addressed the housing opportunities and challenges presented by urbanization in Indonesia, a country experiencing the fastest rate of urbanization in Asia. (For more on these events, see pages 54–55.)

Advisory Board member Robert Stewart (W '88) has provided support for this initiative. This initiative is enriched by Penn IUR's partnership with Perry World House on its inaugural research theme "Global Shifts: Urbanization, Migration, and Demography," which is led by PWH Director and Penn IUR Faculty Fellow William Burke-White and Program Manager Katelyn Leader. (See page 55 for more on this partnership.)





FAR LEFT: Shanghai, China.

LEFT: This year, Penn IUR launched Renewable Energy, Nutrition, Environment, Water, and Waste (RENEWW) Innovation Zones in Rapidly Urbanizing Places.





## Urban Fiscal Stability and Sustainability Going Forward

Penn IUR is committed to promoting fiscally responsible and sustainable urban economies. In 2016–2017, Penn IUR's work on this topic centered around the looming problem of underfunded state and local pensions, which undermines the fiscal solvency of a number of the nation's subnational governments. Through its publications and convenings, Penn IUR has emerged as an important contributor to the dialogue on this topic. Over the past year, Penn IUR continued its leadership role by convening public and private officials, scholars, and researchers for public convenings as well as high-level roundtables.

On November 10, 2016, Penn IUR hosted the symposium "Public Pensions and City Solvency," which featured two panel discussions with experts from academia, industry, and government and a talk by Richard Ravitch, former Lieutenant Governor, State of New York. The event served as the book launch for *Public Pensions and City Solvency* (University of Pennsylvania Press, 2016) edited by Susan Wachter. (See page 66 for more on this event.)

In the spring of 2017, Penn IUR launched the next stage of its investigation into the underfunded pensions problem by organizing a series of exploratory roundtables in New York City. These meetings are scoping the current state of the issues and designing future work that links scholars and cutting edge research to industry experts and policy makers. (See page 54 for details on these meetings and Looking Ahead, page 100, for more on this project going forward.)

These efforts are part of a multi-year initiative to investigate urban fiscal sustainability, made possible with support from Penn IUR Advisory Board member Lawrence Nussdorf (W '68).

## Transforming Our Economies for Opportunity

Economic inequality in the United States has been growing and, with it, the geographic segregation between places with more economic opportunities and those with fewer. In 2016–2017, Penn IUR undertook research on initiatives to transform urban economies in order to better achieve inclusive growth through its ongoing partnership with the Federal Reserve Bank of Philadelphia (Philadelphia Fed). Penn IUR developed the research component of the Philadelphia Fed's biennial conference on the topic and co-edited a research volume jointly with the Fed.

Under the leadership of Penn IUR Co-Director Susan Wachter, Penn IUR drew together preeminent thinkers on this subject who presented at the Philadelphia Fed conference, held in September 2016, "Reinventing Our Communities: Transforming Our Economies." (See page 61 for more on the conference.) Additionally, Penn IUR worked with the Philadelphia Fed to develop a series of Penn IUR / Federal Reserve Bank of Philadelphia working papers, later published in a special issue of the journal *Cityscape*. (See page 29 for details on the publication and page 42 for an excerpt from *Cityscape*.)

## Housing Affordability and Financing Systems

Penn IUR promotes scholarship and discussion related to housing affordability and housing finance systems both in the United States and abroad. In 2016–2017, Penn IUR published a book and organized multiple public events on the topic of America's housing finance system and participated at a high level in an international conference on housing.

The Federal Reserve Bank of New York is a key partner with Penn IUR in investigations into America's housing finance system. *Principles of Housing Finance Reform* (University of Pennsylvania Press, 2016), edited by Penn IUR Co-Director Susan Wachter and Joseph Tracy, Executive Vice President and Special Adviser to the President of the Federal Reserve Bank of New York, and published by Penn Press in the Penn IUR / Penn Press The City in the 21st Century book series, offers a framework for modernizing the America's housing finance system. (For more on this book, see page 20.)

On April 10, 2017, Penn IUR sponsored a book launch for *Principles of Housing Finance Reform* entitled "The U.S. Mortgage Market: What Does the Future Hold for Credit Risk and Access?" This event featured a public panel discussion with leading experts on the nation's mortgage system, including Barry Zigas, Director of Housing, Consumer Federation of America; Greg Boester, Managing Director, JPMorgan; Gerron Levi, Director of Policy and Government Affairs, National Community Reinvestment Coalition; Peter Carroll, Executive Vice President, Mortgage Policy and Counterparty Relations, Quicken Loans. Penn IUR Co-Director Susan Wachter moderated the discussion.

On April 27 and 28, Penn IUR, the Federal Reserve Bank of New York, and others cosponsored the "Workshop on the Appropriate Government Role in U.S. Mortgage Markets." This event featured talks by Ed DeMarco, Milken Institute, who spoke on "Housing Finance Reform: Agreement Trumps Disagreement" and Robert Shiller, Yale University, who gave a talk entitled "Narrative Economics and the Housing Market." Eight panel discussions covered topics including financial stability and mortgage markets, government credit pricing, the role of private capital, secondary mortgage markets, mortgage finance innovations and government's role, mortgage market interventions and economic growth, the role of government in supporting affordable housing, and mortgage access and sustainable economic activity.



LEFT: The Cityscape papers highlighted strategies to create places of opportunity, including developing the local workforce for a global marketplace and providing wealth and opportunity inclusively to all segments of the population.



## Innovation and Entrepreneurship in Higher Education

Innovation and entrepreneurship are the engines of prosperity in the 21st century economy, with colleges and universities playing a lead role in creating the networks and environments that engender such dynamism. Recognizing this, the Connecticut legislature initiated a \$10 million fund to support collaborative work in facilitating entrepreneurship and innovation among the state's institutions of higher education to be managed by CTNext, the state agency that fosters growth in startup and early-stage businesses and links startups to promote greater business activity. The legislature mandated the development of a strategic plan to guide the dispersal of funds. At the inaugural meeting of the state's 38 college and university presidents hosted by Peter Salovey, President, Yale University, the leaders created the Working Group on Entrepreneurship and Innovation chaired by Joanne Berger-Sweeney, President, Trinity College, and Mark Ojakian, President, Connecticut State College and University System, to undertake the plan.

Subsequently, the Working Group, familiar with Penn IUR's work on anchor institutions and innovation, retained Penn IUR to assist in the plan's development. Between December 2016 and April 2017, Penn IUR's Co-Director Eugénie Birch and Project Manager Amanda Lloyd led this project, interviewing administrators and faculty at more than 20 universities around the state to discuss their programs, initiatives, and goals for supporting entrepreneurship and innovation at their institutions. Concurrently, Birch moderated four Working Group meetings to assess the scope and scale of programs, opportunities, and risks; examine higher education's collective capacity to catalyze a thriving innovative economy and incubate an entrepreneurial workforce across the state; establish a strategic roadmap to promote collaboration and cooperation among the state's colleges and universities; and identify funding priorities for state-funded higher education entrepreneurship grants. Penn IUR drafted the Working Group's plan, Entrepreneurship & Innovation in Connecticut's

Higher Education System: A Catalytic Roadmap for Higher Education Collaboration. (To read an excerpt of the plan, see page 40.)

The plan assesses the state's current assets and opportunities in relation to innovation and entrepreneurship in higher education, offers a set of recommendations to strengthen the innovation ecosystem across its colleges and universities and lists criteria for evaluating grant applications. It calls for continued support for building the networks and relationships that emerged during the planning process, the creation of regional hubs to share educational, mentoring, legal, and business advice for start-ups, and the development of a state resource portal. Sweeney, Ojakian, and Birch presented the plan to the CTNext board that is currently implementing it.





ABOVE: The final report includes an assessment of the state's current assets and opportunities in relation to innovation and entrepreneurship in higher education as well as a plan to strengthen the innovation ecosystem across its colleges and universities.





ESCI Best Practices awards were given for projects in each of the ESCI-KSP's five content areas, such as awards for Japan's Panahome Smart City development in Shioashiya (ABOVE; photo by Peellden, via Wikipedia) and Chinese Taipei's innovative use of information and communication technology (LEFT; photo by PanaHome Corporation).

## Supporting Sustainable Energy Across the Asia Pacific

In 2016–2017, Penn IUR continued to promote the adoption of energy efficient technologies and practices across the Asia Pacific by facilitating knowledge transfer and reviewing best practices.

The core of this work is Penn IUR's ongoing support for the Energy Smart Communities Initiative (ESCI), established in 2010 by U.S. President Obama and Japanese Prime Minister Kan to help Asia Pacific Economic Cooperation (APEC) economies reduce the region's energy intensity (energy consumed per gross domestic product). Managed by APEC's Energy Working Group (APEC-EWG), the initiative's preeminent project is the ESCI Knowledge Sharing Platform (ESCI-KSP), a web-based knowledge-sharing platform that highlights best practices and demonstration projects in energy efficient urban development. Penn IUR, in partnership with the Taiwan Institute for Economic Research (TIER) and with funding from the National Development Council (NDC) of Taiwan, developed the ESCI-KSP in 2011 and continues to work with TIER to collect best practices for inclusion in the database and to present the latest achievements of the ESCI-KSP at APEC-EWG meetings. (For more on the ESCI-KSP, see page 31.)

Penn IUR also worked with TIER to initiate and organize a recognition program, now in its third year. The ESCI Best Practices Awards highlights exceptional demonstrations of best practices in energy efficiency across ESCI's five content areas (transport, buildings, grids, jobs and consumers, and low-carbon model towns). The APEC Energy Working Group honored the award winners selected from among nearly 200 applicants by a panel of judges led by Penn IUR Co-Director Eugénie Birch at its 53rd meeting convened in Singapore in April 2017.

Awardees included Chinese Taipei's innovative use of information and communication technology to address severe congestion in their Smart Park innovation district in the Transport category and Japan's Panahome Smart City development in Shioashiya category for deploying energy efficient homes along with onsite renewable generation for an entire community in the Smart Buildings category.

Penn IUR's experience with the ESCI-KSP has led to a new project: conducting a gaps analysis of APEC-sponsored energy efficiency projects. Penn IUR will scrutinize the nearly 200 projects funded by APEC since 1993, contextualize the findings, and recommend priorities for future funding by illustrating current gaps. This project will be completed in November 2017.

Further deepening Penn IUR's work with APEC, the Asia Pacific Sustainable Energy Center (APSEC) invited Penn IUR Co-Director Eugénie Birch to join its Advisory Board in order help APSEC define its program and optimize knowledge-sharing among APEC economies. Created in 2015 to help APEC meet its previously defined goal of reducing aggregated energy intensity by 45 percent from 2005 levels by 2035, APSEC directly supports the development and dissemination of sustainable energy technologies and knowledge across the APEC region. Where the ESCI-KSP is focused on capturing and distributing knowledge of technologies and practices, APSEC is working to deploy these same technologies and practices in the APEC region and, in doing so, to capture more detailed case studies of successful energy smart projects. In September 2017, Penn IUR and ASPEC will sign a memorandum of understanding outlining areas for collaboration.



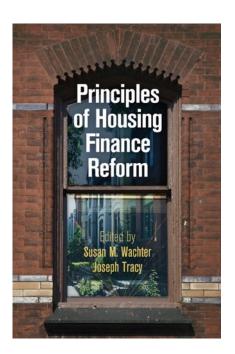
# Translational Research: Publications & Dissemination

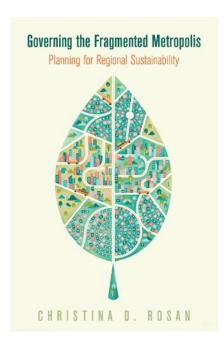
## Disseminating research is central to Penn IUR's mission and a core part of all of its activities.

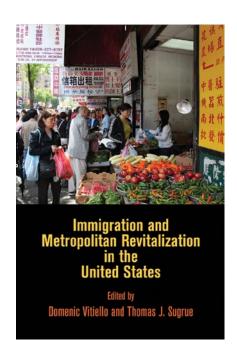
The Institute disseminates research in print and online publications, including The City in the 21st Century book series published by the University of Pennsylvania Press, the SSRN *Urban Research eJournal*, *Urban Link*, Penn IUR briefs, and a variety of special reports and articles. Another key way in which Penn IUR disseminates research is by creating spaces for knowledge transfer. In 2016–2017, Penn IUR continued work on the Global Urban Commons and the ESCI-Knowledge Sharing Platform (ESCI-KSP), two online spaces that Penn IUR developed in earlier years, and created an exhibition at Habitat III, the world's preeminent urban conference, to publicize urban research undertaken at Penn and create a space for informal knowledge-sharing among researchers and practitioners.











## The City in the 21st Century Book Series

Penn IUR's Co-Directors Eugénie Birch and Susan Wachter edit The City in the 21st Century book series published by University of Pennsylvania Press, which now includes 35 volumes and more than a million copies sold. This series explores the depth and breadth of contemporary urban-focused scholarship across a wide range of disciplines including anthropology, planning, sociology, economics, architecture, urban design, political science, and history. The series represents a cross-section of research and experience on the city across the developed and developing world.

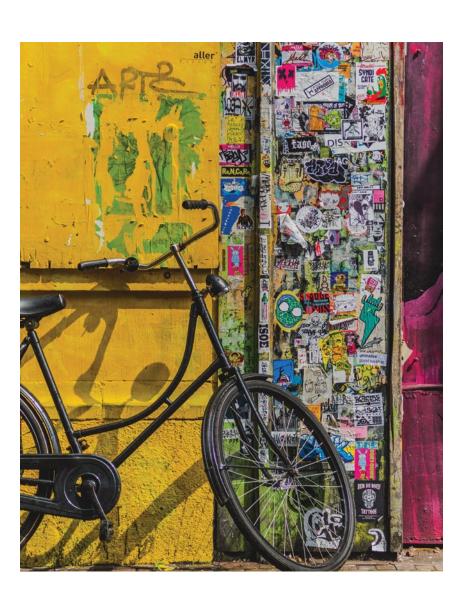
In 2016–2017, Penn Press released three new volumes in the series: *Principles of Housing Finance Reform*, edited by Susan Wachter and Joseph Tracy; *Governing the Fragmented Metropolis*, by Christina Rosan, and *Immigration and Metropolitan Revitalization* in the United States, edited by Domenic Vitiello and Thomas Sugrue.

Principles of Housing Finance Reform outlines the long-term structural reforms that should underlie a rebuilt housing finance system with contributions from both policy researchers and economic experts. Authors propose solutions within this framework, including reforms to the role of the GSEs in the single and multi-family housing finance system, the Federal Housing Administration, and the to-be-announced (TBA) market, as well as a proposal for a national mortgage note registry, among other topics.

In Governing the Fragmented Metropolis, Rosan compares the metropolitan planning processes embraced by Portland, Denver, and Boston, positing a spectrum of approaches from collaborative to authoritative. At one end of the spectrum is Boston, which offers capacity-building support and financial incentives in order to garner voluntary cooperation. At the other

end, Portland mandates local land use. Rosan contends that most regions—including Denver—lie somewhere in between. She argues that by understanding the current, hybrid system of local land use planning and metropolitan governance, stakeholders will be better prepared to support the political arrangements and tools needed to create sustainable metropolitan regions.

Immigration and Metropolitan Revitalization in the United States argues for the importance of immigration in reviving American cities and metropolitan regions. The authors examine the dynamics of immigrant-led urban revitalization from a range of social science perspectives, with sections focusing on immigrants' influence on population and economic growth as well as chapters that highlight revitalization in and by working-class and poor communities.



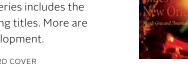
Penn IUR's Co-Directors Eugénie Birch and Susan Wachter edit The City in the 21st Century (C21) book series published by University of Pennsylvania Press, which now includes 35 volumes and over a million copies sold.



The City in the 21st Century book series includes the following titles. More are in development.

