



## Sustainable Urbanization:

ACE

ATTERS

March 27-28, 2014 The University of Pennsylvania 3600 Sansom Street, Philadelphia, PA

With support from





## ...9 Cross Cutting Urban Topics Emerged



#### **Community and Culture**

"How can citizens choose smaller houses, less material wealth, even less travel if sacrifice rebalances global ecologies? Cities as built environments and political economic structures have always "created" citizens -- how can we rethink these processes?" (McDonogh)

### Calculation



"Basic empirical research on all aspects of Indian cities is urgently required to better understand Indian cities and to improve urban policy. " (Patel)





#### Connectivity

"What is the potential for distributed power in cities?" (Daniels)

#### Configuration

"Is there a link between spatial organisation and social exclusion or are other processes much more significant, especially now and into still more digital futures?" (Mabin)



#### Climate

"[How do we] adapt to sea level rise and augment risk from storms in coastal cities?" (Barnett)



#### Conceptualization

"There is no common definition of civic engagement; no common set of ground rules or protocols for how we engage people and communities; and no way to measure its impact." (Steinberg)



#### Collaboration

"What are the most effective ways—in terms of governmental structure and specific policies—to promote integration and advance social equity within the context of fragmented municipal governments and limited public resources?" (Davidson)



#### Consumption

"Cities drive demand for animal based foods. By 2050, per capita meat consumption is projected to increase 86% in East Asia and 118% in Sub-Saharan Africa." (Kelly)



#### Concentration

"What are the political, psychological, and cultural conditions necessary to sustaining density and hyper-density in a world of cities?" (Hughes)

# CONTENTS

Introductory Notes	07
Agenda	15
Participant List	21
Participant Bios & Views on Urban Research	25
About the Urban Research eJournal (SSRN)	47
About Penn IUR	49

## **Introductory Note**

Welcome to the Penn IUR Tenth Anniversary Research Summit. Below are some thoughts that we hope will provide a platform for our discussions over the next two days. We mean this piece to be suggestive, not definitive. We put it together as we collaborated with The Rockefeller Foundation on its Transforming Cities initiative, begun in Spring 2013. This Summit is a continuation of that project. For more information about the previous work, see www.visionariesunbound.com.

Eugénie Birch and Susan Wachter

#### **Sustainable Urbanization: Place Matters**

#### Introduction

That the world is soon to be overwhelmingly urban is well known. That cities are the fulcrum of human economic, social, and political opportunities is also well known. What is in question is the future of the many citizens who live in urban areas.

Worldwide, a billion city dwellers live in slums, the majority in the developing world. Many have marginal jobs in the informal economy. All are deprived of some type of public good: quality education, adequate health care, accessible transportation. At the root of these conditions is income inequality that is growing in both the developing and developed countries. Furthermore, global warming is threatening the well-being of many urban places. With 60 percent of all large cities in hazard-prone locations, rising water levels and increasing climatological disturbances are placing cities at risk. Associated issues of food security and water scarcity are likely to mount as well.

United Nations demographers are predicting that the global urban population will double to 7 billion by 2050. If they are accurate, today's issues may well be exacerbated by this growth. Figure 1 offers a picture the urban world today and tomorrow with the first map showing highly urbanized places in 2011 and the second illustrating the urban growth by country and number of cities a mere decade and a half later. Note the changes in Asia and Africa.



Between 2011 and 2030 alone, the urban areas of the world are expected to gain 1.4 billion people, with the increases concentrated in just a few countries. Together, cities in China and India are expected to account for more than a third of the increase; 276 million more people will live in China's cities and 218 million more people in India's cities in 2030. Nine other countries are predicted to contribute another 26 percent of the additional 1.4 billion: Democratic Republic of the Congo, Bangladesh, Brazil, Indonesia, Mexico, Nigeria, Pakistan, the Philippines, and the United States. Countries in Africa and Asia will experience the highest rates of urban population growth, surpassing 2 percent or even 3 percent per year.

Figure 2, the actual and predicted distribution of cities by size and by their respective shares of the total global urban population shows two notable phenomena. First, megacities, places that capture much media attention, are in reality few in number and have a relatively low share of the global urban population today, a condition likely to hold true in the future. Second, the true weight of urbanization is and will continue to fall on cities of 5 million population or less. Figure 3, offering population distributions from 1970- 2025, simply underlines the fact that most urbanites have lived and will continue to live in these cities of this size. These data suggest that future urban research query the extent to which city size variations matter.

Figure 2. City Size, Number, and Share of Population, 2011 and 2025

City Size	Number (% of world urban population) 2011	Number (% of world urban population) 2025
Megacities (10 million+)	23 (10%)	37 (14%)
5-9.9 million	40 ( 9%)	59 ( 9%)
1-4.9 million	394 (21%)	573 (24%)
.59 million	525 (10%)	750 ( 11% )
Under .5 million	NA (50%)	NA ( 42%)
Source: United Nations, Department of Economic and Social Affairs, Population Division: World Urbanization		

Prospects, the 2011 Revision, New York 2013

#### Figure 3. Distribution of Urban Population by City Size, 1970-2025



Figure II. Total population in millions by city size class, 1970, 1990, 2011 and 2025

Nonetheless, these data make clear the importance of including spatial considerations in urban research. Where urban development is occurring is critical. Consider, for example, the location of cities in the Pacific Region's so-called "ring of fire," the area along the periphery of the Pacific Ocean basin where many earthquakes and volcanoes occur, which calls to mind the scale and location of such natural and human-made disasters as drought, floods, earthquakes, tsunamis, and cyclones. See Figure 4, which illustrates cities prone to multiple disasters. When newly urbanized places haphazardly absorb arable land, are placed on landslide-prone hillsides, or disrupt storm-sensitive floodplains they will be in jeopardy.

Natural disasters, food crises, and other emergencies related to geography and climate change disproportionately affect urban populations in general, and most dramatically impact the poor and vulnerable in particular. With this in mind, the importance of understanding sub-city social and economic patterns, particularly patterns of concentrated poverty (in which both children and adults are alienated from mainstream opportunities) and informality in all its forms, is obvious. Finally, while Figure 5 outlines poverty levels in nations not in cities or sub-city districts, the range and location of different levels of deprivation highlights its severity in Africa, parts of Asia, and Latin America.



Figure 4. Urban Agglomerations by Size Class and Potential Risk of Multiple Natural Disasters, 2025

Source: United Nations, Department of Economic and Social Affairs, Population Division: World Urbanization Prospects, the 2011 Revision, New York 2013



#### Figure 5. Percentage of Population Living Below National Poverty Lines

Source: CIA Factbook 2008

Although cities vary enormously throughout the world, some general principles of urban dynamics hold true; understanding these principles may assist researchers and policymakers in managing them to harness cities' strengths. If managed well, cities can be sustainable—determining how to accomplish this mission is the challenge. In general, cities are shaped by and can control three forces of urbanization that public and private decision-makers can bring to bear. First, they are physical entities where the arrangement of buildings, transport, and the public realm affects the full range of human needs—housing, transportation, air and water quality, access to jobs and social integration. Second, by delivering public goods and by regulating public and private behaviors, decision-makers can support the smooth functioning of city economies and of human development. Third, by virtue of their density, that is the "magic of human interactions," cities can support the social and economic connections that undergird productive synergies that enhance their residents' life chances.

Understanding the interplay of these forces of urbanization and how to manage them to maximize opportunity for all is paramount. Urbanization is not new—nor is the failure to provide public goods in cities. Since the late nineteenth century, generations of practitioners have worked to address such failure. And they have made notable advances. The provision of clean water, development of mass transportation, creation of the civil service, and the invention of public health, education, and social welfare systems in the developed world are a few examples of progress. Although tailored to twentieth-century urbanization, and to the cities of Europe and the Americas in particular, these advancements may still provide some lessons for today's growing cities and metropolitan regions in Asia and Africa. Contemporary researchers are now making the connections.

However, twenty-first-century urbanization differs in pace, location, and character from urbanization of the past. The speed of today's metropolitan growth is at a historic high: demographers report that it took 10,000 years for the world to reach its first billion urbanites, but will likely take only fifteen years for the current urban population to increase by a billion. Accommodating this growth alone would require building the equivalent of a city of a million every week for the next forty years.

#### **Brief Situation Analysis for Rapidly Urbanizing Places**

Africa and Asia are the focal points of rapid twenty-first-century urbanization. Today, Africa is 40 percent urbanized and Asia is 45 percent urbanized. In two decades, these rates will likely rise to 48 percent and 56 percent, respectively, as African and Asian cities experience annual urban growth rates of 2 to 3 percent. By 2050, demographers expect Africa to be 58 percent urbanized and Asia to be 64 percent urbanized. African and Asian cities already strain to provide core urban services (clean water and sanitation, housing, secure land tenure, transportation, health care, and education). Without these services, they will be unable to reap the agglomeration advantages (the flows of ideas and functions that fuel prosperity that cities can provide) that can pay for the services.

