Penn IUR News

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Penn IUR Celebrates Resilience with 2024 Urban Leadership Prize



2024 Nussdorf Awardees and Penn IUR Co-Directors Eugénie Birch and Susan Wachter. Photo credit: Eric Sucar

THE PENN INSTITUTE FOR URBAN RESEARCH (PENN IUR) HONORED THREE PATHBREAKING URBAN leaders from around the globe at the 19th Annual Urban Leadership Forum on April 5, 2024.

Recipients of the 2024 Lawrence C. Nussdorf Urban Leadership Prize, which recognized leaders who are guiding cities worldwide toward a resilient, sustainable, and equitable future, included Jaime Alberto Pumarejo Heins, former Mayor, City of Barranquilla, Colombia; Andrew Melnik, former International Projects Manager, City of Bucha, Region of Kyiv, Ukraine; (CONTINUED ON P. 2)

Weitzman Students Present Green Infrastructure Plan to Ukrainian Ambassador

Laura Frances (MCP '24) shares her firsthand experience presenting a green infrastructure plan to the Ukrainian Ambassador.



Weitzman students at the Penn Biden Center in Washington D.C. with Oksana Markarova (Ukrainian Ambassador to the United States), Dorothy McAuliffe (U.S. Special Representative for Global Partnerships, Department of State), John Thompson (Deputy Assistant Secretary for Environment, Department of State) and Dr. Eugénie Birch (Co-Director, PennlUR). Photo: Department of State

IN LATE JANUARY 2024, MY CLASSMATES AND I traveled to the Penn Biden Center in Washington, D.C. to present a green infrastructure framework

for Bucha, Ukraine, the product of a semesterlong class, to an audience including the Ukrainian Ambassador to the United (CONTINUED ON P. 5)





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In building urban resilience, "change moves at the speed of trust," said 2024 Awardee Lauren Sorkin (center).

(CONTINUED FROM P. 1) and Lauren Sorkin, Executive Director, Resilient Cities Network.

In speaking about the award's namesake, Penn IUR Co-Director Eugénie Birch said, "Larry was a wonderful guide to our advisory board and now Melanie Nussdorf, his wife, is part of our family as well. Larry was passionate about cities—particularly about their enduring value to society." She continued, "The forward thinking of the exemplary leaders we honor today paves the way for the future of our cities."

The ceremony recognizing the urban leaders for their resilience was followed by awardees' remarks and a discussion moderated by Birch and Penn IUR Co-Director Susan Wachter.

Pumarejo, who served as Barranquilla's mayor from 2020 until 2023, spoke of leading the main economic center of the Caribbean region of Colombia as a model for sustainable and inclusive urban development.

"The great miracle of the city is everybody finding common goals and understanding that even though there are things that drive us apart, if you find those common goals and you talk about those—and less about the things that divide us—people start coming together," he emphasized.

"We don't talk about CO2 emissions...we talk about how to make better the quality of air, bettering your health, and your children's."

Accomplishments during Pumarejo's tenure included reclaiming a degraded and forgotten mangrove forest, re-greening the city, implementing solar and wind powered infrastructure, and fostering international collaborations for ambitious green infrastructure projects.

Sorkin, meanwhile, leverages the expertise of a team of urban resilience professionals in London, Mexico City, New York, and Singapore as Executive Director of the Resilient Cities Network.

"My only real superpower is finding the right people who are willing to come together to do the right thing in response to complex challenges," she said. Sorkin spoke of the Network's legacy, stemming from former Penn president Judith Rodin's "bold and broad vision" for the Rockefeller Foundation following Superstorm Sandy. Rockefeller's 100 Resilient Cities initiative created a resilience framework for urban communities to help cities to think about their risks and opportunities in a holistic way.

"In building urban resilience as a network, we've learned that change moves at the speed of trust. Trust has been our anchor during challenging times," she confirmed. "Our response, rooted in collaboration and compassion, underscores the power of networks to save lives and secure a better future."

Melnick, a former international projects manager, described stopping his work during the 2022 invasion of Ukraine and going back to the City of Bucha, a municipality in the Kyiv region, to help bring international attention to the needs of rebuilding.

For the last two years, he has dedicated his efforts to Ukraine's postwar reconstruction, urban development, and energy efficiency projects, attracting funding for Ukrainian municipalities by cooperating with the world's leading consulting and architectural companies, NGOs, and funds.

"We need to bring people back to the schools," he said, describing the need for not only business and economic development but sustainable development. "The best thing we can bring from our friends and partners all over the world is knowledge. Because if you get some money and don't know how to use it in the proper way, you lose it."

Wachter commended the leaders, noting their need for courage in each of their contexts. "We need to congratulate you for taking on very difficult circumstances and showing leadership," she recognized.

A list of past recipients of the Lawrence C. Nussdorf Urban Leadership Prize is available on the <u>Penn IUR website</u> and a recording of the event is available on <u>Penn IUR's YouTube channel</u>.

PENN IUR NEWS

Paris Meeting of Global Commission for Urban SDG Finance Marks a Year of Progress



Paris Mayor Anne Hidalgo welcomes the SDSN Global Commission for Urban SDG Finance as host of the group's plenary meeting.