HC = HARD COVER PB = PAPERBACK

EB = E-BOOK



ROGER D. ARRAHAMS WITH NICK SPITZER, JOHN F. SZWED. AND ROBERT FARRIS THOMPSON Blues for New Orleans: Mardi Gras and America's Creole Soul (HC 2006, EB 2010)



EUGÉNIE L. BIRCH AND SUSAN M. WACHTER, EDITORS Rebuilding Urban Places After Disaster:

Lessons from Hurricane Katrina (PB 2006, EB 2013)



EDWARD J. BLAKELY WITH A FOREWORD BY HENRY CISNEROS

 ${\it My\,Storm:}\, {\it Managing\,the\,Recovery\,of}$ New Orleans in the Wake of Katrina (HC 2011, EB 2012)



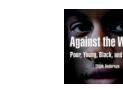
JON CALAME AND

Divided Cities: Belfast, Beirut, Jerusalem, Mostar, and Nicosia (PB 2012, EB 2011)



MARGARET DEWAR AND JUNE MANNING THOMAS, EDITORS

The City After Abandonment (HC 2012, EB 2012)



ELIJAH ANDERSON WITH A FOREWORD BY CORNEL WEST, EDITOR

Against the Wall: Poor, Young, Black, and Male

(PB 2009, EB 2011)



EUGÉNIE L. BIRCH AND SUSAN M. WACHTER, EDITORS

Growing Greener Cities: Urban Sustainability in the Twenty-First Century (PB 2008, EB 2011)



PETER HENDEE BROWN America's Waterfront Revival: Port

Authorities and Urban Redevelopment



NAOMI CARMON AND

Policy, Planning, and People: Promoting Justice in Urban Development

(PB 2013, EB 2013)



MANNY DIAZ WITH A FOREWORD BY MICHAEL BLOOMBERG

Miami Transformed: Rebuilding America One Neighborhood, One City at a Time (HC 2012, PB 2014, EB 2012)



FUGÉNIE I BIRCH SHAHANA CHATTARAJ. AND SUSAN M. WACHTER

Slums: How Informal Real Estate Markets Work (HC 2016, EB 2016)



EUGÉNIE L. BIRCH AND SUSAN M. WACHTER, EDITORS

Global Urbanization (HC 2011, EB 2011)



PETER HENDEE BROWN

How Real Estate Developers Think: Design, Profits, and Community (HC 2015, PB 2017, EB 2015)



RAM CNAAN WITH STEPHANIE C. BODDIE, CHARLENE C. McGREW, AND JENNIFER KANG

The Other Philadelphia Story: How Local Congregations Support Quality of Life in Urban America (HC 2006, EB 2010)



ZAIRE ZENIT DINZEY-FLORES Locked In, Locked Out: Gated Communities in a Puerto Rican City

(HC 2013, EB 2013)



GREGORY I HELLER WITH A FOREWORD BY ALEXANDER GARVIN

Ed Bacon: Planning, Politics, and the Building of Modern Philadelphia (HC 2013, PB 2016, EB 2013)

CHRISTIAN KROHN-HANSEN

(HC 2012, EB 2012)

MARINA PETERSON

AFTER DECLINE

BRENT D. RYAN

Sound, Space, and the City: Civic

(HC 2010, PB 2012, EB 2012)

Design After Decline: How America

Rebuilds Shrinking Cities

SUSAN M. WACHTER AND

LEI DING, EDITORS

Shared Prosperity in

(HC 2016, EB 2016)

America's Communities

(HC 2012, PB 2014, EB 2012)

Performance in Downtown Los Angeles

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(HC 2016, EB 2016)



Edited by Penn IUR
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scholars, the *Urban*Research eJournal
accepts abstracts,
working papers,
and recently
published articles.

## Social Science Research Network Urban Research eJournal

Penn IUR's Urban Research eJournal, published twice weekly through the Social Science Research Network (SSRN), gathers and distributes new research that addresses the governance, policy, economics, design, and social issues that surround global urbanization. The eJournal highlights the urban-focused research of scholars worldwide. Edited by Penn IUR Co-Directors Eugénie Birch and Susan Wachter, and overseen by an advisory board of preeminent urban scholars, it accepts abstracts, working papers, and recently published articles. A sample of recently published articles includes "Government Quality and the Economic Returns of Transport Infrastructure Investment in European Regions" by Riccardo Crescenzi, Marco Di Cataldo and Andrés Rodríguez-Pose; "The Impacts of Neighborhoods on Intergenerational Mobility II: County-Level Estimates," by Raj Chetty and Nathaniel Hendren; and "Between the Market and the State: Financing and Servicing Self-Sustaining Sanitation Chains in Informal Settlements in East African Cities," by Aime Tsinda and Pamela Abbott. Since its inception in 2012, Urban Research eJournal articles have been downloaded more than 623,000 times.



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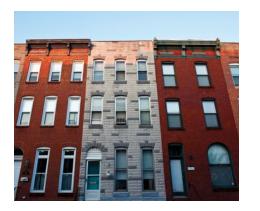
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## Urban Link

Penn IUR's Urban Link is Penn IUR's monthly online publication that features expert commentary on urban topics and highlights Penn IUR news and events. Launched in November 2012, Urban Link has 5,783 subscribers. Penn IUR's Faculty Fellows and Scholars author Urban Link's articles, allowing Penn IUR to disseminate the groundbreaking scholarship of its associates. This year, Penn IUR Faculty Fellows and other scholars and practitioners contributed the following features:

## ROBERT INMAN AND SUSAN WACHTER

"Pension Liabilities: A Call for Transparency." August 2016.

## MATTHEW STEINBERG AND RAND QUINN

"Lessons Learned for Transforming Urban Public Education." September 2016.

## RICHARD WELLER

"Atlas for the End of the World." October 2016.

## REFLECTIONS ON HABITAT III: A HOPEFUL FUTURE FOR SUSTAINABLE **URBAN DEVELOPMENT**

Special issue featuring reflections on Habitat III with contributions from Stefan Al, William Burke-White, Daniel Aldana Cohen, Laurent Corroyer, Chandan Deuskar, Paul Farmer, Sa Min Han, Mark Alan Hughes, Krista Iskandar, Chaeri Kim, Sirus Libeiro, Wendell Pritchett, Mary Rocco, Eduardo Rojas, David Stanek, Patricio Zambrano-Barragan. November 2016.

## JOSEPH TRACY AND SUSAN WACHTER

"Principles of Housing Finance Reform: The Imperative of Rebuilding the System." December 2016.

## EXPERT VOICES 2017: AMERICA'S URBAN INFRASTRUCTURE

Special New Year's issue with contributions from Timothy Bartik, Angela Glover Blackwell, Paul Brophy, Peter Hendee Brown, Gilles Duranton, Erick Guerra, John Landis, Howard Neukrug, Jeremy Nowak, Megan Ryerson, Saskia Sassen, Frederick Steiner, Sarah Rosen Wartell, Dick Voith, Robert Yaro, Mark Zandi. January 2017.

## ARTHUR ACOLIN AND SUSAN WACHTER

"Housing and Opportunity." February 2017.

## JOHN FANTUZZO, KATIE BARGHAUS, AND WHITNEY LEBOEUF

"Improving the Evidence Base for Access to Quality Pre-K." March 2017.

## RICHARD FLORIDA

"The New Urban Crisis." April 2017.

## NEW IDEAS IN URBAN RESEARCH 2017: RESEARCH QUESTIONS AND FINDINGS FROM EMERGING SCHOLARS

Reflections on Urban Issues from recent Penn Ph.D.s. May 2017.



## SPOTLIGHT ON: January 2017 Urban Link

Every year, Penn IUR queries its leading experts and scholars on an issue that will be important in the upcoming year and publishes their responses in the first Urban Link issue of the year. This year, in response to the Trump campaign's vow to develop "the next generation" of American infrastructure, Penn IUR asked: In your view, what should the United States do about urban infrastructure? This feature attracted the attention of several news outlets including NPR, Planetizen, and Penn Current.

To read responses from these urban experts, visit the "Publications" section of the Penn IUR website:

penniur.upenn.edu/publications



TIMOTHY J BARTIK SENIOR ECONOMIST. W.E. UPJOHN INSTITUTE

Infrastructure and Distressed Areas



ANGEL A GLOVER BLACKWELL, CEO. POLICYLINK

Infrastructure Investment Must Benefit All



PAUL C BROPHY PRINCIPAL, BROPHY & REILLY LLC

Transportation in Inclusive Economic Development



PETER HENDEE BROWN URBAN DEVELOPMENT CONSULTANT, LECTURER, HUMPHREY SCHOOL OF PUBLIC AFFAIRS, UNIVERSITY OF

MINNESOTA

Invest in the Public Realm



GILLES DURANTON CHAIR, REAL ESTATE DEPARTMENT, THE WHARTON SCHOOL UNIVERSITY OF PENNSYLVANIA

Infrastructure Spending to Greatness?



ERICK GUERRA ASSISTANT PROFESSOR, CITY AND REGIONAL PLANNING, UNIVERSITY OF PENNSYLVANIA Financing Urban

Infrastructure



JOHN D. LANDIS, CROSSWAYS PROFESSOR OF CITY PLANNING AND DEPARTMENT CHAIR, UNIVERSITY OF PENNSYLVANIA

Re-prioritizing Federal Infrastructure



HOWARD NEUKRUG FORMER COMMISSIONER, PHILADELPHIA WATER DEPARTMENT Water and the Nation's

FREDERICK STEINER.

PROFESSOR, UNIVERSITY

DEAN AND PALEY

OF PENNSYLVANIA

SCHOOL OF DESIGN

Infrastructure



JEREMY NOWAK. PRESIDENT J NOWAK AND ASSOCIATES, LLC

Utilizing Environmental Intelligence in Infrastructure Planning



MEGAN RYERSON. ASSISTANT PROFESSOR CITY AND REGIONAL PLANNING, UNIVERSITY OF PENNSYLVANIA

Consider Infrastructure's Optimal Use



S LYND PROFESSOR OF SOCIOLOGY, COLUMBIA UNIVERSITY

Multi-tasking Infrastructures



SASKIA SASSEN ROBERT

Infrastructure: Make It Green



RICHARD VOITH. PRESIDENT AND PRINCIPAL, ECONSULT SOLUTIONS

Historical Patterns of Infrastructure Funding



SARAH ROSEN WARTELL PRESIDENT, URBAN INSTITUTE Pursuing Evidence-based

Infrastructure Objectives



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ROBERT YARO

Financing America's Infrastructure Needs



MARK ZANDI CHIFF ECONOMIST, MOODY'S ANALYTICS

Improved Infrastructure Must Include Affordable Housing



## Penn IUR Briefs

The Penn IUR Briefs series brings leading scholarship on urban issues to a broad audience. Authors in this series distill research findings, present policy ideas, offer opinions, or explore lessons learned from a particular project. In 2016–2017, Richard Weller contributed "Atlas for the End of the World: Mapping that Recognizes Interdependence of People and Conservation" (October 2016) and Arthur Acolin and Susan Wachter wrote "Housing and Opportunity" (February 2017). (Excerpts from both of these briefs are included in this report beginning on page 32.)

In "Atlas for the End of the World: Mapping that Recognizes Interdependence of People and Conservation," Weller maps existing and anticipated conflicts between biologically diverse habitat and human development. He outlines currently protected areas in the ecoregions within the world's biodiversity hotspots and calculates how much more needs to be set aside to meet UN-agreed targets set by the Convention on Biological Diversity. In addition, he anticipates the conflicts between projected urban growth and biologically diverse habitat. Finally, he argues that public and private decision-makers need maps that intertwine human and biological conservation as sources of information for their work. The Brief summarizes Weller's three-year research project.

In "Housing and Opportunity," Acolin and Wachter discuss the relationship between employment opportunities and housing access. This Brief summarizes a longer working paper they wrote for the Federal Reserve Bank of Philadelphia. In it, they review the relationship between housing affordability and household mobility and discuss the long-term implications of these findings for intergenerational welfare. They argue that countering growing spatial inequality of opportunity requires space-based solutions.

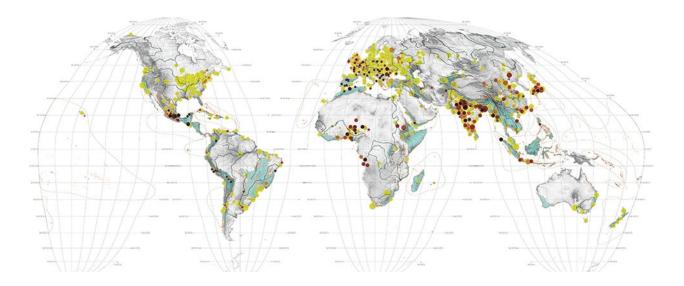


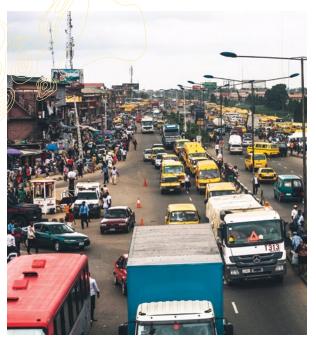
Penn IUR Briefs can be found on the "Publications" section of the Penn IUR website at:

penniur.upenn.edu/publications



 ${\tt BELOW: Evolution of Urbanization: Modern Era,} \\ from Weller's Atlas for the End of the World.$ 







## Special Reports and Journal Articles

Penn IUR publishes special reports, papers, supports research for journal articles, and disseminates the output widely through its website and other means. Highlights from 2016–2017 include "Habitat III: The Quest for Sustainable Urban Development" by Penn IUR Co-Director Eugénie Birch and Jane Vincent, Regional Administrator Region III, U.S. Department of Housing and Urban Development and, in a follow-up assessment, Eugénie Birch's "A Midterm Report: Will Habitat III Make a Difference to the World's Urban Development?" In a separate project, Penn IUR Co-Director Susan Wachter co-edited with William Lambe, Senior Community and Economic Development Advisor, Federal Reserve Bank of Atlanta, and Theresa Singleton, Vice President and Community Affairs Officer, Federal Reserve Bank of Atlanta, a special issue of *Cityscape*, which grew out of a joint Penn IUR / Federal Reserve Bank of Philadelphia working paper series.

Originally published in *Cascade*, the journal of the Federal Reserve Bank of Philadelphia in Fall 2016, Birch and Vincent's "Habitat III: The Quest for Sustainable Urban Development" puts the Habitat III conference in historical and political context, reviewing in particular the emphasis on the integration of civil society stakeholders in the conference preparations the focus on implementation as the conference's goal.

Birch's "A Midterm Report: Will Habitat III Make a Difference to the World's Urban Development?" was published in the July 2016 issue of the Journal of the American Planning Association. In it, she argues that clear messaging and strong civic engagement are essential to the successful implementation of the New Urban Agenda, the outcome document of the Habitat III conference. Further, she called on city and regional planners worldwide to take on an advocacy role in supporting the New Urban Agenda's three key thrusts: fit-for-purpose governance, management and planning of urban spatial development, and implementation including knowledge sharing, capacity-building, and finance. (See page 48 for an excerpt from the article.)

The special issue of *Cityscape* (March 2017) highlighted strategies to create places of opportunity, develop the local workforce for a global marketplace, and provide wealth and opportunity inclusively to all segments of the population. Articles included an introduction by guest editors Susan Wachter, Walter Lambe, and Theresa Singleton and five papers by leading researchers: Arthur Acolin and Susan Wachter, "Opportunity and Housing Access;" Andrés Rodríguez-Pose and Callum Wilkie, "Revamping Local and Regional Development Through Place-Based Strategies;" Harry J. Holzer, "The Role of Skills and Jobs in Transforming Communities;" Matthew Steinberg and Rand Quinn, "Education Reform in the Post-NCLB Era: Lessons Learned for Transforming Urban Public Education;" and Lance Freeman and Jenny Schuetz, "Producing Affordable Housing in Rising Markets: What Works?" (See page 42 for an excerpt from Steinberg and Quinn.)



## Global Urban Commons

Penn IUR hosts and manages the Global Urban Commons (The Commons), a publicly accessible online directory of urban research centers from around the world, a source for information about global urban research and a home base for the General Assembly of Partners (GAP), the multi-stakeholder engagement platform created to support the Habitat III conference and the implementation of the New Urban Agenda. Created in 2014 with seed funding from the University of Pennsylvania Press and the Rockefeller Foundation, Penn IUR continued to manage this site's searchable directory of urban research organizations and resources related to global urbanization. As a communications arm for the General Assembly of Partners (GAP), the site documents the work of 16 separate partner groups and provides a directory of its more than 2,000 organizational members.

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For more information, visit: globalurbancommons.org



## Energy Smart Communities Initiative-Knowledge Sharing Platform

The Energy Smart Communities Initiative-Knowledge Sharing Platform (ESCI-KSP), a web-based knowledge-sharing platform, highlights best practices and demonstration projects in energy efficient urban development. It is the preeminent project of ESCI, established in 2010 by U.S. President Obama and Japanese Prime Minister Kan to help Asia Pacific Economic Cooperation (APEC) economies reduce the region's energy intensity (energy consumed per gross domestic product) by 45% of 2005 levels by 2035 and is managed by APEC's Energy Working Group (APEC-EWG). Penn IUR, in partnership with the Taiwan Institute for Economic Research (TIER) and with funding from the National Development Council (NDC) of Taiwan, developed the ESCI-KSP in 2011 and continues to work with TIER to collect best practices for inclusion in the database. In 2016–2017, Penn IUR added 150 new case studies to the ESCI-KSP, focusing especially on progress being made by developing economies in APEC in the ESCI-KSP's five content areas (transport, buildings, grids, jobs and consumers, and low-carbon model towns).



ABOVE: Wendell Pritchett, Penn IUR Faculty Fellow, Presidential Professor of Law and Education, Penn Law, and now Provost of the University, speaks in Penn IUR's Habitat III exhibition booth, Quito, Ecuador.