#### **Brief Situation Analysis for Highly Urbanized Places**

While the developing world is coping with rapid urbanization, much of the rest of the world is already dominated by cities. Ranked in order of level of urbanization 2011, these urbanized regions are North America (82 percent), Latin America (79 percent), and Europe (73 percent). In two decades, these regions are expected to support even higher proportions of city-dwellers (North America, 86 percent; Latin America, 83 percent; and Europe 77, percent). Many of these regions share common concerns, including: aging infrastructure, economic division and sprawl, and lack of appropriately scaled solutions to the listed problems. While the population and GDP shares of the developed world's cities will likely decline in the next decades, they are at the center of important global discussions related to climate change.

#### **Addressing Important Research Gaps**

While a good deal of information exists on urban growth and its projected impacts for

both the developing and developed worlds, the connection between urban systems, broadly conceived, and local solutions is missing. A platform of deep and detailed place-based research, drawn from many sources, is needed to inform public and private policy for a sustainable and inclusive global urban future.

#### **Organization of the Research Summit**

We are asking you to join one of the tables listed below. For each table, we offer some discussion topics along with some prompting questions. The aim is to accomplish the following:

Goal: To explore and prioritize existing and emerging research agendas that address the spatial aspects of twenty-first-century global urbanization trends.

**Objective:** Prioritize four to five major research agendas or questions related to the table topics.

#### **Table 1: Economic Agglomeration**

Table Leads: Stephen Malpezzi, Gilles Duranton

Rapid urbanization and globalization are reshaping the understanding of agglomeration economies, optimal city size, and spatial organization. What urban forms and systems of cities best foster economic growth and human capital development?

#### **Table 2: Resilience and Metropolitan Systems**

Table Leads: Lawrence Vale, Tom Daniels

The concept of resilience has many implications for urban spatial organization, and may inform ways of addressing climate change, urban-rural relationships related to food security, the provision of water, and the delivery of other ecosystem services. What research is needed to understand the key levers that promote urban resiliency?

#### **Table 3: Transportation and Infrastructure**

Table Leads: Catherine Ross, Michael Replogle

Transportation and infrastructure investment can facilitate economic rejuvenation, reduce environmental degradation, and create healthier, more accessible mobility options: What research is needed to better define, inform and support such strategies and help decision-makers allocate resources for such investments?

#### **Table 4: Inequality**

Table Leads: Paul Jargowski, Alan Mabin

Inequalities in the access to public services provided by nations and cities (education, sanitation, clean water, and transportation) limit inclusive growth and shared prosperity. What research is required to determine how best to produce, provide and finance public goods? At what scale are different public goods best financed and delivered?

#### **Table 5: Urban Analytics**

Table Leads: Dana Tomlin, Marja Hoek-Smit

Data, technology, and urban spatial analytics are useful to inform decision-making in allocating resources, setting strategic benchmarks, and improving efficiency of operations. What research is needed to determine the types and efficacy of "Big Data" and place-based data analytics in driving sustainable solutions and innovative policies for cities at different levels of development?

## AGENDA

### Thursday, March 27, 2014

Van Pelt-Dietrich Library, 6th Floor, Class of 1978 Pavilion, 3420 Walnut St.

- 10:00 11:00 AM Registration Refreshments provided
- 11:00 1:30 PM **Penn IUR Urban Leadership Forum** (Invitation-only Luncheon) The 10th Annual Penn IUR Urban Leadership Forum honoring innovative urban leaders for their accomplishments in creating resilient cities. Lunch provided.

#### **Awardees include**

**Sister Mary Scullion** and **Joan Dawson McConnon**, cofounders of Project HOME. Project HOME, which is celebrating its 25th anniversary, has grown from an emergency winter shelter into an organization ending homelessness with 535 units of affordable housing. It is an international model for alleviating homelessness and poverty on a large scale, providing employment services programs and comprehensive medical and education services. In 2002, Sister Mary was awarded an Eisenhower Fellowship and, that same year, she and Joan were national awardees of the Ford Foundation's prestigious "Leadership for a Changing World Award." In 2009, Sister Mary was named by TIME Magazine's as one of "The World's 100 Most Influential People". In 2012, the Philadelphia Inquirer selected her as their Citizen of the Year.

#### **Martin O'Malley**

Martin O'Malley is serving the people of Maryland in his second term as Governor. Since 2007, his Administration has been delivering results for Maryland families by choosing to do the things that work to create jobs, expand opportunity, and make Maryland a safer, healthier place. A former *Governing Magazine* "Public Official of the Year," Governor O'Malley was re-elected in 2010. The Governor's policies have been credited with restoring the health of the Chesapeake Bay and saving the Bay's native blue crab and oyster populations. The O'Malley Administration has also secured millions of dollars in rate relief for Maryland energy consumers while jumpstarting the creation of thousands of green energy sector jobs. Under Governor O'Malley's leadership, Maryland led the charge for RGGI, the nation's first cap-and-trade auction of greenhouse emissions. Inn at Penn, St Marks/Regent Room, 2nd Floor (Lobby Level), 3600 Sansom St.

2:00 - 5:00 PM	Sustainable Urbanization: Place Matters (Private Session, Research Summit) Closed-door session of scholars from across the globe exploring the centrality of spatial considerations within ongoing multi- disciplinary research fundamental to twenty-first century
2:00 – 2:15 PM	Welcome and Introductions Eugénie Birch and Susan Wachter, Co-Directors, Penn IUR
2:15 – 2:45 PM	<b>Firestarter Discussion</b> Kick off session with four participants who will discuss their research question contributions as they relate to major urbanization trends and research issues.
	Jonathan Barnett Professor of Practice Emeritus, Department of City and Regional Planning, School of Design, University of Pennsylvania Mark Alan Hughes Professor of Practice, Department of City and Regional Planning, School of Design, University of Pennsylvania
	Ferdous Jahan Professor of Public Administration, University of Dhaka; Academic Coordinator, BRAC Development Institute, BRAC University Saskia Sassen Robert S. Lynd Professor of Sociology, Department of Sociology, Columbia University
2:45 – 3:45 PM	<b>Roundtable Discussions</b> Breakout groups explore and prioritize existing and emerging research agendas that address the spatial aspects of twenty-first century global urbanization trends.
3:45 – 4:00 PM	Coffee Break
4:00 – 4:45 PM	Roundtable Report Out Moderator: Marilyn Jordan Taylor, Dean and Paley Professor, School of Design, University of Pennsylvania Table leads will report out the results of the table discussions with key research issues and/or questions.
4:45 – 5:00 PM	<b>Concluding Discussion</b> <b>Speaker</b> : Robert Buckley, Senior Fellow, The Milano School of International Affairs, Management, and Urban Policy, The New School

5:30 – 6:30 PM	<b>The Future of Urbanization:</b> <b>What Can We Learn from Asian Cities?</b> (Public Panel Discussion) Today, almost 80 percent of all city dwellers live in Asian cities. This panel will examine the challenges and opportunities of urban life in Asia and suggest lessons for cities around the globe.	
	Panelists	
	<b>Stefan Al</b> Associate Professor of Urban Design, Department of City and Regional Planning, School of Design University of Pennsylvania <b>Abha Joshi-Ghani</b>	
	Director, Knowledge Exchange and Learning Department, Leadership Learning and Innovation Vice Presidency, The World Bank	
	Bimal Patel President, CEPT University	
	Anthony Yeh Professor and Head, Department of Urban Planning and Design; Director, Geographic Information Systems Research Centre, University of Hong Kong	
6:30 – 7:30 PM	Reception	
POD Restaurant, Private Dining Room, 3636 Sansom St. (next to Inn at Penn)		
8:00 PM	Private Dinner for Research Summit Participants	
Friday, March 28, 2014 (Private Session, Research Summit continued)		
Inn at	Penn, Living Room, 2nd Floor (Lobby Level), 3600 Sansom St.	
8:00 – 9:00 AM	<b>Continental Breakfast and Poster Session</b> University of Pennsylvania's School of Design urban-focused doctoral candidates will display their research in poster format.	
	<b>Penn Doctoral Students</b> William Fleming, Albert Han, Simon Mosbah, Joseph Su, Theo Lim, Marry Rocco, Josh Warner, Amber Woodburn	
Inn at Penn, St Marks/Regent Room, 2nd Floor (Lobby Level), 3600 Sansom St.		
9:00 – 10:30 AM	Think Tanks and Foundations: Views on Urban Issues Representatives of several foundations and other financing sources discuss the urban research outlook.	