ON JULY 25, 2024, MAYOR ANN HIDALGO OF Paris, France again hosted the Sustainable Development Solutions Network (SDSN) Global Commission for Urban SDG Finance for an inperson plenary. The commission and the task forces last met in December at the U.N. Climate Change Conference (COP28) in Dubai and have been meeting regularly to discuss ideas on how to improve cities' access to SDG finance, with a particular focus on climate resilience.

Mayor Hidalgo, together with Rio de Janeiro Mayor Eduardo Paes and SDSN Founder, Jeffrey Sachs, launched the SDSN Global Commission for Urban SDG Finance last June on the sidelines of the New Global Financing Pact Summit hosted by French President Emmanuel Macron. The Commission's 90 members, including mayors, financial actors, and urban experts around the world, aim to find ways to increase urban finance as part of the international discussions among such policy making bodies as the United Nations (UN) and G-20, among other associated entities like the International Panel on Climate Change (IPCC) and the UN Framework Convention on Climate Change's annual Conference of Parties (COP) meetings.

As the Commission's secretariat, the University of Pennsylvania Institute for Urban Research (Penn IUR) has assisted in supporting the Commission's six <u>task forces</u> that shape their emerging recommendations, evolving around three projects:

The first focuses on bringing more public and private funding to cities for climate resilient infrastructure through the creation of a Green Cities Guarantee Fund.

The second is contributing to the scoping and eventual execution of the IPCC Special Report on Cities. (CONTINUED NEXT PAGE)

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Clockwise from top left: Penn IUR's Delfina Vildosola, Laura Frances, Mauricio Rodas, and Eugénie Birch compare notes in Paris; Jaime Alberto Pumarejo Heins, former Mayor of the City of Barranquilla, Colombia, speaking at the Paris City Hall summit July 25; SDSN Global Commission for Urban SDG Finance Co-chair Jeffrey Sachs, center, with a Working Group of mayors and experts at Paris City Hall in July.

(CONTINUED FROM PREVIOUS PAGE) The third is working with several initiatives dealing with climate-focused city platforms and project portfolios.

All of this work is undertaken in conjunction with the <u>Coalition for High</u> <u>Ambition Multilevel Partnerships (CHAMP)</u> for Climate Action initiative, an outcome of COP 28 in which more than 70 nations agreed to include city consultations in their development of climate-responsive policies to address global warming, as promised in their endorsement of the UN's Paris Agreement.

The Green Cities Guarantee Fund is in development with Penn IUR researchers crafting a concept paper that assesses how current efforts ranging from the recently launched Green Guarantee Fund to the World Bank's Multilateral Investment Guarantee Company do not sufficiently support city borrowers. For example, one of the largest entities, Guarantco's public portfolio of 71 guarantees, held only one guarantee for a project in which a municipality was the borrower. Building on this work, secretariat co-chairs Mauricio Rodas and Eugénie Birch oversaw the scaling up local finance working group for the Finance in Common (F20 IC) side event for the G-20 held May 20-21 in Rio de Janeiro, Brazil. Subsequently, FIC endorsed the recommendation, submitting it to the G-20 Working Group on Sustainable Finance for consideration in the G-20 declaration.

In the spring, Penn IUR researchers prepared a key messages memo, backed up by an extensive annotated bibliography on urban climate finance, for the South African, Indian, and U.S. members of the scoping committee

for the IPCC Special Report on Cities. In July, the IPCC plenary approved and released the table of contents for the report to be completed in 2027. The Commission will contribute material as the report is being prepared.

Commission secretariat co-chairs Rodas and Birch also attended the Resilience Cities Network (RCN) convening at the Rockefeller Foundation's Bellagio Center. Among the meeting's outcomes was the decision to support the creation of city project portfolios as a basis for structuring financing approaches attractive to public and private investors.

This work is related to the City Climate Leaders Finance Alliance (CCFLA)'s efforts in promoting country platforms with integrated city platforms, a much advocated effort to make the investment decisions of multilateral development banks and nations more effective for poverty elimination and climate change programs. Birch, meanwhile, has made reports on the Commission at the <u>United Nations Environmental Program's Summit of the Cities</u> in Nairobi and the <u>Organisation for Economic Cooperation and Development (OECD)</u> Roundtable on the Localization of the SDGs in San Sebastian, Spain.

In preparation for the Paris meeting, the Commission grew its ranks, adding several <u>new members</u> to its network including Mayor Giuseppe Sala of Milan, Italy and Michal Mlynár, acting Executive Director of UN Habitat, among other notable figures. For more information about the Commission's work, visit The SDSN Global Commission for Urban SDG Finance website, <u>urbansdgfinance.org</u>.

(CONTINUED FROM P. 1) States, Oksana Markarova, and several officials from the U.S. Department of State and U.S. Department of Housing and Urban Development. Unbeknownst to us, the Ambassador is from Bucha, a small city about 30 kilometers northwest of Kyiv that was brutally attacked at the beginning of the 2022 Russian invasion.