## Habitat III Exhibition: Knowledge for an Urbanizing World

In addition to online platforms that translate and disseminate research, Penn IUR creates real-world platforms for the exchange of research and ideas. This year, as part of Penn IUR's engagement at Habitat III, Penn IUR mounted an exhibit showcasing urban-focused research and publications undertaken at Penn IUR, by faculty across the university, and by Perry World House (PWH) and the Kleinman Center for Energy Policy. The projects and publications shared at the exhibition booth aimed to not only generate new knowledge but also facilitate the exchange of best practices related to sustainable urbanization across the globe.

In addition, Penn IUR hosted more than 20 presentations by members of the Penn delegation to Habitat III, among whom were Penn IUR Advisory Board member Paul Farmer, Principal, Paul Farmer Planning and former CEO, American Planning Association; Penn IUR Faculty Fellows Stefan Al, Associate Professor of City and Regional Planning, School of Design; William Burke-White, Richard Perry Professor of Law, School of Law, and Director, PWH; Daniel Aldana Cohen, Assistant Professor, Sociology, School of Arts and Sciences; David Gouverneur, Associate Professor of Practice in Landscape Architecture, School of Design; Mark Alan Hughes, Professor of Practice in City and Regional Planning, School of Design and Faculty Director, Kleinman Center for Energy Policy; Wendell Pritchett, Provost and Presidential Professor of Law and Education, School of Law; Eduardo Rojas, Lecturer in Historic Preservation, School of Design; Penn IUR Emerging Scholar Mary Rocco, Post-Doctoral Researcher, Penn IUR; and eight doctoral students from the Graduate Group in City and Regional Planning, School of Design. (For details on the doctoral student delegation to Habitat III, see page 82.)

The Habitat III conference attracted more than 30,000 attendees, including diplomats from UN member states, along with mayors and a wide range of stakeholders.



















Penn IUR disseminates knowledge through a variety of publications: books, briefs, journal articles, reports, and online publications. Excerpts from some of the publications created over the 2016–2017 year follow.



## Governing the Fragmented Metropolis

## **CHRISTINA ROSAN**

This selection is from Governing the Fragmented Metropolis: Planning for Regional Sustainability, a book by Christina Rosan, published by the University of Pennsylvania Press in the fall of 2016 as part of The City in the 21st Century book series

The first challenge to creating more effective metropolitan governance in the United States is helping communities to recognize the benefits of a regional approach. Evidence that localities actually benefit from metropolitan governance may help convince local officials to give up some of their authority to regional planning agencies. Of course, it will be difficult to convince local elected officials that it is in their best interest to create more powerful regional institutions. The first step is to change the nature of the debate about metropolitan governance so it more adequately portrays the existing land-use planning framework in the United States. ... [P]lanning agencies with authority can be built from the bottom up. They can help communities accomplish goals that are in their best interest and can be more effective at engaging local officials and addressing their needs. What needs to be questioned are assumptions about local land use planning and its relationship to metropolitan planning agencies. The more that a case can be made that metropolitan planning agencies are working with communities rather than against them, the more likely it will be to create political support for empowering these institutions so they can influence regional development.

Next, the important role of the state in metropolitan planning needs to be recognized and promoted. States can and should be the leaders in creating a regulatory and fiscal setting conducive to metropolitan cooperation. It is important to think of local, regional, and state planning agencies in a nested framework. It needs to be asked what state policies enable metropolitan planning agencies to work effectively and which policies

are barriers to their effectiveness. Rather than focusing on voluntary regionalism as a singular solution, planning agencies should concentrate on formulating model state-level planning legislation that gives metropolitan planning agencies the power they need to help municipalities meet regional objectives. For starters, state policy requiring that local comprehensive or master plans are consistent with local zoning is a must. The next step is to promote consistency between regional and local plans so that regional goals are implemented at the local level. In addition, the impact of municipal finance on land use planning must be carefully examined since the way that communities are financed is often the primary reason they develop in certain ways. Without reforms in state-level planning frameworks and intergovernmental financial arrangements, metropolitan planning efforts will continue to be secondary to local land use planning that pays the bills.

The tendency in the literature is to dismiss the ability of regions to move to more regulatory models of regional planning because there is no political will to adopt strict land use regulations. When it looks like more regulatory approaches are politically impossible, voluntary approaches are adopted. Rather than view voluntary approaches as the fallback position, the cases in this book demonstrate that it may be possible to think more incrementally about creating the framework for stronger regional planning. Sometimes the most effective policies are not the most dramatic or politically controversial. So while there may not be the political will to overhaul the state land use planning system, it may be politically possible to take intermediary steps.



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The more that a case can be made that metropolitan planning agencies are working with communities rather than against them, the more likely it will be to create political support for empowering these institutions so they can influence regional development.



# Immigration and Metropolitan Revitalization in the United States

## DOMENIC VITIELLO AND THOMAS SUGRUE

This selection is from the Introduction to Immigration and Metropolitan Revitalization in the United States, a volume edited by Domenic Vitiello and Thomas Sugrue and published by the University of Pennsylvania Press in the spring of 2017 as part of The City in the 21st Century book series.

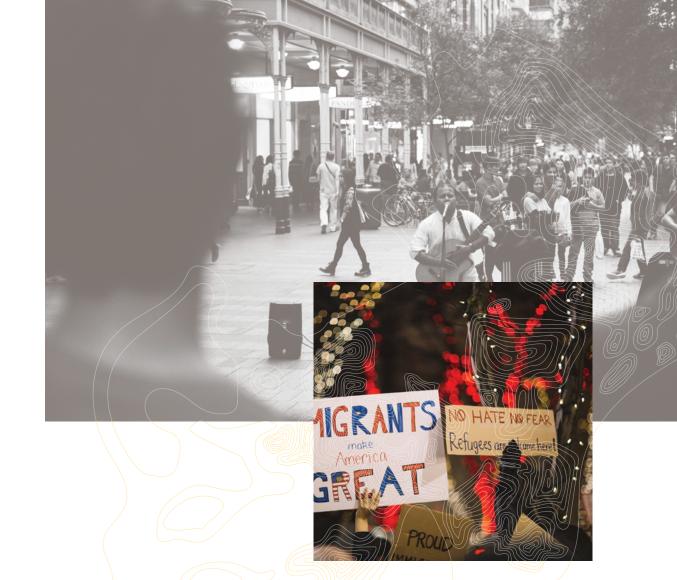
In less than a generation, the dominant image of American cities has transformed from urban crisis to revitalization. Poverty, violence, job losses, and distressed schools still make headlines. But large parts of central cities and older suburbs are attracting new residents and substantial capital investment. The U.S. Census Bureau's American Community Survey found that after decades of population loss, most of America's large old industrial cities, from Philadelphia to Milwaukee, grew between 2010 and 2014, as did forty-nine of the fifty-one largest cities in the nation overall. Even the two that lost population, Detroit and Cleveland, have been the focus of intense planning and investments in revitalization and have seen some neighborhoods grow. ...

Immigration and immigrants belong at the center of this story of metropolitan revitalization in the United States. However, in most accounts of urban and suburban revitalization, native-born empty nesters, their millennial children, and other well-educated professionals of the "creative class" are the agents of change. They "bring the city back" by attracting outside investors, patronizing galleries, restaurants, and high-end shops; rehabilitating historic properties; and developing new houses on vacant lots. Yet in the past decade, policy makers and scholars across the United States have come to understand that immigrants are driving metropolitan revitalization at least as much as these actors....

Urban scholars and policy makers have only recently begun considering the role of immigration in the recent transformations of metropolitan America, including population shifts, economic reinvestment and growth, and housing markets. In a survey of urban scholars taken in 1999, immigration did not make the list of top ten forces that had shaped U.S. cities in the twentieth century. Segregation and discrimination, white flight, suburban sprawl, and other causes of urban crisis dominated the discussion. Nor did immigration make their list of forces likely to influence cities most profoundly in the twenty-first century, though they did cite integration and diversity of urban neighborhoods.

Yet, as demographer Dowell Myers argued in response, immigration has been a "fundamental force" determining the fortunes of American cities in the past, present, and future. Not only did mass immigration fuel the birth of metropolitan America in the late nineteenth and early twentieth centuries, but the closing of U.S. borders between the 1920s and 1960s deprived cities of replacement population for the masses who moved out. Immigration's absence thus played a critical, if silent and invisible, part in the urban crisis. It was no accident that cities began to revive in the late twentieth century, after the Immigration and Naturalization Act of 1965 reopened the borders, asserted Myers. And as the baby boom generation ages and Americans have fewer children, arguably no force will define the future of U.S. cities and suburbs more than immigration. ...

Immigration has gained prominence not only in our understanding of how metropolitan revitalization has happened but also in cities' pursuit of growth. City halls and economic development boosters in big and



small cities from Philadelphia to Dayton, Ohio, and Utica, New York, have turned to immigrant and refugee recruitment and integration as strategies for repopulation and economic development. They have recruited foreign companies and high-skilled workers, implemented language access and multicultural programs, and targeted support to immigrant small business owners and ethnic community development organizations. Some suburbs, too, have supported immigrant merchants and welcoming practices in schools, libraries, and law enforcement. ...

The divergent responses to immigration by different municipalities reflect an increasingly contested set of hopes and fears about the local benefits and costs of immigration. They also reveal diverse visions of what is to be revitalized as well as how and for whom. Generally, social scientists agree that the fiscal costs and benefits of immigration are unevenly distributed between and within metropolitan regions and that costs and benefits fluctuate over time, but at the national level and over the long-term immigration produces net economic gains. In the short-term, and in particular cities and neighborhoods, this means widely varied experiences of immigration and revitalization.

6

As the baby boom generation ages and Americans have fewer children, arguably no force will define the future of U.S. cities and suburbs more than immigration.

## Atlas for the End of the World

## RICHARD WELLER

This selection is from the October 2016 Penn IUR Brief "Atlas for the End of the World: Mapping that Recognizes Interdependence of People and Conservation," by Richard Weller.

Top photo, Anthromes, from "Atlas for the End of the World."

[G]lobal policy settings and the satellite's reductive view of the world are far removed from the real complexity of the things they hold in their pixelated gaze.

No landscape is ever simple—protected areas in hotspots least of all. Demeaned as "fortress conservation" and "paper parks," protected areas are criticized for reducing the world to a global battle ground between culture and nature, for reinforcing nature as an exotic victim, and for simply turning noble savages into noble park rangers. For their critics, protected areas are neocolonialism writ large and green.

Protected areas manifest tensions between the global and the local, between anthropology and biology, between the developed and the developing world, and between the state and its subjects. It is this that

caused Nelson Mandela to remark: "I see no future for [protected areas] unless they address the needs of communities as equal partners in their development."

Maps that see people and conservation as intertwined are necessary to overcome these criticisms. These are called anthromes: maps that classify landscapes as novel ecologies according to their various forms of anthropogenic modification. The University of Maryland geographer Erle Ellis argues that anthrome mapping signifies 'a wholesale rethinking of ecological science and conservation that moves away from humans as recent destroyers of pristine nature and towards humanity's role as sustained and permanent stewards of the biosphere.' ...



Protected areas manifest tensions between the global and the local, between anthropology and biology, between the developed and the developing world, and between the state and its subjects. It is this that caused Nelson Mandela to remark: 'I see no future for [protected areas] unless they address the needs of communities as equal partners in their development.'



# Entrepreneurship & Innovation in Connecticut's Higher Education System

## CONNECTICUT WORKING GROUP ON HIGHER EDUCATION

This selection is from Entrepreneurship & Innovation in Connecticut's Higher Education System: A Catalytic Roadmap for Higher Education Collaboration, drafted by Penn IUR's Amanda Lloyd and Eugénie Birch on behalf of Connecticut's Working Group on Higher Education.

Without a doubt, Connecticut is at an economic tipping point. Yesterday's manufacturing has largely fled, new industries and services are slowly taking its place—but they are not numerous enough to lift the state's economy and retain its work force. In these early years of the 21st century, Connecticut is faced with significant challenges requiring urgent solutions. Connecticut does have the capacity to begin to reverse this situation, but there are no quick fixes. Positive, substantial, and meaningful economic regrowth must begin by reestablishing and reenergizing the state's culture of innovation and entrepreneurship. Today's most prosperous centers of innovation and entrepreneurship, like Connecticut in the 19th century, rely on the collective power of their institutions of higher education as essential community anchors, a major force of economic vitalization and leadership, and the wellspring of their creative workforce.

Connecticut is fortunate in having 38 institutions of higher education poised to expand opportunities to nurture a new generation of entrepreneurs and innovators. Nearly half of the state's four-year degreegranting institutions currently offer concentrations, minors and / or majors in entrepreneurial studies. Some examples are Quinnipiac University, University of Hartford, University of Bridgeport, and UConn. Nine community colleges, such as Gateway Community College and Norwalk Community College, have either an Entrepreneur certificate or Small Business / Entrepreneurship concentration. The College of Technology (COT) helps students at

12 community colleges with Associates degrees in engineering or technology to transition to bachelor's programs in the state's senior colleges. COT's Next Generation Manufacturing Center, a National Science Foundation Center of Excellence, provides resources for both students and educators.

Research institutions are rapidly expanding their technology transfer and research commercialization infrastructure, developing new proof of concept centers and establishing innovation funds to help faculty and student innovators build their companies in Connecticut. With 80% of the state's R&D focused on biosciences, support for new ventures in the sector include UConn's Technology Incubation Program (TIP) in Farmington, Storrs, and Avery Point, and the CURE Commons, in Groton. Yale, which has 12 institutes in the biosciences, supports extensive bioscience innovation infrastructure, including the Blavatnik Fund for Innovation, with competitively awarded grants bridging the gap between early-stage life science research and biomedical product commercialization. Finally, as Part 2 of this report explains, institutions of higher education have been accelerating and expanding their support of entrepreneurship and innovation among students, faculty and alumni significantly over the past five years.

However, this seeming abundance of resources is not functioning as effectively as it could. Taken together the institutions have all the ingredients required to support a strong culture of innovation, yet they are not *operating* together. In practice, efforts are often



fragmented: many institutions operate programs in isolation; others lack the administrative and financial capacity to move their students and faculty ideas to maturity. In this environment, institutions are not adapting effectively to the fast-moving entrepreneurial / innovative climate that characterizes their competitors in California, Massachusetts, and New York.

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## Education Reform in the Post-NCLB Era

## MATTHEW STEINBERG AND RAND QUINN

This selection is from
"Education Reform in the
Post-NCLB Era: Lessons
Learned for Transforming
Urban Public Education," by
Matthew Steinberg and Rand
Quinn, a paper in the Penn
IUR / Philadelphia Federal
Reserve working paper series
(published by Cityscape in
revised form in March 2017).

## Early Childhood Education

Racial and ethnic differences in academic performance have been identified as far back as the Coleman Report five decades ago (Coleman et al., 1966). More recent evidence on student achievement has revealed a persistent gap in the academic performance of minority students compared with that of their White counterparts, a gap that emerges early in the educational careers of students (Fryer and Levitt, 2004). Indeed, minority students enter kindergarten performing below their White peers, and the achievement gap grows as students progress through the early elementary years (Fryer and Levitt, 2006). Moreover, as income inequality in the United States has increased in recent years, so too has the achievement gap between students that come from high- and low-income families (Reardon, 2011). The persistent race gap in student achievement coupled with a growing achievement gap based on family income poses a particular concern for minority families in urban communities. Indeed, residential and economic segregation exist in most urban communities, and, left unaddressed, will continue to disadvantage the educational prospects of students from very early ages.

Recent attention, however, in both academic and policy circles has been given to the role early childhood education can play in preparing economically disadvantaged students for school and narrowing the achievement gap. For example, economist James Heckman has written widely on the economic benefits of investments in early childhood education as a means for reducing educational inequality (Heckman, 2011). Federal

policy efforts such as the Obama administration's RTTT-Early Learning Challenge has provided grants to states to improve the quality of early education programs provided to children who are among the most economically disadvantaged. At the local level, cities such as New York, New York, and Philadelphia, Pennsylvania, recently have made dramatic investments to provide greater access to high-quality pre-kindergarten (pre-K) programs. Given these recent efforts to expand access to pre-K, what effect might the provision of universal pre-K have on students' academic success prior to entering elementary school? The experiences of urban districts in Tulsa, Oklahoma, and Boston, Massachusetts, provide insight to this question.

## Evidence From Tulsa

In 1998, the state of Oklahoma established a universal pre-K program for four-year-old children, under which each of the state's 543 districts could choose to participate. A key feature of the state's program is the requirement that all pre-K teachers have a college degree and a certificate in early childhood education. Moreover, these pre-K teachers received compensation equal to teachers in the state's public elementary schools. Class sizes are capped at 20 students with a student-to-staff ratio of 10 to 1 (Gormley and Gayer, 2004). In a series of studies, Gormley (2008), Gormley and Gayer (2004), and Gormley et al. (2005) examined the impact of pre-K in the state's largest urban school district, Tulsa Public Schools, on students' cognitive development and



school readiness, with a particular focus on the performance of racial and ethnic minority students.