**Moderator:** Theresa Singleton, Vice President, Community Development and Education, Federal Reserve Bank of Philadelphia

- 9:00 9:10 AM Introductions
- 9:10 10:00 AM Panel Discussion
- 10:00 10:30 AM Group Conversation and Q&A

#### **Panelists**

#### **Don Chen**

Senior Program Officer, Ford Foundation **Ben Hecht** President and CEO, Living Cities **Ron Kassimir** Senior Advisor, Social Science Research Council **Shawn McCaney** Senior Program Officer, William Penn Foundation **Justin Schied** Senior Advisor, Office for International and Philanthropic Innovation, U.S. Department of Housing and Urban Development

#### 10:30 – 11:30 AM Crafting A Global Urban Commons:

**Universities and Institutes Around the World** Discussion will explore means to create a new action-oriented network between university-based research institutes around the world and the key actors in civil society, the private sector, and governance

**Introduction:** Eugénie Birch, Co-Director, Penn IUR **Moderator:** Susan Wachter, Co-Director, Penn IUR

#### 11:30 – 12:00PM Closing Remarks

12:00 – 1:00 PM Screening of the new documentary "An Urban World: A Case Study of Slum Relocation" (2013), Lunch "The Urban World: A Case Study of Slum Relocation" documents a family as it receives the news that it must vacate its slum home, packs up, and makes the move to a new, low-income housing project in Ahmedabad, India. The 41 minute documentary includes comments by a Summit participant, Bimal Patel. Filmmaker: Warren Bass, Professor, Film and Media Arts, Temple University. Producer, Summit participant: Howard Spodek, Professor of History and Urban Studies, Temple University. Howard Spodek and Bimal Patel will be available for questions after the screening and during lunch.

## **Participants**

**Stephan Al**, University of Pennsylvania Jonathan Barnett, University of Pennsylvania **Eugénie Birch**, University of Pennsylvania Robert Buckley, The New School **Don Chen,** The Ford Foundation **Stefani Danes,** Carnegie Mellon University **Thomas Daniels,** University of Pennsylvania Nestor Davidson, Fordham University **Gilles Duranton**, University of Pennsylvania Andrea Goulet, University of Pennsylvania Ira Harkavy, University of Pennsylvania **Ben Hecht**, Living Cities Joan Hendricks, University of Pennsylvania Marja Hoek-Smit, University of Pennsylvania **David Hsu,** University of Pennsylvania Mark Alan Hughes, University of Pennsylvania Ferdous Jahan, University of Dhaka Paul Jargowsky, Rutgers University Abha Joshi-Ghani, World Bank Ron Kassimir, Social Science Research Council Alan Kelly, University of Pennsylvania **Neil Kleiman,** New York University Lynn Hollen Lees, University of Pennsylvania Alan Mabin, University of Pretoria

Stephen Malpezzi, University of Wisconsin Shawn McCaney, William Penn Foundation Gary McDonogh, Bryn Mawr College Caroline Ouwerkerk, University of Chicago Jurij Paraszczak, Carnegie Mellon University **Bimal Patel**, CEPT University Laura Perna, University of Pennsylvania **Neal Peirce,** Citiscope **Bo Qin,** Renmin University **Michael Replogle,** Institute for Transportation and Development Policy **Catherine Ross,** Georgia Institute of Technology David Rouse, American Planning Association Saskia Sassen, Columbia University Justin Scheid, U.S. Department of Housing and Urban Development Elliot Sclar, Columbia University **Theresa Singleton**, Federal Reserve Howard Spodek, Temple University Harris Steinberg, University of Pennsylvania **Henry Taylor,** University at Buffalo Marilyn Jordan Taylor, University of Pennsylvania **Jin-Guang Teng**, Hong Kong Polytechnic University David Thornburgh, University of Pennsylvania Dana Tomlin, University of Pennsylvania **Lawrence Vale**, Massachusetts Institute of Technology **Dominic Vitiello,** University of Pennsylvania

Susan Wachter, University of Pennsylvania

Anthony Yeh, University of Hong Kong

#### **Special Guests**

**Mark Bangela,** Senior Associate Director, Principal Gifts, University of Pennsylvania

Paula Clark, Executive Director, Principal Gifts, University of Pennsylvania

**Manuel Diaz**, Penn IUR Advisory Board Member, former Mayor of Miami, Florida

**Paul Farmer,** Penn IUR Advisory Board Member, Executive Director & CEO, American Planning Association

Andrew Halvorsen, Penn IUR Advisory Board Member, Private Investor

**Evan Heller**, Penn IUR Advisory Board Member, Private Real Estate Investor & Advisor

Robert Hillier, Penn IUR Advisory Board Member, Principal, studiohillier

**Lawrence C. Nussdorf**, Penn IUR Advisory Board Member, President & COO, Clark Enterprises, Inc.

**Mark Rosenberg**, Penn IUR Advisory Board Member, Principal, MHR Fund Management LLC

**Robert J.T. Rosenfeld**, Penn IUR Advisory Board Member, Principal, JBG Rosenfeld Retail

**Robert Stewart**, Penn IUR Advisory Board Member, Managing Director, The JBG Companies

Laura Wainer, Buenos Aires Architect, Fulbright Scholar, The New School

### **Participant Bios & Views on Urban Research**



#### Stephan Al, University of Pennsylvania

Stefan Al is an EU-licensed Dutch architect, urban designer, and Associate Professor of Urban Design at the University of Pennsylvania. His writing has been published in the Handbook of Architectural Theory and the Berkeley Planning Journal, among other publications, and he is currently writing a book on Las Vegas entitled The Strip. He was a founding member of the Hong Kong Institute of Urban Design, a co-opted member of Hong Kong's Harbourfront Commission, and as a task force member of Hong Kong's Environment Bureau.

Asian cities are typically characterized by urban informality, rapid urbanization, and extreme densities—conditions very different from cities in the West.

- How should researchers respond to these conditions?
- What are some new and important topics to be explored?
- What does this mean for our research methods?
- What are the effects on the public realm?
- How can urban designers and planners respond to these conditions?
- What does this mean for urban design and urban planning theory?

#### Jonathan Barnett, University of Pennsylvania

Jonathan Barnett is Emeritus Professor of Practice in City and Regional Planning and former Director of the Urban Design Program at the University of Pennsylvania. He is an architect and planner as well as an educator, and has authored numerous books and articles on the theory and practice of city design.

Scholars have yet to adequately address four compelling research topics about sustainable urbanization that concern adaptation to climate change by 2050:

- Adapting to sea level rise and the augmented risk from storms in coastal cities,
- Adapting to more frequent "100 Year" floods along inland rivers,
- Adapting to increased duration and severity of drought from rising temperatures, including both potable water resources and food, and
- Adapting to increased risk of forest fires as a result of changes in the eco system.



#### Eugénie Birch, University of Pennsylvania

Eugénie Birch is Lawrence C. Nussdorf Chair of Urban Research and Education in the School of Design at the University of Pennsylvania; Co-Director, Penn Institute for Urban Research, co-editor, City in the 21st Century book series published by the University of Pennsylvania Press, and co-editor, SSRN Urban Research eJournal. She teaches courses in planning history and global urbanization and serves as Chair, Graduate Group in City and Regional Planning.

Back in 2000, when the United Nations established the Millennium Development Goals (MDGs) international targets to guide global investments to alleviate



worldwide poverty, it largely forgot cities. Now that the MDGs are expiring, the UN is poised to adopt replacement Sustainable Development Goals (SDGs). It will include cities in some form, with language likely along these lines (either as a stand-alone goal or parsed targets integrated into other goals): "achieve sustainable cities and human settlements." But, what indicators will be used to benchmark and measure progress? The key question is: What constitutes a sustainable city—adequate housing? transport? jobs? public space and streets? lifeline and social services? lack of sprawl? freedom from natural disasters? The list of attributes is clear but what data can be applied to all cities in every state of development?



Robert Buckley is a Senior Fellow in the Graduate Program in International Affairs at The New School. Previously, he was an advisor and Managing Director at the Rockefeller Foundation, and Lead Economist at the World Bank. Buckley's work at both the Foundation and the World Bank focused largely on issues relating to urbanization in developing countries.

How are Sub-Saharan cities going to cope with rapid rates of population growth when almost none of them have seen any improvements in access to improved sanitation over the past twenty years despite a 50 percent increase in per capita income? If this trend isn't arrested or dealt with the prospects for these cities, and the countries in which they are located, is bleak.



#### **Don Chen, The Ford Foundation**

Don Chen is a Senior Program Officer at the Ford Foundation. He joined the Ford Foundation in 2008 and works on reforming the rules that shape municipal and regional growth by pursuing integrated approaches to affordable housing, public transportation, land use, and community planning. Previously, he was the founding Executive Director and CEO of Smart Growth America.

The United Nations Sustainable Development Goals process will soon establish a set of goals for global development, poverty reduction, and sustainability, either in the form of a stand-alone "Cities & Human Settlements Goal" or a set of targets that are "mainstreamed" within other goals. What would be some sensible targets for equitable and sustainable urbanization? What data and indicators are needed to track progress?

A growing chorus of urban leaders—from mayors to community organizations are calling for more inclusive growth and less inequality. National-level research by the IMF, OECD, and other institutions suggests that social inclusion is highly correlated with stronger and longer periods of economic growth. Is there a comparable body of evidence related to inclusive urbanization? If greater social inclusion leads to greater prosperity, what would an urban social inclusion agenda look like, based on evidence of the most effective strategies?