The Ambassador kicked off the presentation with somber vet spirited remarks about Bucha's resilience. She reminded us of the atrocities the world witnessed after the withdrawal of the Russians. Remembering the site of one of the worst horrors, Yablunska Street strewn with civilian bodies, the mass graves, and the destroyed buildings, she told us that while the street is rebuilt as a symbol of Ukrainian strength, the horrible memories, as experienced by the residents, linger. She ended with a reminiscence of the city's bucolic beauty. This talk was an incredible introduction to the plan we had developed, one grounded in remembrance, the healing qualities of nature, and the hope for a just future that could stimulate economic development.

We developed the plan, entitled "Green Network Bucha, Rebuild to Reconnect," as part of a Fall 2023 graduate-level city planning course (Topics in International Development: Urban Plans for the Ukraine) at the Weitzman School of Design, taught by Professor of Practice David Gouverneur and Penn IUR Co-Director and Nussdorf Professor Eugénie Birch. The course is the result of a partnership with the U.S. Department of State's Diplomacy Lab program, a collaboration with U.S. universities that organizes courses around State Department priorities. Our work began with considering how to make meaningful recommendations for a place shocked by recent atrocities yet steadfastly determined to reconstruct. Typically, place-based courses incorporate fieldwork, but this was impossible with this class.

So without direct access to Bucha and its residents, we sought information from a variety of authorities and places. Department of Historic Preservation professors Randall Mason and Lynn Meskill, who have deep experience with remembrance/ heritage destruction from their work in Rwanda, Syria, and Iraq, provided particularly relevant advice that informed our thinking about memorials. Ukrainian Andrew Melnyk, representing the Bucha City Council,

provided access to such basic but embargoed sources as Bucha's pre-war comprehensive plan that helped us identify areas of growth (largely disconnected from the core city) as well as key open spaces scattered in and around the city. Perhaps most important, in our search for realtime data, we quickly pivoted to social media to learn from firsthand accounts. For example, user-generated content on a fitness app revealed locals' desire lines – a series of popular off-road and often disconnected running, walking, biking, and kayaking trails. We then crossreferenced Google Street View

with military maps of severe bombing and Flickr to identify local road typologies and how they may be changing through reconstruction.

To develop a sense of Bucha's structure and organization, we worked in two scales, first on two gigantic maps so large that they covered areas 6' by 6' laid out in the Penn IUR conference room and later on GIS maps that we integrated into our PowerPoint presentation. We used the large map to experience the city. With pens and other markers, informed by social media, we "walked" the streets, "seeing" the parks, rivers, roads and highways, logistics and economic nodes (airport, railroad), social and cultural landmarks (stadium, Church of St. Andrew the First [site of the mass graves], Yablunska Street), and new developments (proposed TechnoGarden, residential clusters). While we overlaid the damage reports, we did not have a real time idea of the ongoing reconstruction. However, from time to time, we consulted with Mr. Melnyk who urged us on, saying that the city really did need help in rebuilding.

As we began to get a stronger sense of conditions on the ground, we translated Bucha's comprehensive plan and mapped out growth zones in and around Bucha. Our layered approach revealed a unique opportunity to link Bucha's surrounding greenbelt to its urban assets with a climate-resilient infrastructure plan that could strengthen its street grid and enhance access to its natural assets all while inviting locals and visitors to connect with the city's sites of remembrance. Once we had developed the concept, we turned



Weitzman students Leo Wagner, Laura Frances, and Chenxi Zhu prepare for their January 26th presentation. Photo: Eric Sucar

to thinking about its refinement and later implementation. We viewed the framework as a vehicle for discussion with the residents to refine the locations. We suggested a phasing plan to build it out. We offered illustrations as design examples for streetscapes along the highway, for jogging/biking/walking trails and around key mobility points. We identified potential sources of funding and supportive partnerships.

After we finished presenting, the Ambassador noted that our network plan connected to places that one would not find in any guidebook about Bucha but are meaningful to locals - a comment that validated our nontraditional methodology. She also remarked how if the network was built, her kids could safely bike to school.

Finally, we concluded the discussion with a small ceremony in which we presented hard copies of the work along with a translation in Ukrainian contributed by Alex Jarymovych, IT Director, Weitzman School to the ambassador and to the State Department representatives.

As the intent of Green Network Bucha is to be a visionary framework on top of which locals like the Ambassador can dream up scenarios of how the pedestrian/bike network could enhance their daily lives, we were surprised that coverage by the Voice of America, as well as social media produced by members of the audience including the Ambassador, have led to contacts with Bucha leaders who want to continue the dialogue about the plan, an ongoing opportunity to share ideas and support with these new colleagues.

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Expert Voices 2024 Remote Work: Its Impact on Cities

ANNUALLY, PENN IUR ASKS AN ARRAY OF experts to share their views on a critical topic for the year ahead. This time, nearly four years after the onset of COVID-19 began a structural shift to working from home, Penn IUR Co-Directors Eugénie Birch and Susan Wachter asked scholars and practitioners to share their responses to this question: What do you expect will happen to remote work trends in the future? How should cities respond to remote work's impact on the value of their real estate, tax bases, and more broadly, urban life?