In Gormley and Gayer (2004), the authors relied on a regression discontinuity design that leverages the strict age cutoff required to qualify for the pre-K program. The authors found that Tulsa's pre-K program provides substantive benefits to eligible fouryear-old children, including significant improvements in cognitive, language, and motor skill development. The authors further found that the positive benefits of pre-K are greatest for Hispanic and Black children, with more limited benefits than White children. Economically disadvantaged children—those who qualify for free lunch—gained more from Tulsa's pre-K program than their more economically advantaged counterparts. In Gormley et al. (2005), the authors found that the program positively and significantly impacted children's performance on cognitive tests of prereading and reading skills, prewriting and spelling skills, and math reasoning and problemsolving abilities. In Gormley (2008), the author specifically examined the impact of Tulsa's pre-K program among Hispanic students and found that Hispanic children realized substantial improvements in prereading, prewriting, and premath skills and that children whose parents spoke Spanish at home, or whose parents were born in Mexico, realized the greatest benefit of Tulsa's program.

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## The New Urban Crisis

## RICHARD FLORIDA

This selection by Richard Florida, entitled "The New Urban Crisis," appeared in the April 2017 issue of Urban Link.

Top photo by Bob Jagendorf,

Donald Trump's thinking about cities is a product of the old urban crisis of the 1960s and '70s—the staggeringly high rates of crime and poverty, economic and social dysfunction, and fiscal collapse that he witnessed in his native New York in the early years of his career.

But, his stunning victory over Hillary Clinton is a product of the backlash against what I have come to call the New Urban Crisis of burgeoning economic inequality—the widening divides between rich and poor; the staggering unaffordability of housing in our leading cities, tech hubs, and knowledge-centers like New York, LA, San Francisco, Boston, Seattle, and Washington, D.C.

This New Urban Crisis is defined by what I call "winner-take-all urbanism" in which the biggest, richest, and most talented metros attract wildly disproportionate shares of talent, industry, and economic assets, while smaller cities and towns in the Rustbelt, the Sunbelt, and rural regions fall farther and farther behind.

As narrow as Trump's margin of victory might have been, its geographical bases are unmistakable. Clinton took the dense, affluent, knowledge-based cities and close-in suburbs that are the epicenters of new economy, winning the popular vote by a substantial margin. But Trump took everywhere else, taking 61 percent of the vote in rural places compared to 33 percent for Clinton. He won 57 percent of the vote in metros with less than 250,000 people, compared to 38 percent for Clinton. And he carried 52 percent of the vote in metros with between 250,000 and 500,000 people, compared to 34 percent for Clinton. All told,

he won 260 metros, compared to Clinton's 120. But the average Trump metro was home to just 420,000 people compared to 1.4 million for Clinton's.

A growing number of commentators see our great cities as the major source of opposition and resistance to Trump and Trumpism, and that may well be the case. But an even bigger agenda awaits. Trump or not, the nation–state has too much power. Centralization might have made sense in the great age of industrial capitalism, but it has fallen out of sync with the demands of urbanized knowledge capitalism. Our cities are the new organizing units of our economy, and they need to be able to control their own destinies.

Localism represents the only path around our permanent political divide, which erupts every four year into a veritable Civil War. We have to learn to live together and the only way to do that is to allow us to Red states and Blue state and cities to live the lives they want to. Such devolution and local empowerment may have seemed like a pipe-dream a few years ago, but several forces—not the least of which is the rise of Trump—have conspired to bring a wide range of strange bedfellows from the left and right together on this issue

This is an area where a bi-partisan coalition of mayors must lead, enabling and empowering our cities and communities to address their own challenges and problems brought on by the New Urban Crisis and positioning our economy for success in the 21st century.



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## Informed Securitization

## SUSAN WACHTER

This selection is from "Informed Securitization," by Susan Wachter, a chapter in Principles of Housing Finance Reform, a volume edited by Susan Wachter and Joseph Tracy and published by the University of Pennsylvania Press in the fall of 2016 as part of The City in the 21st Century book series.

The housing finance system began to unravel nearly a decade ago, but the ghosts of its demise continue to haunt us to this day. The housing finance system remains on government life support with no clear plans as of this writing on when or how to resuscitate it despite a substantial recovery in the overall economy. The placement in conservatorship of Fannie Mae and Freddie Mac on September 6, 2008, in the aftermath of the Great Financial Crisis (GFC) has created a de facto government-funded housing finance system in the United States. More than seven years since the federal government placed these institutions in conservatorship, they continue to remain in that status, with no established exit plan. As of the beginning of 2016, Fannie Mae, Freddie Mac, and Ginnie Mae are virtually the only issuers of mortgagebacked securities (MBS). The public actions taken to support Fannie Mae and Freddie Mac were successful in their short-term aims of supporting the housing market and removing the two firms as an immediate source of systemic risk to the financial system. The conservatorship, however, does not achieve the goal of reforming securitization markets.

The Achilles heel of the pre-crisis securitization market, inherent in its structure, was the potential for systemic instability due to credit or default risk. As lending standards declined, surging housing prices

veiled growing credit risk. Securitization markets shrouded rather than revealed information on the mounting system-wide leverage. The bursting of the housing bubble led to massive defaults, the collapse of securitization, systemic failure, and, in response, unprecedented public interventions to support the financial sector and the overall economy.

Episodes of systemic risk linked to real estate and housing finance markets are endemic across countries and history. This time securitization markets were at the center of the crisis. As a financial instrument, MBS markets can provide information on developing market risks. However, the structure of securitization markets precluded this in the GFC....

With the demise of private-label residential securitization and the conservatorships of Fannie Mae and Freddie Mac, there is both an opportunity and a necessity to rethink principles of securitization to promote systemic stability. .... Expanded HMDA (Home Mortgage Disclosure Act) requirements, which are set to go into effect in January of 2018, and the new National Mortgage Database will increase transparency. Nonetheless, resolution of information issues requires attention to the structure and regulatory framework of the U.S. housing finance system.



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## A Midterm Report: Will Habitat III Make a Difference?

## **EUGÉNIE BIRCH**

This selection is from "A Midterm Report: Will Habitat III Make a Difference to the World's Urban Development?," by Eugénie Birch, published in Journal of the American Planning Association, Vol. 82, Iss. 4, 2016.

[P]lace-based discussions occur throughout the U.N. system, with many agencies engaging in urban-focused activities. Three agencies have the most enduring histories in the area: U.N. Habitat, with a mandate centered on dealing with spatial issues; the Population Division, with its authoritative urban database; and the World Bank, with its substantial lending resources. Of these, U.N. Habitat has recently directed its work from a sole concentration on housing in the Global South to a broader portfolio of sustainable urbanization (clustering housing, planning, land management and related governance, legislative, and finance issues), clearer messaging, and renewed support of coordinated stakeholder partnerships. The reorientation, especially the concentration of sustainable urban development, messaging, and stakeholder ideas, are present in the New Urban Agenda (NUA). Although the NUA favors the areas of U.N. Habitat expertise, it leaves ample room for other U.N. agencies to contribute.

...[T]hree important legacies shaping Habitat III: the predecessor conferences (Habitat I and II), global agreements, and expanded stakeholder networks. The conferences and their outcome documents contribute to the substantive continuity of spatial considerations in the NUA, but also reveal gaps in meaningful civic engagement and monitoring. The Habitat III preparatory process and the draft NUA have continued the substantive themes and also offer corrections, especially in the development of content and direction of the draft NUA text through expanding the official inputs into the NUA, holding hearings prior to its completion, and supporting a new

stakeholder organization more than a year before the conference. Further, global agreements, especially the Sendai Framework, SDGs, and the Paris Agreement, provide a solid foundation for pursuing sustainable urban development, on which the NUA drafts build. Finally, transnational solidarity is fueling the explosion of strong civil society networks that have the capacity to be fierce advocates for their interests in the NUA.

... [T]he NUA drafts articulate a positive view of cities as the fulcrum of sustainable urban development and call for the implementation of a few key "development enablers" (governance and planning and management of urban spatial development) and "operational levers" (e.g., detailed specifications including subsidiarity for governance and form-defining recommendations for planning). The substantive message is simple and clear.

...[P]romising signs exist that Habitat III can have an impact on the course of urban development, yet obstacles remain. The NUA is short, pithy, and focused. It is also potentially action oriented if public and private decision-makers are convinced of its importance, a task that will require a lot more advocacy. The U.N. system has a number of agencies that can do their part to undertake supportive research and projects if they receive the financial backing from their donors. Some legacy problems (e.g., lack of prioritization) have been addressed in the NUA, whereas others remain to be solved (local government empowerment, rights discussions, monitoring, and evaluation). Nonetheless, the message is straightforward, providing clear guidance on key elements to be implemented. Further,



several civil society engagement platforms (e.g., policy units, GAP) are organized, yet they are incipient and temporary. However, the NUA is a guidance document that initiates a 20-year cycle for its dissemination and implementation. This leaves a good deal of room to spread the message, develop the necessary advocacy, and hold national governments responsible for their commitments to sustainable urban development, an area in which city and regional planners worldwide have the knowledge to undertake. But do they have the will?

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Penn IUR's expert events bring together scholars, policymakers, and decision-makers to exchange and advance ideas and research.

In 2016–2017, Penn IUR convened meetings on citizen participation in building communities after disaster, the application of remote sensing technology in efforts to build sustainable cities, and on underfunded municipal pensions. Penn IUR also played a leading role in international conferences on city growth in China and urban housing in Indonesia, and partnered with Perry World House in investigations into global urbanization, migration, and demography. In addition, Penn IUR supported cross-disciplinary collaboration by Penn faculty through support of Penn's Humanities Urbanism, and Design (H+U+D) Initiative.







LEFT: Galveston, Texas after Hurricane Ike in 2008 (photo by U.S. Army Corp of Engineers, via Flickr).

ABOVE: The travel exchange group explored the new Lafitte Greenway in New Orleans which manages stormwater while improving connectivity between neighborhoods and downtown.

## United States-Japan Grassroots Exchange Program: Citizen Participation in Community Building Post-Disaster

In 2016–2017, Penn IUR and the East–West Center (EWC) completed the second year of a three-year program featuring dialogue and travel exchanges between Japan and the United States to explore how local leaders, small businesses, and communitybased organizations influence recovery after a natural disaster. In December 2016, delegates from Miyako City, Iwate Prefecture (hit by the Eastern Japan Earthquake and Tsunami in 2011) and Kobe, Hyogo Prefecture (impacted by the Great Hansin Earthquake in 1995) visited Galveston, Texas (hit by Hurricane Ike in 2008) and New Orleans, Louisiana (devastated by Hurricane Katrina in 2005) for site visits, expert discussions, and an exchange of lessons learned.

EWC's Meril Dobrin Fujiki, Seminars Development Coordinator, and Penn IUR's Amy Montgomery, Managing Director, and Laura Barron, Program Manager, initiated the exchange program in 2015 in an effort to build next-generation leadership capacity and networks that engage citizens in providing meaningful input in the long-term recovery and rebuilding of their communities post-disaster. The program involves 24 participants, including representatives from nonprofit community organizations, local government branches, and small business groups from the four cities. During the December 2016 exchange, the U.S. delegates emphasized the importance of preparedness and resilience in coastal areas in the United States, described how demographic disparities have affected disaster response and recovery, and highlighted how culture can aid the recovery process. Japanese delegates learned about different government responses as well as the power of nonprofit and quasi-governmental organizations,

entities that do not have the same influence in Japan. Delegates from both countries recognized the power of person-to-person exchanges in sharing new strategies and building optimism.

In the program's first year, delegates from Kobe and Miyako City hosted delegates from New Orleans and Galveston. Next year, Penn IUR will host a concluding conference focused on collaborative relationships among civil society, government, and businesses in disaster recovery.



Penn IUR's documentation of the program can be found on the "Publications" section of the Penn IUR website at: penniur.upenn.edu/publications

## Symposium on Remotely Sensed Measurement for a Resilient and Sustainable Urban Future

Penn IUR works to ensure that innovations in spatial data inform our understanding of urban systems. To this end, Penn IUR partnered with the Wharton Spatial Integration Laboratory for Urban Systems (SILUS) and the U.S. Geological Society (USGS) Science and Decisions Center to convene a symposium entitled "Remotely Sensed Measurement for a Resilient and Sustainable Urban Future." The September 15, 2016 symposium included a full day of discussions among natural and social scientists from the atmospheric, biophysical, economic, geographic, and sociological disciplines and included a keynote address by Penn IUR Faculty Fellow Richard Weller, Martin and Margy Meyerson Chair of Urbanism and Professor and Chair of Landscape Architecture, Penn School of Design. This expert convening concluded with a public event entitled "Rising Sea Levels, Coastal Hazards, and Urban Resilience."

In his keynote address, Weller presented his current publication, the *Atlas for the End of the World*, a series of maps that illustrate conflicts between biodiversity and human settlement. The *Atlas for the End of the World* maps protected areas in the ecoregions within the world's biodiversity hotspots, illustrating conflicts between

projected city growth and biologically diverse habitats. (See page 38 for an excerpt from Weller's *Atlas for the End of the World*, a Penn IUR Brief that Weller wrote summarizing his research.)

The symposium's three panel sessions each focused on a different aspect of spatial data application. In the first session, "Global Urban Growth and Remote Sensing Imagery," panelists discussed data sources and methods related to urban spatial growth and remote sensing, as well as the broader policy context within which these technologies and databases are being utilized. The second session, "Models and Spatial Data for a Sustainable Urban Future," centered around the opportunities and challenges associated with various approaches to modeling urban spatial data, including coupling remotely sensed data with a model that quantifies the urban footprint, using census data in urban modeling, employing GIS data in urban economics research, and evaluating conservation and urban development policies using satellite based data. In the third session, "Identifying the Impact of Urban Expansion on Ecosystem Services," panelists presented examples and case studies illustrating the effects of urban growth on ecosystem services.



LEFT: Photo by Joshua Stevens for NASA's Earth Observatory, using Landsat data from the USGS.



## Penn IUR Pensions Working Group Roundtables

Penn IUR, under the leadership of Advisory Board member Mark Rosenberg, hosted a series of roundtables in New York City as part of its broader investigation into the problem of underfunded public pensions and its implications for municipal finance. Through these meetings, Penn IUR is exploring challenges and opportunities related to market transparency and public understanding of this issue.

The first meeting, held on March 10, 2017, which included ten participants from finance and academia, centered around the question of transparency and, specifically, how to promote public transparency about the state of individual city pension systems. At the second meeting, on May 15, 2017, participants discussed the geographic and political variations on the basic problem of underfunded pensions, common drivers of the problem, the impact on state and local budgets, and successful strategies. Additional Penn IUR Pensions Working Group meetings are planned for 2017–2018 to further explore issues of transparency and municipal solvency.

## The Rise of the City in China

As part of a three-year Penn IUR investigation into urbanization in China supported by the Penn China Research and Engagement Fund, Penn IUR and the Penn Wharton China Center co-hosted a conference focused on identifying new forms of urban development and new mechanisms to finance investments in infrastructure and public goods in China. "The Rise of the City in China," held on November 4, 2016 in Beijing, China, drew more than 100 scholars and practitioners from around the world to present and discuss research on the past, present, and future of urbanization in China.

Two of the day's three panels focused on the application of historical and contemporary price indices in illuminating real estate trends and on the creation of sustainable urban finance mechanisms. The day's first panel, "Historical Price Indices: What Can We Learn from Them about the Development of Cities and Housing Prices," placed the development of cities in China in international context. Presentations on historical research into housing prices and rents across very different geographic contexts showed similar findings, specifically that long-term, historical stability in housing prices has given way to rising prices in recent decades. Panelists suggested that recent price increases could be due to a slowdown in transportation innovation and heightened land use regulation coupled with

the renewed importance of centrality for urban productivity.

Researchers presenting on the second panel, "The Contemporary Rise of the City: The Role of Price Indices," provided evidence regarding price increases over the past decade in Chinese cities; increases have been particularly rapid in first-tier cities, with more moderate increases in others. In discussing these findings, participants debated the strengths and weaknesses of various methodological innovations in real estate indices. Additionally, they considered research demonstrating the role of price indices in developing local property tax systems, which could potentially serve as a sustainable source of public financing for Chinese cities.

The third panel shifted the discussion from sustainable urban finance to sustainable urban design. Entitled "Where to Build, What to Build, and How to Build: Design for Smart Cities," the panel discussion focused on research into the development of new design guidelines in Chinese cities. These new guidelines—developed by the Chinese central government for incorporation by cities into their regulations—emphasize walkable, mixed-use development, a change from the monolithic superblocks characteristic of urban development in China in recent decades.



As the country experiencing the fastest rate of urbanization in Asia, Indonesia requires major infrastructure investment as well as housing and local public services. The symposium's three panels and its keynote address centered on the changes needed in order to provide housing and quality public services to urban residents.