#### Stefani Danes, Carnegie Mellon University, Perkins Eastman

Stefani Danes is Adjunct Professor of Architecture at Carnegie Mellon University, where she has taught since 1979. She is also a Principal in the firm of Perkins Eastman, where she focuses mainly on the design of environmentally responsive housing. Prior to joining Perkins Eastman, she was a founding Partner of an architectural office that specialized in community development.

The impact of industrialization on the climate and habitability of the earth is the most far-reaching challenge facing cities in this century. Developing better spatial and technological responses to this threat is necessary. But even more fundamental to sustainability is social organization—people's abilities to work together to solve problems. What kinds of urban environments support community? What are the implications of the sharing economy on the physical form of cities? How can the physical environment support social justice and acceptance of diversity? If communities are self-organizing, what is the role of designers and design processes?

#### Thomas Daniels, University of Pennsylvania

Thomas Daniels directs the concentration in Land Use-Environmental Planning at the University of Pennsylvania's School of Design. Daniel's main areas of interest are farmland preservation, growth management, and the connection between land use and water quality. He lives in Lancaster, Pennsylvania, where for nine years he managed the county's nationally recognized farmland preservation program.

- How do we create energy-efficient, safe, and reliable transit systems that minimize the use of fossil fuels?
- How do we provide long term reliable sources of clean fresh water?
- How do we maintain close-by agricultural lands for fresh produce with minimum transportation needs?
- How do we provide effective recycling of solid waste and a minimum generation of solid waste?
- How can we use green infrastructure to manage urban stormwater and the urban heat island effect?
- How do we retrofit cities to become carbon neutral?
- What is the potential for distributed power in cities?
- What is the optimum population size of cities for sustainability?



#### **Nestor Davidson, Fordham University**

Nestor Davidson is Professor of Law and Director of the Fordham Urban Law Center. Prior to joining Fordham, he was an Associate Professor of Law at Colorado Law School. Davidson also practiced with the firm of Latham & Watkins and served as Special Counsel and Principal Deputy General Counsel at the U.S. Department of Housing and Urban Development.

- What are the most effective ways -in terms of governmental structure and specific policies to promote integration and advance social equity within the context of fragmented municipal governments and limited public resources?
- How can we most effectively approach innovating toward urban



sustainability and resilience, given existing allocations of authority, the art of the technologically feasible, and existing culture?

• How can we structure public involvement in urban governance (whether in elections, community planning, participatory budgeting, or other avenues of governance) in a way that appropriately balances democratic accountabil ity and meaningful input against the risk of parochialism and exclusion?

#### **Gilles Duranton, University of Pennsylvania**

Gilles Duranton is the Dean's Chair in Real Estate Professor and Chair of the Real Estate Department at Wharton School of Business at the University of Pennsylvania. Prior to joining Wharton, he was at the University of Toronto and the London School of Economics. He is co-editor of the *Journal of Urban Economics* and of *the Handbook of Regional and Urban Economics* (forthcoming).

Rapid urbanization in developing countries is reshaping our understanding of agglomeration economies. Large cities have been shown to be more productive per capita than smaller ones. This is because larger cities allow for variety and specialization in clusters, enable better matching in the job market that leads to higher job growth, and most importantly, facilitate knowledge sharing and spillovers that contribute to the creation, diffusion and accumulation of knowledge. Understanding how agglomeration economies associated with urbanization can be maximized in developing countries needs to be addressed going forward.

#### Andrea Goulet, University of Pennsylvania

Andrea Goulet is Associate Professor of French in the Romance Languages Department at the University of Pennsylvania and Co-Chair, with Corry Cropper of BYU, of the Nineteenth-Century French Studies Association (NCFS). She has coedited journal issues on "*Visual Culture*" (Contemporary French Civilization) and "*Crime Fictions*" (Yale French Studies). Her forthcoming book, *Legacies of the Rue Morgue: Space and Science in French Crime Fiction, 1866-2006*, explores scientific discourses (cartography, geology, geography) and urban spatiality in modern French crime fiction from Emile Gaboriau to Fred Vargas.

Sustainable development theorists have long recognized the importance of addressing cultural values that extend beyond economic metrics. Practitioners and planners have responded with so much creativity that I am left wondering what scholars of the Arts and Humanities—i.e., those of us who study textual and visual discourses—can bring to the table. Perhaps one way to find common ground is to ask a question: What is the place of imagination in urbanism? Textual Imagination: Can utopian fantasies and dystopian fictions reveal the rifts and possibilities of lived space? Visual Imagination: Can new arts and technologies of mapping reveal gaps between the real and the unreal?

#### Ira Harkavy, University of Pennsylvania

Ira Harkavy is Associate Vice President and founding Director of the Barbara and Edward Netter Center for Community Partnerships, University of Pennsylvania. An







historian with extensive experience building university-community-school partnerships, Harkavy teaches in history, urban studies, and Africana studies, and in the Graduate School of Education.

A most compelling urban research question is how to effectively engage anchor institutions, particularly higher educational and medical institutions, as democratic partners genuinely (not merely rhetorically) dedicated to revitalizing their local communities and cities. Simply stated, what these place-based institutions do (or fail to do) has enormous impact on the quality of life in urban areas and metropolitan regions. America's colleges and universities, for example, represent immense concentrations of human and economic capital (with approximately four million employees, 20 million enrolled students, \$400 billion in endowments, \$460 billion in annual economic activity). How to engage government at all levels as effective catalysts for creating significant, sustained higher education-community partnerships is a urban research question that deserves serious attention.

#### **Ben Hecht, Living Cities**

Ben Hecht is President & CEO of Living Cities, which focuses on grants, loans, and influence to re-engineer obsolete public systems and connect low-income people and underinvested places to opportunity. Hecht co-founded One Economy Corporation, a global nonprofit organization that leverages the power of technology and connects underserved people around the world to vital information that will improve their lives, and was Senior Vice President at the Enterprise Foundation.

- How best can big data be used to improve city services and the economic wellbeing of low income residents?
  - o How would practices in the public and private sector have to change in order to accommodate these results?
- How can the ubiquitous nature of social networks be better activated to improve citizen engagement and connections to the economic mainstream?
- Can government-to-government services be a material revenue source for the public sector?
- Can public policies and best practices be accelerated through more effective and intentional sharing?

#### Joan Hendricks, University of Pennsylvania

Joan Hendricks is the Gilbert S. Kahn Dean, School of Veterinary Medicine, University of Pennsylvania. During her tenure, she has emphasized that vets are key health providers to the ecosystem and play a crucial role in ensuring food safety and public health, safeguarding animal health, guarding against bio- and agro-terrorism and working to maintain a healthy environment.

How are we going to provide food—especially animal proteins—to an increasingly urbanized world? Can we integrate agriculture—including animal husbandry into modern cities? In the developed world, the solution historically has been to expel all agriculture, and especially animal agriculture, to remote locations. This puts distance between food-producers and food-consumers. This distance is psychological/cultural—consumers are not aware of the realities and challenges





of providing food. It is also geographical, leading to transportation challenges, with the attendant financial and environmental costs, and also legitimate food safety and freshness concerns. Finally, urbanization provides a challenge to training experts in agriculture, since fewer and fewer people are raised with an appreciation of agriculture. Veterinarians, city planners, economists, and other professionals must work to address animal health and food security concerns together.

#### Marja Hoek-Smit, University of Pennsylvania

Marja Hoek-Smit is the Director of the International Housing Finance Program of the Wharton School Zell/Lurie Real Estate Center, and an Adjunct Associate Professor in the Wharton Real Estate Department and Department of City and Regional Planning of the University of Pennsylvania. Her work focuses on housing and housing finance policies, particularly for low–income groups, housing demand and affordability analysis, the development of monitoring and evaluation systems for urban housing programs, and training in housing finance, housing market development, and urban development.

#### David Hsu, University of Pennsylvania

David Hsu is Assistant Professor of City and Regional Planning at the University of Pennsylvania School of Design. Professor Hsu's current research develops predictive models for water and energy demand, and analyzes how to link conservation outcomes to the implementation of specific policies in complex environments. Prior to academia, Hsu worked in city government in New York and Seattle and as a structural engineer in London.

- What is a sustainable trajectory for the planet, and how do cities fit within that? Given that sustainability is an evolving concept that addresses the future and the continued development of the environment, economy, and society, we need to articulate how these three aspects will integrate to reduce environmental harms.
- How can ideas that incubate in one city efficiently transfer to others?
- What mechanisms exist to stop unsustainable urban development?

#### Mark Alan Hughes, University of Pennsylvania

Mark Alan Hughes is Professor of Practice of City and Regional Planning at the University of Pennsylvania. He is the founding Director of Sustainability for Philadelphia and former Chief Policy Adviser to Mayor Michael A. Nutter.

Density is promoted (as instrumental) or assumed (as necessary) in arguments about the urban role in addressing future problems: resources, access, equity, efficiency, resilience, innovation, whatever. But what are the political, psychological, and cultural conditions necessary to sustain density and hyperdensity in a world of cities?