The commentators universally agreed that the trend of remote work is here to stay. In fact, Stijn van Nieuwerburgh, Earle W. Kazis and Benjamin Schore Professor of Real Estate and Professor of Finance, Columbia University, noted that commercial real estate is expected to cumulatively lose up to 45 percent in value by the end of this year (\$600 billion in lost value). Heartily agreeing, Dick Voith, Chairman and Founding Principal, Econsult Solutions cautioned that such benefits of remote work as increased worker flexibility in terms of time and location, may drive increased social isolation and climate unfriendly development patterns. In the fourth quarter of 2023, Moody's Analytics found that 19.6 percent of office space was vacant, and according to Kastle System's 10-city survey of office buildings using their key cards, peak office occupancy reached just 50 percent of pre-pandemic levels.

Nonetheless, others saw some brighter outcomes for cities, arguing that over time, they have responded to challenges with innovations and will do so in the future. Clarence E. Anthony, CEO and Executive Director, National League of Cities, noted that despite the expected decline in office occupancy, cities, towns, and villages across America will "lead the way as they revitalize their downtowns and reinvigorate their economic centers." Harriet Tregoning, Director, New Urban Mobility (NUMO) alliance, saw adaptive reuse of real estate and more flexible development going forward. Tracy Hadden Loh, Fellow, The Brookings Institution, observed that contrary to most beliefs, foot traffic in cities comes from casual visitors not office workers; but warned that they require different experiences in cities. She called for downtowns to be "welcoming, legible, and needed by a broad diversity of people." Marc Morial, President and CEO, National Urban League and Former Mayor of New Orleans, added that remote work can be a tool to address cities' racial inequalities, if used responsibly. And Prema Gupta, President and CEO, Center City District, argued that downtowns can show "the way forward for our society to address its goals of equity, climate adaptation, and opportunity."

Further, experts viewed technology as playing a major role in the future of cities where work from home (WFH) is prominent. Nicholas A. Bloom, William D. Eberle Professor of Economics, Stanford University, likened the WFH trajectory to a "Nike swoosh": It rose extremely quickly between 2020-22, flattened in 2023, and by 2025, will rise again due to anticipated improvements in technology. Bruce Katz, Director, Nowak Metro Finance Lab, Drexel University, believed that defense tech, fin tech, medtech and other technology sector startups (along with new university / corporate centers of excellence) will help reinvigorate downtowns. For Richard Florida, University Professor, Rotman School of Management and School of Cities, University of Toronto, technology has created a new kind of urbanism - the Meta City, which "adds digital connectivity to physical clustering and agglomeration, enabling cities to expand their hinterlands far outside of their geographic reach."

More provocative insights about how this year's guests viewed the course and impacts of remote work in cities are available on the Penn IUR website. ■

Expert Voices 2024



Clarence E. Anthony CEO and Executive Director of the National League of Cities; former Mayor of South Bay, Florida



Nicholas A. Bloom William D. Eberle Professor of Economics at Stanford University and co-founder of www. wfhresearch.com



Richard Florida Professor at the Rotman School of Management at the University of Toronto and Distinguished Fellow at NYU's School of Professional Studies



Prema Gupta President and CEO of Center City District in Philadelphia



Bruce Katz Distinguished Fellow at the Lindy Institute and Founding Director of Nowak Metro Finance Lab at Drexel University



Tracy Hadden Loh Fellow at the Brookings Institution



Marc H. Morial President and CEO, National Urban League and Former Mayor of New Orleans



Harriet Tregoning Director of the New Urban Mobility (NUMO) Alliance at the World Resource Institute



Stijn van Nieuwerburgh Earle W. Kazis and Benjamin Schore Professor of Real Estate and Professor of Finance at Columbia University's Graduate School of Business



Richard Voith
Chairman and Founding
Principal at Econsult
Solutions Inc.

Penn IUR Travels to China

THIS SUMMER, PENN IUR FACULTY, STAFF, AND GRADUATE AND PHD students headed to various sites in China. Penn IUR Co-Director and City Planning Professor Eugénie Birch spent the start of July at Tongjie's College of Architecture and Planning (CAUP) in Shanghai. On July 1, Genie gave a lecture titled "Urbanization and Global Agreements Around the World, How Does China fit in?" and provided the Keynote, "Resilient Regeneration of Urban Islands," at the CAUP summer school opening ceremony July 2. She also spent time with department representatives, discussing ways to strengthen the relationship between the Weitzman School of Design and CAUP.

Professor Birch also previewed the new translation of *Slums:* How Informal Real Estate Markets Work done by Yulin Chen, Associate Professor of Tsinghua University, which she co-edited with Susan Wachter, fellow Penn IUR Co-Director.





Top: Penn IUR Program Coordinator Arden Jorden (second from left) met up with former Penn IUR visiting scholars at the "Design for Nature Now" exhibition opening in China; Bottom: Yulin Chen, Associate Professor of Tsinghua University, shows off the translation of the Penn IUR book Slums: How Informal Real Estate Markets Work, by Penn IUR Co-Directors Eugénie Birch and Susan Wachter.