## Urbanization, Urban Housing, and Housing Finance in Indonesia

On November 7, 2016, Penn IUR Co-Director Susan Wachter took part in a symposium entitled "Urbanization, Urban Housing, and Housing Finance in Indonesia: Lessons Learned and Critical Thoughts to Move Forward." Held in Jakarta, the symposium was organized by Janice Bellace, Samuel A. Blank Professor of Legal Studies and Business Ethics, The Wharton School and Director, Tanoto Foundation and Komara Djaja, Head of Urban Studies, University of Indonesia, with support from the Tanoto Foundation. It gathered local and international academics, policymakers, and practitioners engaged in addressing the opportunities and challenges presented by rapid urbanization in Indonesia.

As the country experiencing the fastest rate of urbanization in Asia, Indonesia requires major infrastructure investment as well as housing and local public services. The symposium's three panels and its keynote address—by Wahyu Utomo, Coordinating Minister for Economic Affairs—centered on the changes needed in order to provide housing and quality public services to urban residents.

The first panel, "Redefining Urban Landscape and Urbanization Trends." emphasized the role of national and local governments in framing urban development and in addressing the development of informal settlements in particular. Panelists discussed the need for national policy to support local governments and for urban policy to address environmental concerns, including those related to flooding. The second panel, "Urbanization and Challenges for Housing Provision," focused on informal settlements, with panelists calling for substantial investments in housing and infrastructure and discussing a number of initiatives that aim to improve the lives of residents of informal settlements.

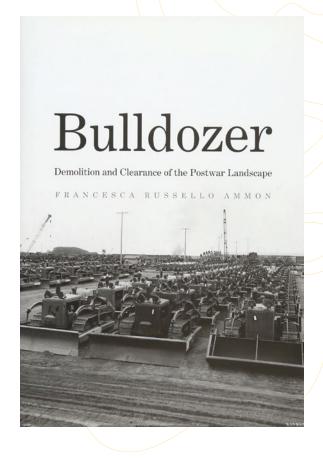
Wachter spoke on the third panel, "Delivering Formal Housing for All," on the topic of designing mortgage markets to enhance macro stability and access. Participants in this panel discussed how housing finance systems can influence housing conditions. They emphasized that different segments of the markets have different needs and discussed the government's role in establishing the structure of long-term affordable and sustainable mortgage markets.

## Urbanization, Migration, and Demography

In 2016–2017, Penn IUR continued its support of Perry World House (PWH) in exploring global issues related to urbanization, migration, and demographic change. PWH—the University's new hub for global engagement and international policy research—officially opened in 2016, though Penn IUR and PWH commenced their partnership the previous year, while preliminary planning and research was underway.

Penn IUR Co-Director Eugénie Birch and Penn IUR Faculty Fellow Devesh Kapur, Director, Center for the Advanced Study of India (CASI), Madan Lal Sobti Professor for the Study of Contemporary India, and Professor of Political Science, School of Arts and Sciences, chaired the exploration of one of PWH's inaugural research themes: "Global Shifts: Urbanization, Migration, and Demography." Penn IUR also assisted PWH on two major events: a workshop on implementing the New Urban Agenda (December 9, 2016) and PWH's first annual conference exploring the "Global Shifts" research theme (April 21, 2017). (See page 69 for more on these events.) Other events on which Penn IUR and PWH collaborated in the past year include a book launch for Slums (September 27, 2016), Resiliency and SDGs in a Changing Climate (March 30, 2017), Inside Habitat III (April 3, 2017), and a photography contest on the theme of urbanization, migration, and demography.









OPPOSITE PAGE: H+U+D members read and discussed Penn IUR Faculty Fellow Francesa Ammon's book, Bulldozer. H+U+D courses took students to Paris, France (LEFT) and Venice, Italy (ABOVE). Photos by H+U+D Undergraduate City Samigas

## Penn's Humanities, Urbanism, and Design (H+U+D) Initiative

The Penn Humanities, Urbanism, and Design (H+U+D) Initiative is a joint project of the School of Design and the School of Arts and Sciences, funded by the Andrew Mellon Foundation. Now in its fourth year, the five-year project works to bridge the gaps between urbanists in the humanities and design disciplines. H+U+D's core activity is the H+U+D Faculty Colloquium. In addition, the initiative sponsors several other educational and research activities. Since the H+U+D Initiative's inception, Penn IUR has provided administrative and programmatic support and Penn IUR Co-Director Eugénie Birch co-directs the initiative with Penn IUR Faculty Fellow David Brownlee, Frances Shapiro-Weitzenhoffer Professor of 19th Century European Art and Chair, Graduate Group in the History of Art, School of Arts and Sciences.

Each year, the initiative welcomes a new group of faculty members from the humanities and design disciplines and invites two Junior Fellows from other institutions who have recently completed their doctoral work to participate in the H+U+D Colloquium that meets biweekly to share research and foster collaboration. In 2016–2017, H+U+D Colloquium members read and discussed Penn IUR Faculty Fellow Francesca Ammon's book, *Bulldozer: Demolition and Clearance of the Postwar Landscape*; toured Louis Kahn's Esherick House and Robert Venturi's Mother's House on November 12, 2016; attended *When the Rain Stops Falling* by Andrew Bovell at Philadelphia's Wilma Theater; visited the Jewish Museum in New York City to tour the "Pierre Chareau: Modern Architecture and Design" exhibit and talk with Guest Curator Esther da Costa Meyer, Professor, Art and Archaeology, Princeton University; and visited the Athenaeum of Philadelphia to view the exhibition "Laying Tracks and Laying Foundations: Building for the Railroad" with Curator of Architecture Bruce Laverty.

Colloquium members participated in conversations about H+U+D at conferences and workshops worldwide. Orkan Telhan, Assistant Professor, Department of Fine Arts, School of Design, represented H+U+D at the

"Design in the Middle Workshop," MAXXI National Museum of the 21st Century Arts in Rome, Italy. Penn IUR Emerging Scholar Mary Rocco, H+U+D Project Manager and Penn IUR Post-Doctoral Researcher, represented the work of the initiative at the Associated Collegiate Schools of Planning (ACSP) annual meeting in Portland, Oregon. She joined other Mellon Initiative coordinators and principal investigators, including representatives from University of California–Berkeley and University of California–Los Angeles, where they discussed their projects and pedagogical contributions to the field of planning. More H+U+D sponsored conference presentations are scheduled for Fall 2017.

Each year, Penn IUR cosponsors the H+U+D Annual Lecture. This year's lecturer, Alan Greenberger, Distinguished Professor of Architecture and Fellow, Lindy Institute, Drexel University, presented "Reflections on Romaldo Giurgola: My Guide and Mentor" (January 25, 2017). Other public events in 2016–2017 included cosponsoring, with Penn's History of Art Department and the Museum of Modern Art, a conversation with renowned American architect, planner, writer, and educator Denise Scott Brown (November 12, 2016) and cosponsoring, with Penn's Departments of Cinema and Media

Studies and Biology, School of Arts and Sciences, and Department of Landscape Architecture, a screening of Ben Kalina's film *Shored Up* (December 5, 2016).

H+U+D also supports graduate and undergraduate courses and student research awards. Among the fall courses offered was "Venice: Self-representation, Performance, and Reception," which introduced students to the material and cultural landscape of Venice. In the spring semester, H+U+D offered a graduate seminar cross-listed with the Department of Landscape Architecture and French and Francophone Studies entitled "Paris and Philadelphia: Landscape and Literature of the 19th Century," sponsored a domestic city seminar entitled "The Wire and The City" for which students studied and visited the city of Baltimore, and sponsored an international city seminar entitled "Paris Modern" for which students visited Paris.

Six students from across the University won research awards for 2016–2017 in a highly competitive process. Awardees who included undergraduates and graduates undertook projects ranging from an investigation of the role of immigrant entrepreneurs in shaping their new environments to the history of newborn nurseries in American hospitals.









Rose Molokoane,
Deputy President
and Management
Committee Member,
SDI (LEFT) and
Victor Pineda,
President, World
ENABLED, (RIGHT)
received the 2017
Penn IUR Urban
Leadership Awards.

## Penn IUR 13th Annual Urban Leadership Awards

On April 25, 2017, Penn IUR held its 13th annual Urban Leadership Forum, "Creating Cities of Inclusion and Equality," presenting Urban Leadership Awards to Rose Molokoane, Deputy President and Management Committee Member, Shack/ Slum Dwellers International (SDI); National Coordinator, South Africa Alliance and the Federation of the Urban Poor (FEDUP); and Chair, UN-Habitat's World Urban Campaign, and Victor Santiago Pineda, President, World ENABLED and Adjunct Professor, Department of City and Regional Planning, University of California-Berkeley. The Annual Penn IUR Urban Leadership Awards recognize 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.

A veteran of the anti-apartheid struggle, Rose Molokoane is an internationally recognized grassroots activist involved in land tenure and housing issues. She is a leader in SDI, a global network of slum dweller federations in 33 countries across the Global South, as well as of FEDUP, which has helped more than 150,000 slum dwellers, the vast majority of whom are women, to pool their savings and improve their lives. She has initiated federations of savings schemes throughout Africa, Asia, and Latin America and is herself a member of the Oukasie savings scheme in a slum settlement outside Pretoria, South Africa. In addition to her leadership of these global NGOs, she serves as Chair, UN-Habitat's World Urban Campaign (WUC), and Co-Chair, Grassroots Constituency Group of WUC's General Assembly of Partners (GAP),

and was awarded the UN-Habitat Scroll of Honor in 2005 for her struggle to bring land and homes to the poor.

Victor Santiago Pineda is a globally recognized expert on disability policy. He teaches courses on planning theory, policy evaluation, and international community development and serves as a public member of the U.S. Architectural and Transportation Barriers Compliance Board. Previously, Pineda was Senior Research Fellow, Haas Institute for a Fair and Inclusive Society at the University of California-Berkeley, and UC-Berkeley Chancellor's Postdoctoral Research Fellow for Academic Diversity. In 2003, Pineda founded World ENABLED to improve the participation outcomes for youth with disabilities through inclusive research and educational programs.

## Federal Reserve Bank of Philadelphia Conference: Reinventing Our Communities: Transforming Our Economies

Penn IUR cosponsored the Federal Reserve Bank of Philadelphia's seventh biennial conference on issues related to building shared prosperity in urban communities. The conference, held September 21–23, 2016 on the theme of "Reinventing Our Communities: Transforming Our Economies," explored how communities can connect people, place, and capital to transform local and regional economies in an inclusive way.

The conference opened with a plenary session, "Building an Inclusive, Transformative Economy," a welcome by Theresa Singleton, Vice President and Community Affairs Officer, Federal Reserve Bank of Philadelphia and a talk by Xavier de Souza Briggs, Vice President, Economic Opportunity and Markets, Ford Foundation. Briggs reflected on how foundations are redefining their funding approaches to address inequitable underlying systems. He was then joined by other thought-leaders in a discussion of the education, job training, and innovation initiatives needed to prepare communities for a changing economy.

Gabriela Ramos, Organisation for Economic Co-operation and Development (OECD) Special Counsellor to the Secretary-General, Chief of Staff, and Sherpa to the G2o, provided the conference's keynote speech. She highlighted the critical role that leadership plays in addressing inequality in cities worldwide and introduced the OECD–Ford Foundation Inclusive Growth in Cities Initiative, a campaign to increase awareness of rising inequalities, to refocus the debate on concrete solutions, and to empower local governments in leading the transition towards more inclusive growth; central to the campaign is the creation of a network of "Champion Mayors" to promote inclusive growth in an increasingly global marketplace.

Over the course of the three-day convening, over 100 national and international speakers shared emerging strategies and innovative approaches to fostering equitable economic growth with a diverse audience of planners, elected officials, academics, bankers, community developers, foundation leaders, and students. Participants in breakout sessions identified potential strategies, based on empirical research, to improve opportunities for low-income people in terms of education, skills, jobs, and housing, focusing on topics such as where affordable housing should be built, connecting communities to capital through collaboration, addressing gentrification and neighborhood change in an equitable way, and preparing today's workforce for tomorrow's jobs, among others. Federal Reserve Presidents Patrick Harker, Dennis Lockhart, and Loretta Mester closed the conference with a talk about the Federal Reserve's role in transforming economies.

Six joint Penn IUR / Federal Reserve Bank of Philadelphia working papers were distributed at the conference and published in the March 2017 special issue of the journal *Cityscape*, guest edited by Penn IUR Co-Director Susan Wachter; William Lambe, Senior Community and Economic Development Advisor, Federal Reserve Bank of Atlanta; and Theresa Singleton. (See page 29 for details on this publication.)

FROM TOP: Theresa Singleton, Vice President and Community Affairs Officer, Federal Reserve Bank of Philadelphia; Xavier de Souza Briggs, Vice President, Economic Opportunity and Markets, Ford Foundation; and Patrick Harker, President, Federal Reserve Bank of Philadelphia, joined the discussion at the Reinventing Our Communities conference. Photos by the Federal Reserve Bank of Philadelphia.







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## Urban Talks with Michael Nutter

Penn IUR and the School of Social Policy & Practice welcomed Senior SP2 Executive Fellow at Penn IUR Michael Nutter, Former Mayor of the City of Philadelphia, on three dates in March and April for a series of Urban Talks. Discussing his experience campaigning locally and holding office as both a City Councilman and Mayor of Philadelphia, Mayor Nutter shared insights on the path to public service and the responsibility of governing. Supplementing his talk with video clips and newspaper clippings, he highlighted key moments in his career and Philadelphia's history.

On March 21, 2017, Mayor Nutter gave a presentation entitled "Public Service is a Calling—How Should You Answer It?" Recounting his early years growing up in Philadelphia and attending Penn, he told the story of his circuitous route to public service and his decision, at age 25, to commit himself to it. He spoke about the people who supported him, described what it takes to win elections, and his own experiences running for office.

In his second talk on April 3, 2017, Mayor Nutter focused on what comes *after* winning the Mayoral race, discussing both the day-to-day practices of good governance as well as the necessity of handling unexpected calamities. In "Getting Stuff Done in a Big City: From Daily Duties to Crisis Management," Mayor Nutter described the difficulties of prioritizing multiple objectives and satisfying multiple stakeholders, highlighting some of the major successes of his time in office, such as a dramatic drop in homicides and the inculcation of an anti-corruption culture in City Hall.

In his final talk on April 17, "Reflections on Leadership: Lessons Learned in City Hall and Beyond," Mayor Nutter reflected further on his time as the 98th Mayor of Philadelphia, exploring the practices and qualities necessary to succeed in a leadership role. Pointing out that the office is both near enough and powerful enough to be seen by the public as ultimately responsible for all the city's issues, problems, and difficulties, Mayor Nutter described the necessity of both shouldering that responsibility and of working with others.

LEFT: Photo by Jessica Bautista.

Throughout his three presentations and his conversations with the audience, Mayor Nutter made clear that he finds the difficult problems of urban governance and policy to be truly energizing and deeply important. In February 2017, Mayor Nutter was appointed Senior SP2 Executive Fellow at Penn IUR, a non-residential post that allows him to engage the Penn community on a regular basis on issues related to urban policy in Philadelphia and beyond. He is also continuing to serve as David N. Dinkins Professor of Professional Practice in Urban and Public Affairs at Columbia University's School of International and Public Affairs. Additionally, he is currently writing a book about the topics covered in his three talks this spring.



To watch videos of Mayor Nutter's talks, visit the "Events" section of the Penn IUR website:

penniur.upenn.edu/events

## Penn IUR Public Interest Series

Penn IUR hosted 30 programs throughout the year, bringing together scholars, practitioners, faculty, students, and the general public around a diversity of topics ranging from building urban resilience in the face of rising sea levels to answering the call for public service.

ABOVE: Penn IUR Advisory Board member and former CEO of the American Planning Association, Paul Farmer, speaking in the Penn IUR Habitat III exhibition booth, Quito, Ecuador.



Bulldozer

## SEPTEMBER 8, 2016

## PENN ECONOMIC HISTORY FORUM No Price Like Home: Global House Prices, 1870–2012

## Speaker:

**Moritz Schularick,** Professor of Economics, The University of Bonn

## Host:

Department of History, School of Arts and Sciences

## ${\it Cosponsor:}$

The Wharton School



## PENN IUR URBAN BOOK TALK

Bulldozer: Demolition and Clearance of the Postwar Landscape

## Speaker:

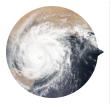
## Francesca Russello Ammon,

Assistant Professor, City and Regional Planning, School of Design

## Cosponsor:

Department of City and Regional Planning, School of Design





SEPTEMBER 15, 2016

Rising Sea Levels, Coastal Hazards, and Urban Resilience

## Speakers:

**Michael Berman,** Founder, Berman Consulting, LLC

**Howard Kunreuther,** Co-Director, Risk Management and Decision Processes Center, The Wharton School

**Marion McFadden,** Vice President of Policy, Enterprise Community Solutions

**Walter Meyer,** Principal, Local Office Landscape Architecture

**Wayne Pathman,** Co-Founder and Managing Partner, Pathman Lewis LLC

**Jamie Springer,** Senior Principal, HR&A Advisors, Inc.

Harriet Tregoning, Principal Deputy
Assistant Secretary, Office of
Community Planning and Development,
U.S. Department of Housing and Urban
Development (HUD)

## Cosponsor:

Penn's Initiative for Global Environmental Leadership (IGEL)



SEPTEMBER 19-20, 2016

PERRY WORLD HOUSE GRAND OPENING, SPECIAL SESSION: Urbanization, Migration, and Demography

**Highlighted Speakers:** 

Eugénie Birch, Co-Director, Penn IUR

**Devesh Kapur,** Director, Center for the Advanced Study of India (CASI), Madan Lal Sobti Professor for the Study of Contemporary India, and Professor of Political Science, Penn School of Arts and Sciences

Host:

Perry World House

Photo by user Giro 555 SHO, via Flickr.