Innovation is promoted as the key driver of economic growth. It is associated with cities on the bases of (1) interaction, both structured and spontaneous, and (2) consolidation, whereby invention is translated into demand and







production is translated into opportunity. All these nouns and verbs imply local spatial organization into cities and regions. But what are the underlying causal mechanisms and which of these are amenable to intentional investment by governments or capital?

#### Ferdous Jahan, University of Dhaka

Ferdous Jahan is Professor of Public Administration at the University of Dhaka and the Academic Coordinator (part time) at BRAC Development Institute (BDI). She is a senior level expert in program evaluation and policy research. Her current academic and research interests include governance, social protection, urban poverty, legal empowerment of the poor, and women's empowerment issues in developing societies.

- Housing for the urban poor: In most densely populated developing countries, there are no specific low-income housing policies and schemes although the poor urban population is growing exponentially. So, the research question is: Can secure housing be a pathway for poverty alleviation?
- Street Children: In many developing countries, the number of street-connected children is increasing. These children are invisible to the government, deprived of basic human rights, and exposed to crime, violence, etc. So, the research question is: How is it possible to re-claim the rights of street children as citizens?

#### Paul Jargowsky, Rutgers University

Paul Jargowsky is Professor of Public Policy and Director of the Center for Urban Research at Rutgers University-Camden and Urban Education and Senior Research Affiliate at the University of Michigan's National Poverty Center. His principal research interests are inequality, the geographic concentration of poverty, and residential segregation by race and class. Other areas of interest include educational attainment and economic mobility.

#### Abha Joshi-Ghani, World Bank

Abha Joshi-Ghani is the Director of the Knowledge Exchange and Learning Department in the Leadership Learning and Innovation Vice Presidency of the World Bank. Until 2012 she headed the World Bank's Global Urban Development Practice, where she oversaw the World Bank's work on Urban Policy and Strategy and Knowledge and Learning. Joshi-Ghani is the Vice Chair of the Global Agenda Council on Urbanization of the World Economic Forum. She is also co-editor of the forthcoming book *The Urban Imperative: Towards Shared Prosperity with Edward Glaese*, Harvard University.

First, consistent and verifiable data on cities in developing country is difficult to find. Helping cities assemble this data is important.

Second, the phenomenon of growing informality in the face of rapid urbanization is relatively new to the research and policy-making arena. Identifying causes underlying trends, with research into such topics as: the nature of agglomeration externalities and how they play out for the formal and informal sectors; the







precise reasons for productivity in the informal sector to be lower than in the formal sector, especially if agglomeration benefits seem to accrue equally if not more to informal enterprises; the reasons for informality to persist in the face of rapid growth and continued deregulation in many countries; how to bring informal enterprises into the fiscal net so that they can use the services needed for them to flourish; the policy measures that can be undertaken to support the informal sector in creating jobs and addressing poverty, since job creation in the formal sector has not been, nor is it likely to be, vigorous enough to meet the employment and poverty challenges of the next two decades.

#### Ron Kassimir, Social Science Research Council

Ron Kassimir is a Senior Advisor at the Social Science Research Council. He works in the President's Office supporting the development of new initiatives as well as cross-program work at the Council and providing leadership and support for the Council's work on Africa. He most recently published, with Connie Flanagan, "Youth Civic Engagement in the Developing World: Challenges and Opportunities" in *The Handbook of Research on Civic Engagement in Youth* (Wiley, 2010).

In 2013, the Social Science Research Council embarked on the development of a new initiative: The Decent City. The SSRC bridges disciplines within the social sciences, and connects them to other fields: the humanities, the sciences, and, for The Decent City, design, architecture, and planning. We imagine "decency" as a zone between utopian reflections of the city and highly focused instrumental policy considerations, and are examining three themes—urban inequality, toleration, and design—through a spatial imagination, i.e. how urban space and the built environment interact with social relations, politics and economics to produce (or not) urban decency.

#### Alan Kelly, University of Pennsylvania

Allan Kelly is the Gilbert S. Kahn Dean Emeritus, Penn School of Veterinary Medicine. As part of the Center for Animal Health and Productivity he organized an international symposium Veterinary Public Health in a Global Economy in 2006, introducing the veterinary profession to the imperatives of global health and global food security. In 2010, Kelly co-developed the course "Veterinary Medicine and Global Food Security," which covers broad multi-departmental topics of food security.

Sustainable urban food supplies: Sustainable urban growth is directly linked to environmental sustainability of the livestock industry. Cities drive demand for animal-based foods. By 2050, per capita meat consumption is projected to increase 86 percent in East Asia and 118 percent in Sub-Saharan Africa. To meet this demand, a 2011 FAO report concluded "there are no technically or economically viable alternatives to intensive production for providing the bulk of the livestock food supply." In the Global South, systems of food production, marketing, and access are profoundly changing; industrialized production systems, isolated from crop farming, are proliferating. They result in massive waste management problems, environmental damage, changing infectious





disease dynamics, and food safety risks. Rural poverty is increased with consequences for urban migration.



#### **Neil Kleiman, New York University**

Neil Kleiman is Director of New York University's Wagner Innovation Lab, which promotes informed, evidence-based policy decision-making in local government. At the Lab, Kleiman has initiatives supported by Bloomberg Philanthropies, Citibank, and the Ford Foundation. Kleiman is also the research lead for NYU in the newly created National Resource Network, an effort sponsored by the Obama administration to create a one-stop resource for American cities. Prior to joining NYU, Kleiman was Director of Policy and Research at Living Cities. Previously he was founding Director of the NYC-based think tank, Center for an Urban Future.

- What are the exact right conditions for universities to provide useful policy guidance to local government?
- All cities are unique, but they have at least some common traits. How best can we determine those common traits and those reforms with broad applicability that could benefit most city governments?
- There is increasing discussion of cities as centers of innovation, but in many respects cities are still governed by siloed bureaucracies and other vestiges of the Progressive era. How can we determine when we have indeed entered a new urban government paradigm? what are the core features of an innovative urban government?

#### Lynn Hollen Lees, University of Pennsylvania

Lynn Hollen Lees is Professor of History Emerita, former Co-Director of the Joseph H. Lauder Institute of Management and International Studies and, until July, 2013, Vice-Provost for Faculty, University of Pennsylvania.

Improving infrastructures is one of the biggest challenges facing cities today. The exploding megacities of the world urgently require better social infrastructures —schools, hospitals, and recreation spaces. Urbanization has far outpaced social investment in a majority of the world's cities. The stark differences in environments for rich and poor work against political integration and the inclusion of all citizens into an urban community. Cities as sites of research, development, and innovation should take the lead in developing affordable new technologies for the provision of clean power, water, and waste disposal, which could lengthen and improve the lives of urbanites around the world. (from UrbanLink)



#### Alan Mabin, University of Pretoria

Alan Mabin is a Professor and Research Fellow at the Centre for the Advancement of Scholarship at the University of Pretoria in South Africa. From 2005-2013 he headed the School of Architecture and Planning at Witwatersrand University. Among his recent articles are pieces on "Suburbs in Africa?," "Grounding southern city theory in time and place," and "South African capital cities." His interests are in cities and urban development.

In the second decade of the twenty-first century, it's time to revisit comfortable



assumptions and truisms which haunt urban studies:

- Is there a link between spatial organisation and social exclusion or are other processes much more significant, especially now and into still more digital futures?
- Is density a panacea—is sprawl a universal evil—or are there quite different ways of thinking about effective, efficient, and livable city life?
- Is northern, western, urban theory really limited in its applicability to new forms in "cities of the south" or is this an over-excited view?

#### Stephen Malpezzi, University of Wisconsin

Stephen Malpezzi is Professor in the James A. Graaskamp Center for Real Estate in the University of Wisconsin School of Business. His active research agenda includes real estate and urban development, housing policy and programs, and housing market behavior, both domestic and foreign.

- Economists already have many robust research findings with policy implications: In many cases, we know what to do. Why aren't we doing it? We need to speak beyond our journals to a much wider audience of planners, politicians, the media, and direct communication.
- Political economy needs to be given a higher priority in our agenda. Research on political economy is essential, and political roadblocks to improved policies are formidable.
- We need to study dynamics of links between urbanization and growth/development, and move beyond simple correlations to tackle causal relationships and thresholds.
- We need to add to the emerging database on urban form with more explicit estimates of the welfare implications of different forms.
- Real estate research is heavily skewed to housing. We need to stop ignoring commercial real estate (CRE), as efficient CRE is a necessary condition for efficient cities.
- Regarding youth unemployment: we need to understand links between education and training, and productivity, cradle to grave.
- We should unbundle institutions into their essential functions. Copying institutions from one country to the next is often counterproductive. We should focus on "best practices," but on finding the best way to perform necessary functions in a local context.
- We need to tax carbon and other effluents. Research can set the optimal size of the tax, as well as the best way to collect it and compensate some of the losers.
- We must design truly smart transport policies, moving beyond the nineteenth-century rail fetish to cleaner cars and buses. This is not just about fuel but also the "industrial organization" of transport, e.g. using new technologies to improve taxis and paratransit. Save rail for the small number of large, dense cities in which it might contribute.
- Early research on housing demand, supply, has not been extended or subject to sufficient rigorous scrutiny and needs to be updated.
- We need research into distributional importance of housing, other real estate long recognized but understudied. We need to start with better data and link to emerging research on distribution and growth/development more broadly.
- The gulf between urban economists and macroeconomists remains. We



need to engage macroeconomics more directly.