FACULTY

Faculty Spotlight

Allison Lassiter



Dr. Allison Lassiter is a Penn IUR Faculty Fellow and Assistant Professor of City and Regional Planning at the Weitzman School of Design at the University of Pennsylvania.

DR. ALLISON LASSITER JOINED THE UNIVERSITY OF PENNSYLVANIA'S Weitzman School of Design Faculty in 2017, following work with the Cooperative Research Centre for Water Sensitive Cities in Melbourne, Australia.

her research and teaching focus on managing urban water resources in the context of climate change, from watershed-based approaches to "smart water" technologies. Through her work, she examines opportunities to use landscape infrastructure and emerging technologies to build resilience and increase adaptive capacity in cities. She's currently working on a project through an award from the National Science Foundation to improve the nation's water infrastructure system.

Lassiter complements her research by participating in national and international meetings on water management, such the U.S. EPA's Creating Water Resilient Utilities water-finance workgroup or the Aspen Institute-Duke Nicholas School of the Environment Water Forum, and the UN Framework Convention on Climate Change (UNFCCC) Conference of Parties.

For Weitzman's Department of City & Regional Planning, she teaches courses on sustainable cities, smart cities, and water policy.

Please tell us about your work, which integrates economics, remote sensing, hydrology, and systems engineering as well as planning. What motivated your research direction?

I work on adapting drinking water systems to climate change. But, there are some substantial challenges facing water systems today, even without considering climate change. Many water systems are struggling to raise sufficient revenue and are behind on required maintenance. We need to develop approaches that fix today's problems, while also leaving systems

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FACULTY

prepared to adapt to tomorrow's changes. This is a tall order. We are going to need to approach water system fundamentals in a new way.

Interdisciplinary insights are key. I think of water systems as a product of four interacting infrastructures—natural, physical, social, and digital—and believe transformation will come by innovating within and across these four infrastructures. To develop and evaluate potentially transformative approaches, I work with researchers at global universities in social sciences, physical sciences, engineering, business, and design. No discipline will figure this out in isolation.

You've been looking at the threat sea level rise poses to drinking water systems as the planet heats up. So now what? What is smart water? What are the main takeaways for urban water management in this dystopian reality?

The past few years, I've spent a lot of time thinking about how sea level rise may contribute to increased levels of salt in the drinking water supplies of coastal communities. I published one paper on this subject and my lab is finishing up three others.

Now, I'm working with a team of scientists under the National Science Foundation Convergence Accelerator program to develop a tool called SaltCast. One of the intentions of the tool is to give coastal water suppliers information they can use to understand future salinity threats.

Next, with my lab and partners, I'm starting to think about how community water systems might adapt to changes in salinity levels. It's difficult to remove salt from water and building a desalination facility is expensive, even with state-of-the-art equipment. Are there alternatives? In collaboration with a large research team in Europe, Smart Water Futures: Designing the Next Generation of Urban Water Systems, my lab is thinking about how newer digital technologies can contribute to cost-effective adaptation. I'll report back more on our findings soon!

Can you tell us about your work serving on Penn's delegation to the UN Framework Convention on Climate Change (UNFCCC) Conference of Parties and specifically your work with UNFCCC on adaptation? How do these experiences influence your research and its real-world applications?

It's been such an honor to join the Penn delegation to COP over the last four years, watch the negotiations, attend side events, and meet other people working on similar climate adaptation problems around the globe.

My own engagement with the UNFCCC is primarily under a program called National Adaptation Planning (NAP). This program is intended to help countries prepare to adapt to climate change and then implement planned projects. I've been contributing to a project on developing indicators to track adaptation, which can help monitor and evaluate the success of NAPs. In addition, my lab is working on a supplement to the NAP Technical Guidelines. The supplement, Transforming Water Management for Resilience and Security in a Changing Climate, will feature successful case studies on decentralized, cost-effective water management strategies from around the world, providing inspiration and examples for countries working on adaptation planning.

How do you integrate your research on water policy, sustainable cities, and smart cities into your teaching? What ideally should planners come away with after taking these courses?

I teach graduate-level seminars on water policy, sustainable cities, and smart cities. My research directly feeds into these classes – it influences the material we cover, the examples I present, and the guest speakers I invite into class. I'm constantly updating my syllabi to make sure that the courses reflect cutting-edge concepts.

All these subjects are complex. Both the problems and possible solutions are changing alongside evolving societal values, economic contexts, climate, and technology. This leads to two big goals when I teach: (1) to clearly unravel complex, interdisciplinary interdependencies and trade-offs, so students can develop sophisticated ideas; (2) to help students learn to ask good questions.

I do this by using teaching style known as discussion-based learning. The idea is that the instructor acts as facilitator, while students collectively discuss ideas and collaboratively learn. (This can be a little bit harder in my larger classes, but I still try to keep it conversational.) Discussion-based learning is associated with increased critical thinking skills, problem solving skills, understanding of diverse perspectives, and development of the learners' autonomy. I hope when students finish my classes they have a holistic and nuanced view on water, sustainable cities, and smart cities and will continue to update and re-evaluate their views over time.