SEPTEMBER 20, 2016

Brexit: Territorial Inequality and the Future of Nations

## Speakers:

## Andrés Rodríguez-Pose,

Professor of Economic Geography, President of the Regional Science Association International, London School of Economics

**Gilles Duranton,** Dean's Chair in Real Estate Professor, Chair, Real Estate Department

**Joao Gomes,** Howard Butcher III Professor of Finance

Cosponsor:

Perry World House



SEPTEMBER 27, 2016

PENN IUR BOOK LAUNCH Slums: How Informal Real Estate Markets Work

SEE SPOTLIGHT ON FOLLOWING PAGE FOR MORE ON THIS EVENT.

Speakers:

Eugénie Birch, Co-Director, Penn IUR

**Sebastian Galiani,** Professor of Economics, University of Maryland

**Devesh Kapur,** Director, Center for the Advanced Study of India (CASI), Madan Lal Sobti Professor for the Study of Contemporary India, and Professor of Political Science, Penn School of Arts and Sciences

**Bishwapriya Sanyal,** Ford International Professor of Urban Development and Planning and Director of the Special Program in Urban and Regional Studies, Massachusetts Institute of Technology

Susan Wachter, Co-Director, Penn IUR

Cosponsors:

Perry World House and the Center for the Advanced Studies of India (CASI)



OCTOBER 4, 2016

Media and Habitat III: How You Can Be a Part of It

Speakers:

**Eugénie Birch,** Co-Director, Penn IUR

**Neal Peirce,** Founder and Editor-in-Chief, *Citiscope* 

**Mythili Sampathkumar,** U.S. Editor, *Cities Today* 

Ariella Cohen, Editor-in-Chief, Next City

Cosponsor:

Perry World House



OCTOBER 15-20, 2016

UN-HABITAT III CONFERENCE EXHIBITION: The Role of Sustainable Urbanization in the New Urban Agenda

See page 31 for more on Penn IUR's exhibit at Habitat III.



Professor

Bishwapriya

Sanyal argued

that, if future

efforts are

to succeed,

researchers and

policymakers

need to better

understand

the housing

in informal

settlements.

preferences of

the people living

## SPOTLIGHT ON PENN IUR BOOK LAUNCH:

Slums: How Informal Real Estate Markets Work

Penn IUR, Perry World House, and the Center for the Advanced Study of India (CASI) cosponsored on September 27, 2016 the launch of the book *Slums: How* Informal Real Estate Markets Work, a recent release in the Penn Press / Penn IUR The City in the 21st Century book series. Penn IUR Co-Directors Eugénie Birch and Susan Wachter, who edited the volume with Shahana Chattaraj, Post-Doctoral Research Fellow, Comparative Public Policy, Blavatnik School of Government, University of Oxford, spoke with Penn IUR Faculty Fellow Devesh Kapur, Director, CASI and Madan Lal Sobti Professor for the Study of Contemporary India and Professor of Political Science, Penn School of Arts and Sciences, and book contributors Sebastian Galiani, Professor of Economics, University of Maryland, and Bishwapriya Sanyal, Ford International Professor of Urban Development and Planning, Massachusetts Institute of Technology School of Architecture + Planning.

Wachter opened the event by introducing the panelists and the book, which explores relationships among informality, state policies, and market forces from a range of disciplines and across a variety of scales, and asking Galiani to discuss the impacts of formalizing informal settlements. He detailed his research with Ernesto Shargrodsky, President, Universidad Torcuato Di Tella, on a natural experiment in which they compared two groups of informal settlement dwellers in Buenos Aires that were identical aside from one factor: one group had received title to the land they inhabited and the other group had not. Through this natural experiment, Galiani explained, they found that families that received title saw an increase in the value of their homes (though likely not due to better access to credit, as some researchers had theorized) as well as changes to their family size and structure.

Sanyal put the question of improving conditions for residents of informal settlements in historical context; he noted that what we now refer to as "informal real estate markets" were once considered blight, and discussed the principal historical approaches to improving conditions in informal settlements (in-situ upgrading, granting private property rights to residents, and redevelopment). Drawing lessons from past improvement efforts, Sanyal argued that, if future efforts are to succeed, researchers and policymakers need to better understand the housing preferences of the people living in informal settlements and the varying impacts of policy packages across different contexts.

Kapur took a close look at an important factor in the Indian context: the near-absence of property taxes. While he noted that expanding taxation of property is politically difficult, Kapur argued that an efficient property tax system is essential for generating revenue for urban public goods and services, including for investments that benefit residents of informal settlements. He noted, too, another challenging political reality: the withholding of services from informal settlements as a means of keeping residents beholden to politicians for assistance.

Birch closed the panel discussion by lauding grassroots efforts to ensure that politicians respond to residents of informal settlements and explaining the role of the New Urban Agenda in furthering policies that will improve the lives of such residents. As she explained, the New Urban Agenda will help determine governance strategies that hold leaders accountable, identify development best practices for an increasingly urban world, and establish financing systems to fund both international development and local governments.



## **NOVEMBER 9, 2016**

The Urbanization-Construction-Migration Nexus in Five Cities in South Asia

## Speaker:

Sunil Kumar, Former Dean of Graduate Studies and Lecturer, Department of Social Policy, London School of Economics and Political Science

## Cosponsors:

Perry World House and Penn School of Design



## **NOVEMBER 10, 2016**

PENN IUR C21 BOOK LAUNCH Public Pensions and City Solvency

## Speakers:

Alex Brown, Research Manager, National Association of State Retirement Administrators (NARSA)

Matt Fabian, Partner, Municipal Market Analytics, LLC

Peter Hayes, Managing Director, Head of Municipal Bonds Group, BlackRock

Robert Novy-Marx, Lori and Alan S. Zekelman Professor of Business Administration, Simon Business School, University of Rochester

Mathew McCubbins, Professor of Law and Political Science, Duke University

**Richard Ravitch,** Former Lieutenant Governor, State of New York

Allison Schrager, Contributor, Quartz

David Skeel, S. Samuel Arsht Professor of Corporate Law, University of Pennsylvania

James Spiotto, Managing Director of Chapman Strategic Advisors LLC

John Sugden, Senior Director, Sector Lead, U.S. Public Finance, S&P Global Ratings

Nancy Winkler, Former City Treasurer, City of Philadelphia

## **NOVEMBER 16, 2016**

## PENN GIS DAY 2016: How Will Open Data Drive Government and For-Profit Innovation?

## Speakers:

Robert Cheetham, President and CEO, Azavea

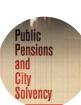
**Stacey Mosley,** Founder, fixlist.co

Tom Shenk, Chief Data Officer, City of Chicago

**Andrew Turner,** Director, ESRI R&D

## Cosponsors:

Master of Urban Spatial Analytics, the Department of City and Regional Planning, and the Wharton GIS Lab





DECEMBER 8-9, 2016

PERRY WORLD HOUSE WORKSHOP: Advancing the New Urban Agenda in a Shifting World

SEE SPOTLIGHT ON RIGHT PAGE FOR MORE ON THIS EVENT.

Host:

Perry World House



JANUARY 23, 2017

**PENN IUR URBAN BOOK TALK**The Unbanking of America:

How the New Middle Class Survives

Speaker:

**Lisa Servon,** Professor of City and Regional Planning, Penn School of Design

Cosponsor:

Penn School of Design

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JANUARY 24, 2017

Pricing Carbon: Lessons from Canada

Speakers:

**Gitane De Silva,** Alberta's Senior Representative to the United States, Canadian Embassy

**Jim Hines,** Professor of Law and Co-Director, Law and Economics Program, University of Michigan

**Jon Mitchell,** Vice President Environment and Sustainability, Cenovus

Host:

Kleinman Center for Energy Policy

Cosponsor:

Canadian Consulate of New York



JANUARY 25, 2017

H+U+D Annual Lecture featuring Alan Greenberger

Speaker:

**Alan Greenberger,** Distinguished Professor and Fellow, Drexel University and former Deputy Mayor of Economic Development and Commerce

Host:

Humanities, Urbanism, and Design (H+U+D) Initiative



ABOVE: Ashley Napier, Global Initiatives Fellow at Penn Global, took the winning photo, "Swayambhunath Monkey," as part of a contest for the Global Shifts symposium event. The photo was taken in Nepal in December of 2014.



SPOTLIGHT ON PERRY WORLD HOUSE PARTNERSHIP:

Advancing the New Urban Agenda in a Shifting World and Global Shifts Conference

Penn IUR's partnership with Perry World House (PWH) to explore global issues related to urbanization, migration, and demographic change continued in 2016–2017 (for more on the partnership, see page 55) with Penn IUR assisting PWH on two major events: a workshop on implementing the New Urban Agenda and PWH's first annual conference exploring its inaugural theme "Global Shifts: Urbanization, Migration, and Demography."

Following Penn IUR and PWH travel to Quito for Habitat III (see page 31), experts from academia, government bodies, the media, and nonprofit organizations gathered on December 9, 2016 to find ways to implement the New Urban Agenda, a set of global standards for sustainable urban development formally adopted at Habitat III. "Advancing the New Urban Agenda in a Shifting World: A Multi-Stakeholder Workshop," convened by PWH and cosponsored by Penn IUR and the Kleinman Center for Energy Policy, identified critical components for effective implementation of the New Urban Agenda through a series of multi-stakeholder conversations. With an explicit focus on inclusive implementation, the workshop sought to find ways to advance the New Urban Agenda in the context of the broad demographic shifts transforming the global population. In particular, it sought to identify interdisciplinary academic research questions and policy gaps to which Penn and other academic institutions can contribute.

On April 21, 2017, discussions about inclusive urbanization continued at PWH's first annual conference exploring the sustainability of urbanization, the unprecedented scale of migration, and the consequences of worldwide demographic change. "Global Shifts: Urbanization, Migration, and Demography: An Examination of Marginalization and Inequality," was convened by PWH and cosponsored by Penn IUR and others. Samantha Power (HON'15), U.S. Permanent Representative to the United Nations (2013–2017), gave the keynote address, speaking on the worldwide refugee crisis. At the symposium, Penn IUR and PWH revealed the winners of a related photography contest (see winning photograph, left). Penn IUR also welcomed symposium participants to its annual MUSA Earth Day event, which took place during the symposium's lunch break, featuring Deborah Balk, Associate Director, Institute for Demographic Research, City University of New York (CUNY).



## **FEBRUARY 2, 2017**

Media, Communication, and the City

SEE SPOTLIGHT ON RIGHT PAGE FOR MORE ON THIS EVENT.

Speakers:

Michael Delli Carpini, Walter H.

Annenberg Dean and Professor of
Communication, Annenberg School
for Communication

**John Jackson, Jr.,** Dean, Richard Perry University Professor and Penn Integrates Knowledge (PIK) Professor, Penn School of Social Policy & Practice

**Frederick Steiner,** Dean and Paley Professor, Penn School of Design

Supported by:
Penn's Office of the Provost



## MARCH 20, 2017

PENN IUR URBAN BOOK TALK
The Strip: Las Vegas and
the Architecture of the
American Dream

Speaker:

**Stefan AI,** Professor of City and Regional Planning, School of Design



## MARCH 21, APRIL 3, AND APRIL 17, 2017

Lecture series with Michael Nutter, former Mayor of the City of Philadelphia and Senior SP2 Executive Fellow at Penn IUR

See page 62 for more on this lecture series.

Cosponsor:

Penn School of Social Policy & Practice



### MARCH 28, 2017

PENN IUR BOOK LAUNCH
Governing the Fragmented
Matropolis, Planning for

Metropolis: Planning for Regional Sustainability

Speaker:

**Christina Rosan,** Professor of Geography, Temple University

 ${\it Cosponsor:}$ 

University of Pennsylvania Press



**Panelist** 

Michael Delli

Carpini discussed

recent trends that

have combined

to blur the

distinctions

interpersonal

communication

and mass media,

entertainment and

between

news, fact

and opinion.

## SPOTLIGHT ON:

## Media, Communication, and the City

In honor of Penn's 2016–2017 Year of the Media, Penn IUR hosted a conversation on February 2, 2017 entitled "Media, Communication, and the City." Panelists Michael Delli Carpini, Walter H. Annenberg Dean and Professor of Communication, Annenberg School for Communication; John Jackson, Jr., Dean, Richard Perry University Professor and Penn Integrates Knowledge (PIK) Professor, School of Social Policy & Practice; and Frederick Steiner, Dean and Paley Professor, School of Design, were joined by moderator and Penn IUR Co-Director Eugénie Birch to discuss the media's role in promoting equality and shared prosperity.

Penn IUR Co-Director Susan Wachter introduced the panelists and the evening's topic. Carpini gave the first presentation, discussing the causes and consequences of the current media environment. He identified four social and economic trends that have evolved over decades to create today's media landscape: explosive growth in the number of media outlets, deregulation of media, an economic crisis within the industry, and a dramatic decline in public trust in news media. These trends, he said, have combined to blur the distinctions between interpersonal communication and mass media, entertainment and news, fact and opinion. While this state of affairs has incredible democratic potential, he said, it also requires active, critical engagement.

Jackson focused on the role of faculty and academics in the new media environment, explaining how

the School of Social Policy & Practice is helping its faculty to make their research accessible and comprehensible to people outside of academia. SP2's "Penn Top 10," for example, is a web-based multimodal initiative in which SP2 experts identify and analyze the nation's most important social justice and policy issues (penntopten.com).

Steiner's presentation shifted the conversation to Philadelphia and, in particular, to the local media's involvement in conversations on urban and design topics. He said that the city's proliferation of media outlets covering urban issues, the existence of local critics with architecture and design beats, and the variety of community design initiatives at institutions such as Penn puts Philadelphia at the forefront of media and urban design experimentation.

Following panelist presentations, Birch moderated a discussion in which panelists recognized the impossibility of predicting the future of the media landscape, delved deeper into the relationships between academics and journalists in their efforts to communicate complex concepts to the public, and acknowledged aspects of communication that go beyond the transfer of information.

This event was made possible with the support of the Office of the Provost. To watch a video of the discussion, visit the "Events" section of Penn IUR's website at:

penniur.upenn.edu/events





MARCH 30, 2017

Resiliency and SDGs in a Changing Climate

#### Speakers:

**Howard Neukrug,** Professor of Practice, Penn School of Arts and Sciences, Principal, CASE Environmental LLC

**Frederick Steiner,** Dean and Paley Professor, Penn School of Design

**Henk Ovink,** Special Envoy for International Water Affairs, Kingdom of the Netherlands and Principal, Rebuild by Design

#### Cosponsors:

Perry World House, Kleinman Center for Energy Policy, and Humanities+Urbanism+ Design (H+U+D) Initiative

Photo by R. Kennedy for Visit Philadelphia™



APRIL 4, 2017

The Moment to Get Cities Right: Inside Habitat III, the Urbanization Summit of a Generation

## Speakers:

Mark Alan Hughes, Faculty Director, Kleinman Center for Energy Policy, Professor of Practice, Penn School of Design

**Ian Klaus,** Perry World House Visiting Fellow, Former Senior Advisor for Global Cities, U.S. Department of State

**Sarah Wu,** Deputy Director, Office of Sustainability, City of Philadelphia

Ariella Cohen, Editor-In-Chief, Next City

**Tom Dallessio,** President, CEO, and Publisher, *Next City* 



Perry World House, Kleinman Center for Energy Policy, and Next City

Habitat 3 photo by Agencia de Noticias ANDES, via Flickr.



## PENN IUR BOOK LAUNCH

Principles of Housing
Finance Reform
The U.S. Mortgage Market:
What Does the Future Hold
for Credit Risk and Access?

## Speakers:

**Greg Boester,** Managing Director, JPMorgan

**Peter Carroll,** Executive Vice President, Mortgage Policy and Counterparty Relations, Quicken Loans

**Gerron Levi,** Director of Policy and Government Affairs, National Community Reinvestment Coalition

**Barry Zigas,** Director of Housing for Consumer Federation of America

APRIL 11, 2017

**FILM SCREENING AND DISCUSSION**Changing Face of Harlem

Speaker:

**Shawn Batey,** Filmmaker

#### Host:

Department of City and Regional Planning, Penn School of Design



APRIL 20-21, 2017

PERRY WORLD HOUSE CONFERENCE:
Global Shifts in Focus:
Marginalization & Inequality

SEE SPOTLIGHT ON PAGE 69 FOR MORE ON THIS EVENT.