• The 2007-09 crisis and its aftermath is the latest and largest event that invites demands study.

#### Shawn McCaney, William Penn Foundation

Shawn McCaney is Senior Program Officer for the Creative Communities Program at the William Penn Foundation, which provides support for arts and culture organizations, arts education, and the development of high quality public spaces. Previously he led the Foundation's efforts to support the adoption of a new master plan process for the Central Delaware Riverfront that advanced public access as the key organizing principle for waterfront redevelopment. Prior to the Foundation, Shawn spent fifteen years working for architecture and design firms in Philadelphia.

Philanthropic institutions are confronted with an array of challenges and investment choices—from under-performing schools and limited economic opportunity to aging infrastructure and over-burdened community and social services. To determine where private giving can have the most significant and effective impact, philanthropy requires strong urban research and public policy partner institutions to help develop data-driven investment decision-making. To accomplish this, critical questions must be answered, including: What is the appropriate role for Foundations; that is, candidly, what do Foundations do most well? What roles should they avoid? And what are the right metrics necessary to test grantmaking strategies and evaluate their performance? Understanding that only targeted and focused investment strategies are likely to have meaningful and measurable impact, urban policy researchers can play an important role in helping shape those strategies.

#### Gary McDonogh, Bryn Mawr College

Gary McDonogh, an anthropologist, is Professor of Growth and Structure of Cities at Bryn Mawr College. His works include *Good Families of Barcelona* (Princeton 1986), *Black and Catholic in Savannah* (Tennessee 1993), *Iberian Worlds* (Routledge 2008), the co-authored *Global Hong Kong* (2005) and the co-edited collections *Global Downtowns* (Pennsylvania 2012) and *Sustainability in the Global City: Myth and Practice* (Cambridge, in press). He is currently working on Chinatowns as urban laboratories worldwide.

As an anthropologist, my questions inevitably center on humans as agents, their understandings and re-creations of the city. With sustainability, my most pressing questions surround creating the sustainable citizen. Is a LEED building worthwhile if it fosters excess consumption? How can citizens choose smaller houses, less material wealth, even less travel if sacrifice rebalances global ecologies? Cities as built environments and political economic structures have always "created" citizens—how can we rethink these processes? Answers will come from sensitive listening, thoughtful historical comparisons, and engagement with fields like public health: what can campaigns against tobacco and obesity teach us about sustainability?

Beyond sustainability, although not completely divorced from it, lies another question: In a world of social media, conflicting and convergent spheres and mass communication, what will constitute the urban private sphere and how/why do we value it?







#### Caroline Ouwerkerk, University of Chicago

Caroline Ouwerkerk is the Project Manager of the University of Chicago Urban Network where she oversees the daily operations of the Network, organizes major events such as the Urban Forums, develops new programs and initiatives, and manages the strategic growth of the Urban Network. She has an M.S. Ed. in Higher Education Administration from the University of Pennsylvania and an A.B. in history, with honors, from the University of Chicago. She is interested in food access issues, urban history, and the intersection of the Internet and society.

- What does urban studies mean when the world's population is urbanized? How might technology change this?
- Why are cities necessary in a world where people can go to school virtually, work from home, order groceries online, buy every product imaginable from Amazon, and develop long-lasting friendships with people they have never met in person? How can we create healthy, vibrant cities in a world that is increasingly technology-oriented? How can these cities be diverse and inclusive?
- How can researchers better share the results of their research with the communities they study?
- How can university-based urban research centers collaborate more efficiently?

#### Jurij Paraszczak, Carnegie Mellon University

Jurij Paraszczak is Distinguished Service Professor at Carnegie Mellon University. Until recently (retired December 2013), Paraszczak was Director of IBM Research Industry Solutions and the leader of the Research Smarter Cities program focusing on helping cities manage the complex set of demands placed on their infrastructure by their constituents and on the optimize the flows of energy, people, and water through this infrastructure.

Recently, the focus of computer science, mathematics, and engineering on cities is on lifting the obscurity of urban interactions and influencing design, engineering, and quality of life to understand the ways in which these urban systems operate. To accomplish this, a number of issues must be addressed:

- Accurate physical models (where available) and statistically valid volumes of data which can represent the urban system components must be made available.
- Systems that allow the human owners of various agencies and activities to exchange and understand each others' information must be made available.
- Methods of data interchange that do not constrain the present data owners and their activities need to be developed.
- 'Privacy transparent' and preserving technologies that locate and describe activity (both human and otherwise) at an aggregation level which provides the requisite information will be critical to the overall system understanding
- Urban system objectives by system managers and denizens need to be clearly described.





#### **Bimal Patel, CEPT University**

Bimal Patel is President of CEPT University in Ahmedabad, India, which is focused on the architecture, planning, design, construction and management of human habitats. Patel is also Director at HCP Design Planning and Management Pvt. Ltd. Patel founded Environmental Planning Collaborative, a not-for-profit, planning research and advocacy organization that works with local governments and other agencies to understand and transform urban design and planning practice in India.

India is rapidly urbanizing. Towns and cities are rapidly transforming, vast swathes are being built and millions are learning a new way of life. Indian cities will define what "urban" means in the coming century.

And yet, we have almost no systematic, reliable, and comprehensive information about any aspect of Indian cities—how they are governed, how land is used, how they are planned, how they are managed, how transportation works, how people are housed, what is produced in cities, what strategies are working, etc.

Basic empirical research on all aspects of Indian cities is urgently required to better understand Indian cities and to improve urban policy.



#### **Neal Peirce, Citiscope**

Neal Peirce is the founder and editor-in-chief of Citiscope (www.citiscope.org), a new global news and website, supported by the Ford and Rockefeller Foundations, that commissions local people worldwide to write stories on significant innovations and experiments in their home cities. From 1975 to 2013, Peirce authored the United States' first nationally syndicated newspaper column on developments in states and cities (Washington Post Writers Group syndication). He co-authored newspaper series on developing issues in twenty-five U.S. Metro regions. His books include *Citistates* (1992), on the emergence of metropolitan regions as the critical urban entities in our time.

As world population explodes around developing world cities, research needs to discover the planning and execution of best models—from any continent for adding new settlements so that they become vibrant, real, balanced communities, with residents' physical access to vital services ranging from retail to schools to public transportation (present or planned). The danger: sprawling patterns of helter-skelter settlements unrelated to basic human and community needs.



#### Laura Perna, University of Pennsylvania

Laura Perna is a Professor at the University of Pennsylvania's Graduate School of Education, Higher Education Division and Executive Director of Penn AHEAD. Her research focuses on gaps in educational attainment by race/ethnicity and family income despite substantial annual investments by federal and state governments, colleges and universities, school districts, philanthropic organizations, and other entities in policies and programs that are designed to close these gaps.



#### Bo Qin, Renmin University

Bo Qin is Associate Professor, School of Public Administration and Policy, and Deputy Head, Department of Urban Planning and Management, at Renmin University of China in Beijing. His research interests include low carbon cities, the informal sector in emerging cities, and the application of GIS in urban studies. He is the author of "The Location-choice of Firms and Urban Spatial Restructuring: A Case Study in Shanghai" (2012) and has published dozens of articles in various academic journals.

Urbanization continues at a record pace in emerging countries, where millions of rural people are moving to cities to become urban dwellers. Two questions that haunt me are:

- A large number of people moving to cities go to the informal sector which, however, causes many environmental/sanitary/traffic problems. Should the informal sector be formalized? If so, how?
- Most of them enjoy the better lives they deserve, but in the meantime consume more materials/energy and release more carbon emissions. As the urban built-environment influences and defines its dwellers' behaviors, how can we prepare a better urban form for the new, incoming residents in terms of climate change mitigation?



## Michael Replogle, Institute for Transportation and Development Policy

Michael Replogle is Global Policy Director and Founder of the Institute for Transportation and Development Policy, a nonprofit corporation that since 1985 has worked to reduce poverty, pollution, and oil dependence. Replogle is also a strategic advisor on transportation to the Environmental Defense Fund. He has been a consultant to the World Bank and the Federal Highway Administration.

- What governance, financing, institutional, and capacity-building models will best take-to-scale sustainable urban transport and urban development best practices worldwide and create quickly a pipeline of financeable, cost-effective, ready-to-go sustainable transport initiatives?
- How can we cheaply measure and monitor accessibility to basic services and travel activity in time and space and stratified by income/consumption indicators, gender, and disability status?
- How can we reconcile divergent top-down and bottom-up estimates for transport sector GHG/pollution emissions and mitigation potential while considering all avoid-shift-improve strategies?
- How might information technology, governance, and pricing reforms transform urban transportation into a reliable, safe, and managed utility like electricity?