You collaborated with us on a popular event last fall, AI and the City, which examined how planners are balancing the use of AI tools in their work for efficiencies while grappling with its inaccuracies and ethical conflicts. What has changed since that conversation, now nearly a year later?

Yes, it was a great event! Al tools are increasingly more sophisticated, but the fundamental challenges aren't different. Depending on the application, Al outputs can be deeply biased and inaccurate. Implementing an Al approach can be expensive, too, especially if weighed against how the outputs from the tool can be reasonably and responsibly used. Some problems aren't meant to be solved with Al. My lab thinks about the right place and time to use Al in the city, in water systems, and in climate adaptation. I tend to take a less-is-more approach. As a whole, the many researchers and practitioners working on urban technology and Al are still figuring out the opportunities Al presents and the guard rails that need to be put in place.

What are you excited about for this coming year? What will you dive into next?

I'm thrilled to continue work on drinking water systems and climate adaptation. These are big, tricky problems that I'll be working on for a long, long time.

EVENTS

Public Programs

FEBRUARY 1, 2024

Post Industrial DIY:

Book Talk & Panel Discussion

Speakers: Daniel Campo, Associate Professor of City & Regional Planning, Morgan State University; Catherine Seavitt, Professor and Chair of Landscape Architecture, Weitzman School of Design; Fritz Steiner, Dean and Paley Professor, Weitzman School of Design (Moderator)

In partnership with the Ian L. McHarg Center for Urbanism & Ecology, Penn IUR hosted a book talk and panel discussion on *Post Industrial DIY: Recovering American Belt Icons*, which chronicles grassroots efforts to recover, rebuild, and enjoy these architecturally iconic but economically obsolete places in the American Rust Belt.

FEBRUARY 26, 2024

The Architecture of Informality in Islamabad: Book Talk and Discussion

Speakers: Faiza Moatasim, Assistant Professor, Architecture in Urbanism and Urban Design, USC School of Architecture; Aasim Sajjad Akhtar, Associate Professor, Political Economy, Quaid-i-Azam University; Liza Weinstein, Department Chair and Associate Professor, Sociology, Northeastern University

Penn IUR and the Forum on Urban Informality hosted a book talk and discussion on *Master Plans and Encroachments: The Architecture of Informality*, a release in the Penn Press series, The City in the Twenty-First Century, edited in conjunction with Penn IUR. The book examines informality in the high-modernist city of Islamabad as a strategic conformity to official schemes and regulations rather than as a deviation from them.

MARCH 13, 2024

Powering the Slum: Exploring Alternatives Forms of Energy for Informal Settlements

Speakers: James Kwame Mensah, Lecturer, Public Administration and Health Services Management, University of Ghana Business School, and Penn IUR Fellow; Penn IUR Co-Director, Eugénie Birch (Moderator)

With a new policy digest by Mensah and Birch from the Kleinman Center for Energy Policy serving as a point of departure, this conversation explored ways of introducing renewable energy to informal settlements in Accra, Ghana. With Ghana's electrical system heavily reliant on fossil fuels and unable to meet demand due to rapid urban population growth, the discussion focused on diversifying the energy mix to provide affordable, reliable, and sustainable energy in informal settlements. This session was part of the University of Pennsylvania's Energy Week.

MARCH 21, 2024

Leveling the Field: Combining Proprietary Micro-Level Data with Machine Learning Methods for Housing Justice Research

Speakers: Esteban López Ochoa, Assistant Professor of Urban and Regional Planning, School of Architecture and Planning, University of Texas at San Antonio

The rapid population growth in U.S. cities has intensified urban development pressures and raised several equity concerns, such as displacement, gentrification, and low-income housing demolitions. Previously hard to quantify, these issues can increasingly be tracked and documented with data. In this talk, Ochoa showed how a property-level gentrification index and code-enforcement bias assessment can leverage these new data sources with machine learning and artificial intelligence techniques.

APRIL 9, 2024

Vibrant Cities: Advancing Green, Resilient, and Inclusive Urban Development

Speakers: Somik Lall, Staff Director, World Bank 2024 World Development Report; Omar Masoud, Chief Executive Officer, The Urban Unit, Government of Pakistan; Guy Michaels, Associate Professor, Economics, London School of Economics; Forhad J. Shilpi, Senior Economist, Development Economics, The World Bank; and Gilles Duranton, Professor and Dean's Chair, Real Estate, Wharton, and Penn IUR Faculty Fellow (Moderator)

How will the world's developing cities become vibrant—capable of meeting the climate, social, and economic challenges of tomorrow? Vibrant cities offer firms and households high expectations for good returns on investments, for a sustainable and resilient future, and for dynamic and inclusive growth. Cities thrive not only by increasing incomes and wealth for a select few, but by improving common welfare through the equitable provision of basic services and opportunities. To do this, tomorrow's vibrant cities will be: resilient and low carbon, inclusive, and productive.