## Highlighted Speakers:

Jockin Arputham, President, Slum/ Shack Dwellers International and Perry World House Visiting Fellow

**Aisa Kirabo Kacyira,** Deputy Executive Director, UN-Habitat

**Deborah Balk,** Associate Director, CUNY Institute for Demographic Research

Anne C. Richard, Assistant Secretary of State for Population, Refugees, and Migration (2012–2017) and Perry World House Visiting Fellow

**T. Alexander Aleinikoff,** Professor and Director, Zolberg Institute on Migration and Mobility, the New School for Social Research, former Commissioner, UN High Commission for Refugees

**Arafat Jamal,** Head, Inter-Agency Coordination, UN High Commission for Refugees

**Kica Matos,** Director, Center for Community Change, Immigrant Rights and Racial Justice

**Susan Martin,** Founder, Institute for the Study of International Migration, Georgetown University; and the Donald G. Herzberg Professor Emerita of International Migration

Host:

Perry World House

 $Photo\ by\ Internews\ Europe,\ via\ Flickr.$ 



APRIL 21, 2017

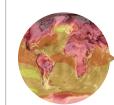
MUSA Earth Day 2017: Urbanization, Migration and Climate Change: What Can We Learn From a Spatial Perspective?

## Speaker:

**Deborah Balk,** Associate Director of the CUNY Institute for Demographic Research

#### osponsor:

Master of Urban Spatial Analytics (MUSA)



APRIL 21, 2017

Earth Day 2017 / 1970

#### Speakers:

Eugénie Birch, Co-Director, Penn IUR

**Frederick Steiner,** Dean and Paley Professor, Penn School of Design

**Richard Weller,** Martin and Margy Meyerson Chair of Urbanism and Professor and Chair of Landscape Architecture

#### Hosts

Penn School of Design and Penn School of Design Student Council

Photo of Projected Surface Temperature Changes 2081–2100, from Atlas for the End of the World.







MAY 8, 2017

Roundtable on Resilience and the Miami Public Realm

Speakers

**Debra McCarty,** Philadelphia Water Commissioner

**Richard Freeh,** City Energy Project Manager at Mayor's Office of Sustainability

**Piet Dircke,** Arcadis Global Leader Water Management

Host:

Department of City and Regional Planning

Cosponsor

Kleinman Center for Energy Policy



MAY 13, 201

Nature and Cities: A Panel

Speakers:

Jose Alminana, Principal, Andropogon

**Adrian Benepe,** Senior Vice President and Director of City Park Development, Trust for Public Land

Carol Franklin, Principal, Andropogon

Catherine Seavitt Nordenson,

Associate Professor of Architecture, City College of New York

Frederick Steiner, Co-editor, Nature and Cities: The Ecological Imperative in Urban Design and Planning and Dean and Paley Professor, Penn School of Design

**Richard Weller,** Martin and Margy Meyerson Chair of Urbanism and Professor and Chair of Landscape Architecture, School of Design

Host:

Penn School of Design

"You change the context, you change the laws, you change attitudes, and then all of a sudden something that would have seemed like an inevitable path into a marginal and dependent status, or a path towards poverty, or a path towards not being able to contribute to society, actually turns into a path towards empowerment, towards power, and towards the ability to change the world."

-VICTOR PINEDA, AT THE APRIL 25, 2017 PENN IUR URBAN LEADERSHIP FORUM





# Penn IUR Undergraduate Urban Research Colloquium

Each year, Penn IUR sponsors the Undergraduate Urban Research Colloquium (UURC), an advanced research seminar for undergraduate scholars with an interest in urban-focused research from across the University. Held each spring semester, this seminar provides students with urban research experience and connects them with faculty mentors with expertise in the their fields of interest. Students receive credits through the School of Design's City and Regional Planning Department or the School of Arts and Sciences Urban Studies Program.

In the spring of 2017, Penn IUR sponsored the 13th annual UURC. This year, six undergraduate students representing the School of Arts and Sciences and The Wharton School and six faculty mentors

representing the School of Arts and Sciences and School of Design participated in the program. Over the course of the semester, students visited the Architectural Archives at Penn, attended a documentary film screening, and participated in data gathering and sharing exercises to further their analytic skills. Faculty and researchers from across the University visited the class to present various approaches to urban inquiry, including presentations on spatial analytics for public policy, ethnography in India, participatory research in immigrant neighborhoods, and food insecurity among recipients of the supplemental nutrition assistance program (SNAP).

UURC topics of study and student–faculty teams this year were:

Crystallizing a Discourse of 'Khalijiness': Exclusion and Citizenship in the Arab Gulf States

STUDENT: KHALED ABDULKARIM
Huntsman Program, The Wharton School

FACULTY MENTOR: HEATHER SHARKEY

Near Eastern Languages and Civilizations,
School of Arts and Sciences

Conventional Benefits? Examining the Revitalization Outcomes of the 2016 Democratic and Republican National Conventions in Philadelphia and Cleveland

STUDENT: NOAH HOLLIN
Urban Studies, School of Arts and Sciences

FACULTY MENTOR: MARY ROCCO
Urban Studies, School of Arts and Sciences

The Preservation of Historic Sounds: Community Efforts to Restore and Maintain the Paul Robeson and John Coltrane Houses

STUDENT: MICHAEL JEAN
History and English, School of Arts and Sciences

FACULTY MENTOR: MOLLY McGLONE
Urban Studies, School of Arts and Sciences

In My Back Yard: Housing Insecurity and Informal Responses in Cape Town, South Africa

STUDENT: MIRA KAPLAN
Urban Studies, School of Arts and Sciences

FACULTY MENTOR: EUGÉNIE BIRCH
City and Regional Planning, School of Design

Urban Ageing Policies in Philadelphia and Daegu

STUDENT: SEYEON KIM
Sociology, School of Arts and Sciences

FACULTY MENTOR: HANS-PETER KOHLER Sociology, School of Arts and Sciences

Martin Wagner, Urban Planner in Exile: An Exploration of the Physical Manifestations of Martin Wagner's Theoretical and Philosophical Ideas

STUDENT: ANDRO MATHEWSON

Germanic Languages, School of Arts and Sciences

FACULTY MENTOR: ANNA VALLYE
Architecture, School of Design

# Master of Urban Spatial Analytics

The Master of Urban Spatial Analytics (MUSA) is a nine-month graduate program coupling spatial analysis skills—most notably Geographic Information Systems (GIS)—with substantive knowledge in a selection of urban content areas including criminology, design, economic and community development, education, local and state government administration, public health, real estate, urban land use planning, social welfare, transportation, and urban demography. While many university and college programs offer certificates in GIS, Penn offers a unique master's degree that integrates spatial analysis with multiple urban disciplines. MUSA is administered by the School of Design with support from Penn IUR and a university-wide Academic Committee. The program draws on teaching and research faculty from the schools of Design, Engineering, Business, and Public Health.

## Academic Committee

#### JOHN LANDIS

Academic Director, Master of Urban Spatial Analytics, Crossways Professor of City and Regional Planning, School of Design

## **KEN STEIF**

Program Director, Master of Urban Spatial Analytics, School of Design

#### DAVID BELL

Xinmei Zhang and Yongge Dai Professor, Professor of Marketing, The Wharton School

## EUGÉNIE BIRCH

Co-Director, Penn IUR; Lawrence C. Nussdorf Professor of Urban Research and Education, Department of City and Regional Planning, School of Design

## **CHARLES BRANAS**

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## **DENNIS CULHANE**

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#### IRMA ELO

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## AMY HILLIER

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Professor of Regional Science, Sociology, Urban Studies, and Real Estate, School of Arts and Sciences and The Wharton School

## TONY SMITH

Professor of Systems Engineering and Regional Science, Department of Electrical and Systems Engineering, School of Engineering and Applied Science

## DANA TOMLIN

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#### SUSAN WACHTER

Co-Director, Penn IUR; Sussman Professor, Professor of Real Estate and Finance, The Wharton School

## DOUGLAS WIEBE

Associate Professor of Epidemiology, Perelman School of Medicine Penn Institute for Urban Research 2016–2017 ANNUAL REPORT





## Students

In order to complete the degree, students must complete a capstone project that applies spatial analysis to an urban content area. Final projects in 2017 included:

- "Spatial Segregation by Another Name: Impact of Religion in Delhi, India," Shruthi Arvind
- "Visualizing Elderly 'Riskscape' in Singapore," Dorcas Chang Yan Qin
- "Property Values and the Second Avenue Subway," Claire Douglass
- "Rent Affordability Analysis in Philadelphia Neighborhoods," Yue Guo
- "How does Road Network Affect Traffic Flow of Philadelphia?," Jingxuan Hou
- "Web-based Tool for Supermarket Siting & Customer Analysis in San Francisco," Tianyi Ren
- "Smart Select: A Decision Support Tool for Commercial Real Estate Investors," Yun Shi
- "Site Selection for Amazon Go in Philadelphia," Xiaoyuan Sun (Layla)
- "Urban Explorer—We Explore Cities with You," Xunze (Aaron) Su
- "Web Mapping Design: Spatial and Temporal Analysis of Community Garden in New York City," Ziqin Wang
- "Analyzing and Visualizing UBER Trip Data in NYC," Mingfang Zhang
- "Pattern Detection & Prediction of Chicago Taxi Trips," Yipei Zhang
- "Bike Smart: A Redefined Philadelphia Bike Route Recommendation App," Jianting Zhao
- "Predicting Free-Floating Bike Share Demand in New York City," Luyun Zhao

MUSA students go on to hold professional positions in a diversity of fields in the public and private sectors. Exemplary positions include: Malaria Analyst, Clinton Health Access Initiative, Harare, Zimbabwe; GIS Specialist, University of Tennessee Health Science Center, Nashville, TN; Senior Economist and Director of Geospatial Analytics, Oxford Economics, Wayne, PA; Product Engineer, ESRI, Redlands, CA; Aerial Sensor Operator, Keystone Aerial Surveys, Inc., Philadelphia, PA; Programmer, Augur Intelligence Technology (Guangzhou) Co. Ltd., Guangzhou, China; Scientist, NASA, Houston, TX; GIS Analyst, Philadelphia Department of Health, Philadelphia, PA; Corporate Real Estate Strategy Director, Bank of America, Pittsburgh, PA; Assistant Director of Planning and Evaluation, City of Philadelphia, Philadelphia, PA; Property Valuation Modeler, NYC Department of Finance, New York, NY; Deputy Budget Director, Program Evaluation, City of Philadelphia, Philadelphia, PA; Associate Director, Econsult Solutions, Philadelphia, PA; Assistant Director, Philadelphia Redevelopment Authority, Philadelphia, PA; Director, Data Analytics, Department of Rehabilitation Sciences, Temple University, Philadelphia, PA; Data Journalist, Associated Press; Founder, Urban Spatial Analytics, LLC, Philadelphia, PA; Lecturer, Department of City and Regional Planning, Penn School of Design, Philadelphia, PA; and Cityworks-GIS Asset Manager, Department of Public Works, City of Richmond, Richmond, VA.

# Public Programming

Every year, Penn IUR partners with MUSA to provide a lunch speaker series, GIS Day event, and Earth Day programming.

The Penn IUR lunch speaker series focuses on real-life applications of geographic information systems and spatial analysis. In 2016–2017, Penn IUR brought in five professionals to share with MUSA students how they apply current tools to urban problems and to speak about the evolving professional landscape. The 2016–2017 speakers included:

- Grant Ervin, Deputy Geographic Information Officer, Enterprise Services, City of Philadelphia
- Tim Haynes, GIS Analyst, City of Philadelphia
- Laura Ancona, Senior Data Scientist of Web Analytics, Office of Open Data and Digital Transformation, City of Philadelphia
- Ken Steif, MUSA Program Director; Founder, Urban Spatial
- Daniel Aldana Cohen, Assistant Professor, Sociology, Penn School of Arts and Sciences

Penn IUR also works with the MUSA program to host a GIS Day event each fall and an Earth Day event each spring. Penn GIS Day, held on November 16, 2016, focused on the importance of open data in public and private organizations for driving innovation. It featured a keynote address by Robert Cheetham, President and CEO, Azavea, followed by a panel discussion with Stacey Mosley, Founder, fixlist.co; Tom Shenk, Chief Data Officer, City of Chicago; and Andrew Turner, Director of ESRI Research and Development Center. Penn IUR celebrated Earth Day 2017 on April 21, 2017 with a talk by Deborah Balk, Associate Director, CUNY Institute for Demographic Research, on forced migration due to climate change. The was part of the Perry World House Global Shifts Conference on the same day.







# Penn IUR Urban Doctoral Activities

Penn IUR supports urban-focused doctoral-level researchers by creating opportunities for students to present their research and to make connections with other urban scholars across disciplines. This year, Penn IUR hosted a speaker series for doctoral students at the UN's Habitat III conference in Quito, Ecuador and cosponsored the annual Urban Doctoral Symposium.

In addition to taking part in Penn IUR doctoral events, a number of doctoral students go on to become part of Penn IUR's Emerging Scholars network. (See page 92 for more information on Penn IUR Emerging Scholars.)

# Doctoral Student Delegation to Habitat III

Eight students from the Graduate Group in City and Regional Planning, School of Design had the opportunity to present their research to an international audience of urbanists on October 19, 2016, as part of the Penn IUR Speaker Series at the UN's Habitat III conference. Participating students and their topics of research included:

## PATRICIO ZAMBRANO BARRAGAN

"Data and Cities: New Trajectories for Urban Governance in Latin America"

## LAURENT CORROYER

"Disaster Debris Management"

## CHANDAN DEUSKAR

"Measuring Global Urbanization Using a Standard Definition of Urban Areas"

## SA MIN HAN

"Urban Design for Informal Settlement: The Case of Las Rehoyas, Spain"  $\,$ 

## KRISTA ISKANDAR

"Social Aspects in Informal Settlements: The Case of Indonesia"

## CHAERI KIM

## SIRUS LIBIERO

"Governing the Urban Periphery in India"

## DAVID STANEK

"Keepers of Urban Heritage: Socioeconomic Dynamics of Local Historic Districts in the Largest Cities of the United States"  $\,$ 

## Urban Doctoral Symposium

On May 12, 2017, Penn IUR, in collaboration with the Penn Urban Studies Program, hosted the 13th annual Urban Doctoral Symposium, which celebrated the achievements of graduating doctoral students who have completed dissertations on urban-focused topics. The four graduating students and their topics of study were:

Branding Against Closure: Philadelphia Neighborhood Schools and the Management of Risky Futures

JULIA McWILLIAMS
Anthropology and Education,
School of Arts and Sciences

Healing at the Borderland of Medicine and Religion: A Folklore Study of Health Care in Taiwan

CHIA-HUI LU

East Asian Studies and
Folklore, School of Arts
and Sciences

Land, Water, Infrastructure & People: Considerations of Planning Distributed Stormwater Management Systems

THEODORE LIM
City and Regional Planning,
School of Design

Occupational Inequality, Racial Integration, and the Spatial Development of Maryvale, Phoenix, 1970–1990

ANTHONY PRATCHER II History, School of Arts and Sciences

Following welcoming remarks from Penn IUR Co-Director Susan Wachter, Dawn Bonnell, Vice Provost for Research, and Mark Stern, Co-Director, Urban Studies Program offered their congratulations to the graduating students. Elaine Simon, Co-Director, Urban Studies Program, School of Design, closed the event with a comment on the benefits of an interdisciplinary approach to studying the city and thanking the graduates for their work.

Penn IUR supports
urban-focused doctorallevel researchers by
creating opportunities
for students to present
their research and to
make connections with
other urban scholars
across disciplines.







Penn IUR People

Penn IUR's academic and professional networks promote exploration of urban issues across disciplines and sectors while its advisory boards help shape its programs and initiatives.

Penn IUR honors the many experts who collaborate with Penn IUR on research and programming through six honorific categories: Faculty Fellows, Scholars, Emerging Scholars, Fellows, Visiting Scholars, and Affiliated Doctoral Students. Through these networks, Penn IUR aims to foster an environment that encourages cross-disciplinary connections and nurtures a collaborative spirit across the University and beyond.







# Penn IUR Faculty Fellows and Executive Council

# Penn faculty with a demonstrated interest in cities Faculty Fellow Executive Council members are denoted with an asterisk.