#### **Catherine Ross, Georgia Institute of Technology**

Catherine Ross is Harry West Professor of City and Regional Planning at the Georgia Institute of Technology's College of Architecture and the Director of the Center for Quality Growth and Regional Development (CQGRD). She is also Deputy Director of the National center for Transportation System Productivity and Management (NCTSPM). Ross is a recognized expert on transportation systems planning, urban planning, and quality growth and was selected to advise the Obama Administration on the first-ever White House Office of Urban Affairs. Her new book Health Impact Assessment in the United States is published by Springer, 2014.

Infill development is a lever to accommodate the burgeoning urban population in many cities and the redevelopment of surrounding areas. These opportunities allow changes in economic activity through the introduction of technologies, industries, and products that tap the potential of cities to sell services and goods with a focus on the global economy. Transportation investment strategies that facilitate economic rejuvenation, reduce environmental degradation, and create healthier, more accessible mobility options are no longer options but imperatives.

#### David Rouse, American Planning Association

David Rouse is the Research Director for the American Planning Association where he is responsible for the overall design, direction, and management of APA's research program. He is a planner and landscape architect with a special interest in evidencebased connections among public health, green infrastructure, and urban planning and design. He has more than thirty years of private and public sector experience in community planning, design, and implementation.

What are the implications of climate change for urban form? How can cities in different climactic regimes adapt to impacts such as increased temperatures, sea level rise, drought, and more frequent, intense weather events? How will these adaptations be reflected in the spatial configuration of cities, including integration of the built and natural environments as green infrastructure?

What evidence demonstrates the linkages between human health and urban form? How can this evidence be translated into metrics to measure the health impacts of the built environment? How can these metrics be used to optimize the health outcomes of urban designs?

#### Saskia Sassen, Columbia University

Saskia Sassen is the Robert S. Lynd Professor of Sociology and Co-Chair, The Committee on Global Thought, Columbia University (www.saskiasassen.com). She is the author of several books. Her forthcoming book is *Expulsions: Brutality and Complexity in the Global Economy* (Harvard University Press 2014). She has received diverse awards, from multiple doctor honoris causa to being chosen as one of the Top 100 Global Thinkers by Foreign Policy, Top 100 Thought Leaders by GDI-MIT, and receiving the 2013 Principe de Asturias Prize for the Social Sciences.

Our global geopolitical space is getting crowded. Many new actors have been added over the last three decades, from WTO to the International Criminal Court, and older actors, such as the IMF and civil society organizations, have gained prominence. Over a hundred other regulatory bodies have emerged and aspire to govern our increasingly globalized economies, polities, criminalities, terrorisms, epidemics, and environmental destructions. None of these has fully replaced national governments because these are far more complex in their all-encompassing functions and (at times at least) capabilities. But now we see emerge a very different network of complex actors with multiple capabilities who find themselves at the forefront of many of our major challenges—from





the environment to terrorism. They are cities, especially global cities. It is not that the diverse leaderships of cities want to compete with national states in our global geopolitical space. They don't. They simply have had to address these major challenges because it is in cities where they become acute, urgent, empirical—one can act on them directly. It is this practical and urgent situation of city leaderships that is giving them such traction, often informal, in the new global geopolitics.

#### Justin Scheid, U.S. Department of Housing and Urban Development

Justin Scheid is Senior Advisor for the Office for International and Philanthropic Innovation (IPI), at the U.S. Department of Housing and Urban Development(HUD). IPI was created to collaborate with the philanthropic, corporate, nongovernmental, and international sectors to generate lessons, evidence, and best practices in housing and community development that can be applied to HUD's work. Before HUD, Scheid was the Director of Government Relations at the National Building Museum.

- How can government best institutionalize, systematize, and encourage innovation within local governments and, subsequently, affect federal urban policy to achieve continually improving outcomes in place-based programs and policies? Do those systems look different for the level of government—local, regional, and national?
- How can government work with a broad range of necessary stakeholders

   civic groups, academia, nonprofits, philanthropy, and the private sector to
   develop cohesive communities of practice around urban resilience and
   sustainability?

#### Elliot Sclar, Columbia University

Elliot Sclar is Professor of Urban Planning on the Faculty of Columbia University's Graduate School of Architecture, Planning, and Preservation as well as the Faculty of Columbia University's Earth Institute. At the Earth Institute, Sclar is Director of the Center for Sustainable Urban Development. Sclar served on the Advisory Board of the Global Research Network on Human Settlements (HS-NET), UN-HABITAT, and the World Economic Forum's Global Agenda Council on Urban Management. His latest (edited) volume, *Urban Access for the 21st Century: Finance and Governance Models for Transport Infrastructure*, was published earlier this month by Routledge-Earthscan.

Can steady state urban economic vitality be created and maintained? A mid-century world of 9 to 10 billion people with between two-thirds and three-quarters of that population living in urban places requires steady state economies. Rapid urban population expansion and massive informality in some places and urban population stagnation and falling living standards in others characterize contemporary urban reality. A form of sustainable urban economic adaptation is required that emphasizes "vitality," not an ever-expanding "development" process where we destroy urban infrastructure in some places while urgently building it in others.







#### Theresa Singleton, Federal Reserve

Theresa Singleton is the Vice President of Community Development and Education in the Federal Reserve Bank of Philadelphia, where she promotes community development in low- and moderate-income communities and fair and impartial access to credit in underserved markets. Previously, she was Director of Research and Information at the Washington, D.C.-based Housing Assistance Council, where she held several positions over nine years. Singleton is the author of several research papers. Her most recent works, written in conjunction with co-authors, include "Very Low-Income Loan Obligations within USDA's Section 502 Direct Loan Homeownership Program" (2010).

Urban research can help guide effective practice on two issues of significant importance: issues of equity and the structural limitations of municipal governance. Some questions include:

- What are the most effective strategies to encourage growth and economic revitalization while creating opportunities for low-income, low-opportunity communities? And, how do you best measure the short- and long-term benefits of equitable revitalization?
- How do you encourage effective regional approaches—specifically if your community is the "weaker" center?
- Given the legacy costs that are driving the municipal fiscal crisis, how can cities reframe their service-provision and revenue generation in a way that attracts new residents and retains older residents?

#### Howard Spodek, Temple University

Howard Spodek is a Professor of History and Urban Studies at Temple University. His research and writing is focused on the history of urbanization in India, especially on the city of Ahmedabad. He has written numerous articles and books, including *Ahmedabad: Shock City of Twentieth Century India* (Bloomington: University of Indiana Press, 2011; Orient BlackSwan: Indian edition, 2012). Spodek is the executive producer and subject specialist for the documentary film *An Urban World: A Case Study of Slum Relocation* (2013).

Some cities have been characterized by tightly-knit ruling elites who control them. Florence under the Medici is perhaps the best-known classical example. In modern times, cities such as Pittsburgh, Atlanta, and Ahmedabad, India—especially during the years Mahatma Gandhi lived there, 1915-30—have been studied for their own forms of ruling "regimes." How might we assess such regimes? Are they forms we might wish to encourage?



#### Harris Steinberg, University of Pennsylvania

Harris Steinberg is the founding Executive Director of PennPraxis, the clinical arm of the University of Pennsylvania's School of Design whose mission is to foster faculty and student collaboration on real-world projects across the school's five disciplines: architecture, landscape architecture, city and regional planning, historic preservation, and fine arts. From 2003 until 2006, Harris was the Director of the Center for Innovation in Affordable Housing Design.



Civic engagement is a topic that could benefit from deeper study. While the words are used frequently today and are held up as the bedrock of community planning, they mean many things to different people and to different professions. There is no common definition of civic engagement: no common set of ground rules or protocols for how we engage people and communities, and no way to measure its impact. Furthermore, we need to better understand the impact of technology on civic participation and determine how best to integrate it into meaningful civic dialogue.

#### Henry Taylor, University of Buffalo

Henry Taylor is the Director of the University at Buffalo Center for Urban Studies and a Professor of Urban and Regional Planning. His research focuses on a historical and contemporary analysis of distressed urban neighborhoods, social isolation, and race and class issues among people of color, especially African Americans and Latinos. He is a member of the Board of Overseers of The Nelson A. Rockefeller Institute of Government of the State University of New York.

- How do we end neighborhood distress and spatial injustice, along with the neighborhood inequality they produce? This question is intertwined with other critical issues such as inadequate public schools, unsafe housing, food insecurity, poor physical health, and environmental injustice.
- How do we construct an urban educational system that ends educational stratification by preparing all residents to hold jobs that provide a living wage?
- How do we bring about the organizational and cultural changes in anchor institutions, especially higher education and medical institutions, which will enable them to become fully engaged and mobilized in the regeneration of urban regions?