APRIL 12, 2024

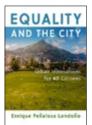
Economic Opportunity for Everyone: The Role of CDFIs in Advancing and Building Opportunity

Speakers: Della Clark, President and CEO, The Enterprise Center; Jodie Harris, President, Philadelphia Industrial Development Corporation; Donald Hinkle-Brown, President and CEO, Reinvestment Fund; Mihailo Temali, Founder and Senior Advisor, Neighborhood Development Center-MN; and Mark Pinsky, Founding Partner, CDFI Friendly America (Moderator)

Community Development Financial Institutions such as Reinvestment Fund play an influential role in advancing wealth in underserved communities by providing capital, expertise, and technical assistance for a variety of community-led and impact driven projects. Panelists in this year's 6th Annual Nowak Lecture discussed the varying and holistic ways that their organizations approach community development with an equity lens to advance economic opportunity and build joyful and thriving communities.

PUBLICATIONS

New Books in the University of Pennsylvania Press Series, The City in the 21st Century



Equality and the City: Urban Innovations for All Citizens

By Enrique Peñalosa Londoño

In *Equality and the City*, Enrique Peñalosa

Londoño draws on his experience as mayor of Bogotá, Colombia, as well as his many years of international work as a lecturer and consultant, to share his perspective on the issues facing developing cities, especially sustainable transportation and equal access to public space.

As mayor of Bogotá, Peñalosa Londoño initiated development of the TransMilenio Rapid Bus Transit system, among the largest and most comprehensive public transit systems in the Global South, which carries 2.5 million passengers a day along dedicated bus lanes, bike paths, and a rapid metro line. The system emphasizes accessibility for the entire population. Peñalosa Londoño's efforts to create public space were similarly ambitious: over the course of his two terms, more than a thousand public parks were created or improved.

Underlying these policies was a conviction of how cities should be—a compelling humanistic philosophy of sustainable urbanism. For Peñalosa Londoño, city design is not just engineering; it defines human happiness, dignity, and equality. "An advanced city is not one where the poor own a car," Peñalosa writes, "but one where the rich use public transport." Equality and the City provides practical criteria for conceiving and constructing different and better cities, describes the obstacles that are confronted when doing so, and identifies ways to overcome them.



Underground Dreams and Degradations in Bucharest

By Bruce O'Neill

This book gets to the bottom of the twenty-first-century city, literally.

Underground moves beneath Romania's capital, Bucharest, to examine how the demands of global accumulation have extended urban life not just upward into higher skylines, and outward to ever more distant peripheries, but also downward beneath city sidewalks. Underground details how developers and municipal officials have invested tremendous sums of money to gentrify and expand Bucharest's constellation of subterranean Metro stations and pedestrian pathways, basements and cellars, bunkers and crypts to provide upwardly mobile residents with space to live, work, and play in an overcrowded and increasingly unaffordable city center. In this sense, the repurposed underground facilitates dreams of middleclass ascendancy. This sense of optimism, the book shows, invariably gives way to ambivalence as the middle classes confront the indignities of being incorporated into the city from below.

Bruce O'Neill argues that these loosely coordinated efforts have not only introduced novel forms of social fragmentation but also a new aesthetics of inequality that are fundamentally shaping where and how the middle classes fit in the city. Pushing urban studies beyond a cartographic perspective—with its horizontal focus upon centers and peripheries, walls and gates—O'Neill brings into focus the vertical dynamics of gentrification that place some "on the bottom" and others "on top" of the city. As cities

around the world extend further downward in the name of development and sustainability, *Underground* makes clear that scholars and practitioners of the twenty-first-century city will need to become ever more attuned to the cultural politics of urban verticality, asking not just who is included in the city and who has been pressed outside of it, but also who is on top and who is placed on the bottom.

New from Springer Singapore



Harnessing
Urban Innovation
to Unlock the
Sustainable
Development Goals

By Ali Cheshmehzangi, Nicholas You, José Siri and Eugénie Birch

This book explores the nexus between urban innovation and sustainable development goals (SDGs). It puts together global examples of urban innovation initiatives, highlighting practical, policy-oriented, social, and technological interventions by exploring green cities, inclusive cities, resilient cities, and healthy cities.

In summarizing successful initiatives, interventions, and projects, this book highlights how urban innovation could accelerate achieving SDGs The lessons learned from each case study cluster are narrated as knowledge transfer platforms for future city development and achieving sustainable development.

STUDENTS

Emerging Urban Research and Local Urban Leader Celebrated at Urban Doctoral Symposium



Penn IUR Co-Director Dr. Eugénie Birch (left) honored Dr. Elaine Simon (center), Past Co-Director of the Urban Studies Program, with an Urban Leadership Award at the 2024 Urban Doctoral Symposium.

university of Pennsylvania Doctoral students with urban-focused dissertations gathered to celebrate their achievements at the Urban Doctoral Symposium and Poster session hosted on May 17 by Penn Institute for Urban Research (Penn IUR) and the Penn Urban Studies Program.

Dr. Bruce Zou (Graduate School of Education) offered the keynote, presenting ideas from his dissertation examining how international manufacturing companies adjusted localization strategies following COVID-19 to balance economic efficiency with social and environmental concerns. Hyper-localization is the next phase of globalization, he posited, emphasizing the critical role of workforce development and economic revitalization and the impact of these trends on urban development and city planning strategies.