#### STEFAN AL

Associate Professor of Urban Design, Department of City and Regional Planning, School of Design

#### FRANCESCA RUSSELLO AMMON

Assistant Professor, Department of City and Regional Planning, School of Design

## DANIEL BARBER

Assistant Professor, Department of Architecture, School of Design

#### **DAVID BARNES**

Director of Health and Societies Major and Associate Professor, Department of History and Sociology of Science, School of Arts and Sciences

#### JONATHAN BARNETT

Professor Emeritus of Practice in City and Regional Planning, Department of City and Regional Planning, School of Design

## JERE BEHRMAN

William R. Keenan, Jr. Professor of Economics, Department of Economics, School of Arts and Sciences

## DAVID BELL

Xinmei Zhang and Yongge Dai Professor, Professor of Marketing, Department of Marketing, The Wharton School

## **EUGÉNIE BIRCH**

Co-Director, Penn IUR; Lawrence C. Nussdorf Professor of Urban Research and Education, Chair of Graduate Group, Department of City and Regional Planning, School of Design

## \*CHARLES BRANAS

Professor of Epidemiology in Biostatistics and Epidemiology, Department of Biostatistics and Epidemiology, Perelman School of Medicine

#### LAWRENCE BROWN

 $\label{thm:minimum} \mbox{Miers Busch Professor of Statistics, Department of Statistics,} \mbox{ The Wharton School}$ 

## \*DAVID BROWNLEE

Frances Shapiro-Weitzenhoffer Professor of 19th Century European Art, Department of History of Art, School of Arts and Sciences

## WILLIAM BURKE-WHITE

Richard Perry Professor, Professor of Law, School of Law; Inaugural Director, Perry World House

#### \*CAROLYN CANNUSCIO

Assistant Professor, Department of Family Medicine and Community Health, Perelman School of Medicine

## **CAMILLE ZUBRINSKY CHARLES**

Professor of Sociology; Walter H. and Leonore C. Annenberg Professor in the Social Sciences; Chair, Department of Africana Studies, Department of Sociology, School of Arts and Sciences

## RAM CNAAN

Professor; Program Director, Program for Religion and Social Policy Research; Faculty Director, Goldring Reentry Initiative, School of Social Policy & Practice

## DANIEL ALDANA COHEN

Daniel Aldana Cohen, Assistant Professor, Sociology, School of Arts and Sciences

#### \*DENNIS CULHANE

Professor and Dana and Andrew Stone Chair in Social Policy; Co-Principal Investigator, Actionable Intelligence for Social Policy; Director of Research, National Center on Homelessness among Veterans, School of Social Policy & Practice

## THOMAS DANIELS

Professor; Director, Land Use and Environmental Planning Concentration, Department of City and Regional Planning, School of Design

## \*JOHN DIIULIO, JR.

Frederic Fox Leadership Professor of Politics, Religion, and Civil Society; Director, Robert A. Fox Leadership Program, Department of Political Science, School of Arts and Sciences

#### **GILLES DURANTON**

Dean's Chair in Real Estate Professor; Chair, Department of Real Estate, The Wharton School

## FERNANDO FERREIRA

Associate Professor of Real Estate and Business Economics and Public Policy, Department of Real Estate, The Wharton School

#### **KENNETH FOSTER**

Professor of Bioengineering, Department of Bioengineering, School of Engineering and Applied Science

## VIVIAN GADSDEN

William T. Carter Professor of Child Development and Education; Director, National Center on Fathers and Families; Associate Director, National Center on Adult Literacy, Graduate School of Education

## RICHARD GELLES

Former Dean, School of Social Policy & Practice; Joanne and Raymond Welsh Chair of Child Welfare and Family Violence; Director for the Center for Research on Youth and Social Policy, Department of Child Welfare and Family Violence; Co-Director, Field Center for Children's Policy Practice and Research, School of Social Policy & Practice

#### EDWARD GEORGE

Universal Furniture Professor of Statistics, Department of Statistics, The Wharton School

#### RAFFAELLA FABIANI GIANETTO

Assistant Professor, Department of Landscape Architecture, School of Design

## KAREN GLANZ

George A. Weiss University Professor, School of Nursing; Professor of Epidemiology, Perelman School of Medicine; Senior Scholar, Center for Clinical Epidemiology and Biostatistics

## ANDREA GOULET

Professor of Romance Languages; Graduate Chair, French; French and Francophone Studies, School of Arts and Sciences

## DAVID GRAZIAN

Associate Professor of Sociology; Graduate Chair, Sociology, School of Arts and Sciences

#### JEANE ANN GRISSO

Emeritus Professor CE of Family Medicine and Community Health, Department of Family Medicine and Community Health, Perelman School of Medicine

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## MAURO GUILLEN

Dr. Felix Zandman Professor of International Management; Director, Lauder Institute, Department of Management, The Wharton School

#### JOSEPH GYOURKO

Martin Bucksbaum Professor of Real Estate, Finance, and Business Economics and Public Policy; Director, Zell / Lurie Real Estate Center, Department of Real Estate, The Wharton School

#### **GARY HACK**

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## KATHLEEN HALL

Associate Professor of Education and Anthropology, Division of Education, Culture, and Society, Graduate School of Education

## JESSE HANDBURY

Assistant Professor of Real Estate, Department of Real Estate, The Wharton School

#### \*IRA HARKAVY

Associate VP and Founding Director of the Barbara and Edward Netter Center for Community Partnerships

#### SARA HELLER

Assistant Professor of Criminology, Department of Criminology, School of Arts and Sciences

## JOAN HENDRICKS

The Gilbert S. Kahn Dean, School of Veterinary Medicine

#### **AMY HILLIER**

Associate Professor, Co-Director, Department of City and Regional Planning, School of Design

## \*RENATA HOLOD

College of Women Class of 1963 Term Professor in the Humanities, Department of History of Art, School of Arts and Sciences; Curator, Near East Section, Museum of Archaeology

## MARK ALAN HUGHES

Professor of Practice, Department of City and Regional Planning; Faculty Director, Kleinman Center for Energy Policy, School of Design

## ROBERT INMAN

Richard King Mellon Professor of Finance; Professor of Business Economics and Public Policy; Professor of Real Estate, Department of Finance, The Wharton School

## ROBERTA IVERSEN

Associate Professor; Director, Master of Science in Social Policy Program, School of Social Policy & Practice





#### \*JOHN JACKSON, JR.

Dean; Richard Perry University Professor, Penn Integrates Knowledge (PIK) Professor, School of Social Policy & Practice

## **DEVESH KAPUR**

Director, Center for the Advanced Study of India (CASI); Professor of Political Science, Madan Lal Sobti Professor for the Study of Contemporary India, Department of Political Science, School of Arts and Sciences

## JOHN KEENE

Professor Emeritus of City and Regional Planning, Department of City and Regional Planning, School of Design

## \*ALAN KELLY

Gilbert S. Kahn Dean Emeritus, Department of Pathobiology, School of Veterinary Medicine

## DAVID KIM

Assistant Professor of Art History, Department of History of Art, School of Arts and Sciences

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## DAVID LEATHERBARROW

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#### DANIEL LEE

UPS Foundation Chair Professor; Director, GRASP (General Robotics Automation, Sensing, Perception) Lab, School of Engineering and Applied Sciences

## LYNN HOLLEN LEES

Professor of History Emeritus; Co-Director, Joseph H. Lauder Institute of Management and International Studies, Department of History, School of Arts and Sciences

#### WALTER LICHT

Walter H. Annenberg Professor of History, Department of History, School of Arts and Sciences

## KEN LUM

Professor and Chair; Director, Fine Arts Undergraduate Division, Department of Fine Arts, School of Design

#### JOHN MacDONALD

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Associate Professor and Chair; Executive Director of PennPraxis, Department of Historic Preservation; Executive Director, PennPraxis, School of Design

#### ANURADHA MATHUR

Professor, Department of Landscape Architecture, School of Design

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University Trustee Professor of Education and Social Policy, Education Policy Division, Graduate School of Education

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The Independence Chair for Nursing Education; Professor of Nursing; Associate Director, Center for Health Outcomes and Policy Research; Faculty Director, Nursing and Health Care Management Coordinated Dual Degree Program, School of Nursing

## AFAF MELEIS

Dean Emeritus and Professor of Nursing and Sociology, School of Nursing

## HOWARD NEUKRUG

Professor of Practice in Water Leadership and Innovation, Department of Earth and Environmental Science, School of Arts and Sciences

## \*LAURA PERNA

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#### WENDELL PRITCHETT

Provost, University of Pennsylvania; Presidential Professor of Law and Education, Law School

## JOHN PUCKETT

Professor of Education, Literacy, Culture, and International Education Division, Graduate School of Education

#### JANET ROTHENBERG-PACK

Professor Emerita of Business Economics and Public Policy, The Wharton School

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Martin and Margy Meyerson Professor Emeritus of Urbanism, Department of Architecture, School of Design

#### MEGAN RYERSON

Assistant Professor of City and Regional Planning and Electrical and Systems Engineering, Department of City and Regional Planning, School of Design

## SASWATI SARKAR

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## \*ERIC SCHNEIDER

Assistant Dean and Associate Director for Academic Affairs; Adjunct Professor, Department of History, School of Arts and Sciences

#### LYNN SAWYER SOMMERS

Professor Emerita of Nursing, School of Nursing

## HEATHER SHARKEY

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Dean and Paley Professor, School of Design

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#### MARK STERN

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Professor of Architecture and Urban Design; Former Dean, School of Design

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Patricia Bleznak Silverstein and Howard A. Silverstein Endowed Term Chair in Global Women's Health; Associate Professor of Nursing, School of Nursing; Associate Professor of OB / GYN, Perelman School of Medicine

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## ROBERT YARO

Professor of Practice, Department of City and Regional Planning, School of Design



## Penn IUR Scholars

## Renowned academics from around the world investigating critical urban problems

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## ROBERT CERVERO

Professor, City and Regional Planning, University of California–Berkeley

## JANET CURRIE

Henry Putnam Professor of Economics and Public Affairs, Center for Health and Well-Being, Princeton University

#### YONGHENG DENG

Provost's Chair, Professor of Real Estate and Finance; Director, Institute of Real Estate Studies; Head, Department of Real Estate, National University of Singapore

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Emeritus Professor of Urban and Regional Planning, Taubman College of Architecture and Urban Planning, University of Michigan

#### REBECCA DIAMOND

Assistant Professor of Economics, Graduate School of Business, Stanford University

#### ZAIRE ZENIT DINZEY-FLORES

Associate Professor, Latino and Hispanic Caribbean Studies and Sociology, Rutgers University

## RICHARD FLORIDA

Global Research Professor, New York University; Director of Business and Creativity, The Martin Prosperity Institute, Rotman School of Management, University of Toronto; Founder, Creative Class Group

## MATTHEW FREEDMAN

Associate Professor, Department of Economics, University of California–Irvine

#### GEORGE GALSTER

Hilberry Professor of Urban Affairs, Department of Urban Studies and Planning, Wayne State University

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#### SHAUN HARPER

Clifford and Betty Allen Chair in Urban Leadership; Executive Director, USC Race & Equity Center, Rossier School of Education, University of Southern California

#### HARRY HOLZER

John LaFarge Jr. SJ Professor of Public Policy, Georgetown University

#### JORDAN HYATT

Associate Professor, Department of Criminology and Justice Studies, Drexel University

## KENNETH JACKSON

Jacques Barzun Professor in History and the Social Sciences; Director, Herbert H. Lehman Center for American History, Columbia University

#### **BRIAN JACOB**

Walter H. Annenberg Professor of Education Policy; Professor of Public Policy; Professor of Economics; Professor of Education, Gerald R. Ford School of Public Policy, University of Michigan

#### FERDOUS JAHAN

Professor of Public Administration, University of Dhaka

## PAUL JARGOWSKY

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## RUCKER JOHNSON

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## MARK JOSEPH

Leona Bevis / Marguerite Haynam Associate Professor in Community Development; Founding Director, National Initiative on Mixed-Income Communities, Jack, Joseph and Morton Mandel School of Applied Social Sciences, Case Western Reserve University

#### MATTHEW KAHN

Professor of Economics, Spatial Sciences and Environmental Studies, Dornsife College of Letters, Arts and Sciences, University of Southern California

## KYUNG-HWAN KIM

Professor, School of Economics, Sogang University; former President, Korea Research Institute for Human Settlements; Immediate Vice Minister, Republic of Korea; Vice Minister, Ministry of Land, Infrastructure and Transport (MOLIT)

## SCOTT GABRIEL KNOWLES

Associate Professor of History; Interim Department Head for History, Drexel University

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 ${\bf Professor, Department\ of\ Social\ Anthropology,\ University\ of\ Oslo}$ 

#### **DONGQUAN LI**

Associate Professor, Department of Urban Planning and Management, School of Public Administration, Renmin University of China

#### **HUANG LING**

Associate Professor of Urban Planning, Chongqing University

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Emeritus Professor of Economics and Finance, University of Illinois at Chicago

## GARY McDONOGH

Helen Herrmann Chair and Professor, Growth and Structure of Cities Department, Bryn Mawr College

## SIMON MOSBAH

Consultant, Transit and Rail Project Development and Finance, WSP USA

## DOWELL MYERS

Professor, Sol Price School of Public Policy; Director, Population Dynamics Research Group, University of Southern California

## ARTHUR NELSON

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## SUZANA PASTERNAK

Professor of Architecture and Urbanism, University of São Paulo

## MARINA PETERSON

Associate Professor of Performance Studies, School of Interdisciplinary Arts, Ohio University

## RUTHERFORD PLATT

Professor Emeritus of Geography, University of Massachusetts–Amherst



#### **BO QIN**

Professor, Department of Urban Planning and Management, Renmin University of China

## STEPHEN RAPHAEL

Professor and James D. Marver Chair in Public Policy, Goldman School of Public Policy, University of California–Berkeley

#### STEPHEN ROSS

Professor, Department of Economics, University of Connecticut

#### JESSE ROTHSTEIN

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#### BRENT RYAN

Associate Professor of Urban Design and Planning, Massachusetts Institute of Technology

## SASKIA SASSEN

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#### **CATHERINE TUMBER**

Research Manager, UMass Donahue Institute, University of Massachusetts

#### LAWRENCE VALE

Ford Professor of Urban Design and Planning, Massachusetts Institute of Technology

## **DOUGLAS WEBSTER**

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## MARK WILLIS

Senior Policy Fellow, Furman Center for Real Estate and Urban Policy, New York University

## KATHLEEN WOLF

Research Social Scientist, College of the Environment, School of Environmental and Forest Sciences, University of Washington

## LAURA WOLF-POWERS

Associate Professor, Urban Planning and Policy, Hunter College, City University of New York

## CHUNXIA YANG

Associate Professor, Department of Architecture, Tongji University

## ANTHONY YEH

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# Doctoral candidates from across Penn's campus investigating urban issues

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#### OSEI ALLEYNE

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#### JEFFREY SHARLEIN

Graduate Group in Social Welfare, School of Social Policy & Practice

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Penn IUR is advised by internationally renowned urban experts. The Penn IUR Advisory Board is comprised of innovative practitioners in such fields as real estate, governance, arts and culture, urban planning, finance, communications, and philanthropy. The Penn IUR Executive Committee is composed of deans, faculty, and University administrators from across Penn's 12 schools.

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# \_ooking Ahead

## Land for Public Good in Emerging Economies

Penn IUR will continue to explore how to create and monitor orderly urban development in rapidly urbanizing places. One facet of this initiative promotes the adoption of "RENEWW Zones" a decentralized, closed-loop, multipurpose model for recycling waste and water while producing energy and food within a designated area within or contiguous to a slum. In 2017–2018, Penn IUR and partners will launch a competition to catalyze the development of pilot RENEWW Zones. In addition to its work on RENEWW Zones, Penn IUR will lead a colloquium of Penn scholars researching "Responses to Current Global Agreements: New Theories and Practices of Development in Low- and Middle-Income Nations."

# Urban Fiscal Stability

Penn IUR will continue to promote fiscal stability in U.S. cities through research, convenings, and expert roundtables. In the coming year, efforts will focus on building transparency around the problem of underfunded municipal pensions. Penn IUR will explore, with the support of a working group composed of key stakeholders and experts in the field, various facets of municipal pension obligations.



# Advancing the New Urban Agenda

Penn IUR will continue to generate research in support of the New Urban Agenda and sustainable urban development. Forthcoming articles by Penn IUR Co-Director Eugénie Birch include "Inclusion and Innovation: The Many Forms of Stakeholder Engagement in Habitat III" (Cityscape) and "Implementing the New Urban Agenda in the United States, Building on a Firm Foundation" (Informationen zur Raumentwicklung).

## Energy Efficiency in the Asia Pacific

Penn IUR will conduct a gaps analysis of APEC-sponsored energy efficiency projects, recommending priorities for future funding by illustrating current gaps. This work is a continuation of Penn IUR's partnership with APEC economies to promote the adoption of energy efficient technologies and practices across the Asia Pacific by supporting knowledge transfer and the adoption of best practices.

Japan's Panahome Smart City photo by PanaHome Corporation.



# Housing Finance Reform

Penn IUR will continue to work with partners in the Federal Reserve Bank System and beyond to illuminate problems in the U.S. housing finance system and propose and advance reforms that would enhance the long-term stability of the system while promoting access and affordability. A forthcoming Economic Policy Review will include papers focusing on these issues.

Philadelphia rowhomes photo by Melody Joy Kramer, via Flickr.



## Rise of the City in China

Penn IUR will host the second in a series of conferences held at the Penn Wharton China Center discussing urbanization dynamics in China. This second conference will look at the financing of sustainable urban development in China, including looking to international models for transferable lessons. Penn IUR will make papers from the fall 2016 conference on the Rise of the City in China available online.