#### Marilyn Jordan Taylor, University of Pennsylvania

Marilyn Jordan Taylor was appointed Dean of the University of Pennsylvania School of Design in October 2008 where she passionately advocates for the key roles of interdisciplinary design in building more resilient and equitable communities. A leading architect and urban designer at Skidmore, Owings & Merrill for over three decades, she attained international acclaim for her large-scale urban and transportation projects and for their role in advancing a more equitable and resilient quality of urban life. She was the first woman to be elected as SOM Chairman. Actively engaged in civic initiatives, she also served as worldwide Chairman of the Urban Land Institute.

Extreme and recurring weather events are threatening vulnerable communities, who often include a large and disproportionate number of lower-income and rent-burdened households. Building resilience in individuals and communities will require local strategies that entwine science-based discoveries and high-performance physical infrastructures with new partnerships among regions, cities, and neighborhoods. Exploratory programs such as HUD's Rebuild by Design illustrate the short-term results and longer-term visions that arise from research-informed design.







#### Jin-Guang Teng, Hong Kong Polytechnic University

Jin-Guang Teng is Chair Professor of Structural Engineering and Director of the Research Institute for Sustainable Urban Development at The Hong Kong Polytechnic University. He has authored or co-authored some 170 SCI journal papers, leading to over 4,500 citations and an H-index of 34 according to the Web of Science. Teng has received a number of prestigious awards for his research, including the State Natural Science Award of China, the IIFC Medal from the International Institute for FRP in Construction (IIFC), and the State-of-the-Art of Civil Engineering Award from the American Society of Civil Engineers.

Many cities in Asia are of very high-density, with Hong Kong being an extreme example. In these cities, the challenge of accommodating a large population within a limited land area is solved through the construction of high-rise residential buildings. This high-density urbanization model is in stark contrast to the low-density urbanization model commonly pursued in Western countries. While a higher urban density generally leads to a lower carbon footprint per person, it also creates many problems that affect the liveability of the city (e.g. air pollution, noise, and urban heat islands). Against the above background, the following research questions arise naturally:

- What is the optimal urban density that strikes a desirable balance between the liveability and the carbon footprint of a city (particularly a mega-city)?
- What can we do through urban planning and advanced technologies to increase this optimal density?

#### David Thornburgh, University of Pennsylvania

David Thornburgh is Executive Director of the Fels Institute of Government since August of 2008. Prior to his appointment he served as a Senior Advisor to the Econsult Corporation. Thornburgh has also served as CEO of the Alliance for Regional Stewardship (ARS), Executive Director of the Pennsylvania Economy League (PEL), Director of the Wharton Small Business Development Center, and Director of Civic Affairs at the CIGNA Corporation in Philadelphia.

1. What do we know about the actual role of cities in the entrepreneurial ecosystem? How much do place and amenities matter to breakthrough innovation and entrepreneurial growth--or does significant company formation in a particular place owe more to the vision and drive of a few high impact entrepreneurs (e.g. Bill Gates and Seattle)?

2. Almost 15 years ago David Rusk wrote about distressed American cities that were "past the point of no return". To what extent was his characterization accurate (how many of those cities have "recovered"), and are there documented case studies that suggest that distressed cities can turn around?





#### Dana Tomlin, University of Pennsylvania

Dana Tomlin is Professor of Landscape Architecture at the University of Pennsylvania's School of Design. He is also Adjunct Professor at the Yale School of Forestry and Environmental Studies. He is Founder and Co-Director of Penn's Cartographic Modeling Laboratory, author of GIS and Cartographic Modeling, originator of Map Algebra, and a member of the URISA GIS Hall of Fame.

What I find most compelling is the prospect of envisioning, anticipating, designing, implementing, testing, and promoting small-scale, location-based information technology to improve the effectiveness and efficiency of urban services ranging from transportation and commerce to public health and safety. While movement in this direction is already well underway, it is precisely because of this that opportunities for targeted initiatives warrant fuller attention. While "everyone is now online," it was only yesterday that this was not the case; as early as tomorrow, that fact alone could be used to achieve efficiencies heretofore unheard of -or, more to the point, unthought of.

#### Lawrence Vale, Massachusetts Institute of Technology

Lawrence Vale is Ford Professor of Urban Design and Planning at MIT and served as Head of the Department of Urban Studies and Planning from 2002 until January 2009. He is currently Director of the Resilient Cities Housing Initiative (RCHI), a unit of the School's Center for Advanced Urbanism. He is completing work on a new book about HOPE VI public housing redevelopment practices across the United States.

In the last decade, notions of "resilience" and "resilient cities" have rapidly proliferated and become increasingly salient in the frameworks used by academics, practitioners, international organizations, NGOs, and foundations, yet the definitions of these terms get ever more fuzzy. How can resilience be harnessed as a term that carries shared meaning? And can such shared meaning entail a commitment to equitable development as part of the core understanding of what resilience must mean? How can the term "resilient city" best be grounded in exemplars of actual practice? Can urban scholars reach consensus on what constitutes success, and can establishing criteria help focus debate and action?



#### **Dominic Vitiello, University of Pennsylvania**

Dominic Vitiello is Assistant Professor of City and Regional Planning at the University of Pennsylvania's School of Design. He also teaches for Penn's Urban Studies Program and is a senior fellow of Penn's Center for Public Health Initiatives. Vitiello's research focuses on community and economic development institutions, migration, and urban agriculture. He has served as founding President of the Philadelphia Orchard Project; Board Chair of JUNTOS/Casa de los Soles and on the boards of the African Cultural Alliance of North America.

As cities in the developing world expand rapidly in the coming years, how can we integrate their new residents, largely migrants from rural regions and other cities, in ways that foster lasting peace and shared prosperity? And how can we feed these and other cities around the world?



#### Susan Wachter, University of Pennsylvania

Susan Wachter is the Richard B. Worley Professor of Financial Management and Professor of Real Estate and Finance at The Wharton School of the University of Pennsylvania and Co-Founder and Co-Director of the Penn Institute for Urban Research. She is a former Assistant Secretary for Policy Development and Research at the U.S. Department of Housing and Urban Development and chairperson of Wharton's real estate department.

Inequalities in the access to public services provided by cities (education, sanitation, clean water, and transportation) limit inclusive growth and shared prosperity. What strategies are there to support inclusive economic growth in cities in developing and developed countries?

#### Anthony Yeh, University of Hong Kong

Anthony Yeh is Chair, Professor, and Head of the Department of Urban Planning and Design, Director of the Geographic Information Systems Research Centre, and Deputy Convener of the Contemporary China Studies Strategic Research Area at the University of Hong Kong. He is Academician of the Chinese Academy of Sciences, Fellow of The Academy of Sciences for the Developing World, and Secretary-General of Asian Planning Schools Association. Yeh's areas of specialization are land use planning, urban renewal, new towns, geographic information systems, and urban planning and development in Hong Kong, China, and South East Asia.

Urbanization in the world is expected to rise from 52 percent in 2011 to 67 percent in 2050. Developing countries in Asia and Africa, especially China and India, are the major contributors of the world urbanization. With a marked difference in population size, density, culture, technology, and formal and informal economy, the urbanization pattern and problems of these countries in the twenty-first century will be very different from the urbanization experience in Europe and North America in the twentieth century, making their experience less relevant. Much experience can be learnt from the rapid high-density urbanization and economic development of China in the last three decades. How to avoid urban sprawl, environmental pollution, and housing and traffic problems, and how to further plan, develop, govern, and manage mega-city regions and cities of different sizes in creating smarter, sustainable, compact, high-density living will be a major challenge for future world urbanization.



## **Urban Research eJournal**



SSRN: Urban Research eJournal

Editors: Eugénie L. Birch and Susan M. Wachter University of Pennsylvania - Penn Institute for Urban Research (IUR) University of Pennsylvania - Real Estate Department http://www.ssrn.com/link/Urban-Research.html

This eJournal distributes abstracts, working papers, and recently published articles focused on urban research, establishing a platform through which researchers can access the latest urban-focused research from scholars worldwide. A primary goal of the Urban Research eJournal is to gather and distribute new research that addresses the governance, policy, economics, design and social issues that surround global urbanization. Through the diffusion of the most up-to-date and classic urban-focused articles currently posted in different networks on SSRN, the Urban Research eJournal aims to serve as a single point of access for the growing literature in urban research.

#### Create a free SSRN User HQ membership at:

https://hq.ssrn.com/login/pubSignInJoin.cfm?

Before subscribing please check first to see if your institution has already subscribed to a site subscription to one of SSRN's networks. You may be able to join through an existing subscription.

## **About Penn IUR**

#### Penn Institute for Urban Research

The Penn Institute for Urban Research (Penn IUR) is dedicated to advancing crossdisciplinary urban-focused research, instruction, and civic engagement on issues relevant to cities around the world. As the global population becomes increasingly urban, understanding cities is vital to informed decision-making and public policy at the local, national, and international levels. Penn IUR focuses on research that informs the sustainable and inclusive twenty-first-century city. 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.

www.upenn.edu/penniur