Penn IUR Co-Director Eugénie Birch also honored longtime friend and collaborator Elaine Simon, Co-Director of the Urban Studies Program, presenting her with an Urban Leadership Award.

said. "Elaine Simon has grown Urban Studies into a truly interdisciplinary program that prepares urban scholars and practitioners to take on climate change, homelessness, failing infrastructure, and other pressing challenges of our time."

Simon also collaborated with Penn IUR to develop the doctoral symposium as a way of documenting and sharing new ideas in urban research across campus and beyond, encouraging cooperation and collaboration on urban issues between many disciplines.

A poster session documenting current work from continuing urban doctoral students followed, featuring brief presentations on current research topics ranging from automated buses to groundwater salinization:

 TIFFANY M. TRAN, City & Regional Planning, Weitzman School of Design - "Changing Water into Land: Estimates of Informal Land Reclamation from a Pilot Study of Cirebon City, Indonesia";

- KIRSTIN FISK ENGELMAN, City & Regional Planning, Weitzman School of Design -"How Can Planners Become Involved in Planning for Blue Carbon?";
- RACHEL BONDRA, Fellow in the Initiative in the History of the Built Environment, Weitzman School of Design - "A Human Dumping Ground": Waste and the Making of Rikers Island, 1884-1939;
- ZIYI TANG, City & Regional Planning, Weitzman School of Design - "Exploring the Impact of Automated Buses on Travel Mode Choice Dynamics";
- JASMINE SIYU WU, City & Regional Planning, Weitzman School of Design
 "Barriers to Obtaining a Young Driver License: Financial & Physical Access Matter";
- RANCE GRAHAM-BAILEY, City & Regional Planning. City & Regional Planning, Weitzman School of Design - "Moving Towards the Market: The Rental Assistance Demonstration and Transforming Public Housing";
- HUI TIAN, City & Regional Planning. City & Regional Planning, Weitzman School of Design - "Predicting Salinization of Groundwater Under Sea Level Rise Scenarios with Machine Learning Models"; and
- SHERRIE CHENG, Economics, College of Arts and Sciences – "Urban Highway Removal: Evidence from Rochester's Inner Loop."

This year, members of the <u>Undergraduate</u> <u>Urban Research Colloquium</u> also shared their work (see p. 15 for more details).

To learn more about Penn IUR programs for academic instruction, including the Undergraduate Urban Research Colloquium (UURC) and the Penn Urban Doctoral Symposium, visit https://penniur.upenn.edu/instruction.

TUDENTS

2024 Lawrence C. Nussdorf Student Award Winners Honored at Penn IUR 19th Annual Urban Leadership Forum

THREE UNIVERSITY OF PENNSYLVANIA undergraduate students claimed the 2024 Lawrence C. Nussdorf Student Award, presented by the Penn Institute for Urban Research (Penn IUR) at the 19th Annual Urban Leadership Forum on April 5: Joey Jung, Marielle Kang, and Khalid Mohieldin.

The award is named for the late Lawrence C. Nussdorf, founding Penn IUR board member, who deeply valued the brilliance and enthusiasm of Penn's undergraduate students in Penn's Undergraduate Urban Research Colloquium (UURC) and the Penn IUR Fellows in Urban Leadership Program. Both programs seek to enrich students' exploration of cities and the urban landscape in the classroom and the field.

Penn IUR Co-Directors Eugénie Birch and Susan Wachter presented the Nussdorf Student Award to the three graduating students who have all exemplified the goals of the award:



JOEY JUNG C'24 majored in Urban Studies and Political Science and minored in Public Policy and Data Analytics. With his mentor, Dr. Yeonhwa Lee, he

conducted research on gentrification through the UURC program in 2022 and was a 2023-24 Penn IUR Undergraduate Fellow in Urban Leadership. He was also a former president of Wharton Undergraduates in Public Policy. Jung previously worked at the Philadelphia Association of Community Development Corporations and Econsult in Philadelphia and Charter Cities Institute in Washington D.C. Jung is primarily interested in public policy, urban planning, and city diplomacy and is currently working with cities on important fiscal and financial issues at PFM.



MARIELLE KANG

C'24 studied Environmental Studies with a concentration in Sustainability and Environmental Management with minors in Urban

Studies and Economic Policy. She explored her interest in climate risk management and resiliency with mentor and Penn IUR Faculty Fellow Dr. Simon Richter as a participant in the spring 2024 UURC. Her research focused on Cebu City, Philippines and private sector participation in relief efforts following Typhoon Odette in 2021. Following graduation, Kang joined J.P. Morgan as a credit risk analyst.



KHALID MOHIELDIN

C'24 majored in Urban Studies with a minor in History and Africana Studies on the pre-law track. Attentive to global urbanization trends

and the intersections between urbanization, displacement, and public health, he has specific interests in Africa and southern European nations. With his mentor Heidi Artigue, a doctoral student at Wharton's Applied Economics, his spring 2023 UURC project aimed to map and analyze poverty changes in America's major metropolitan areas and its impact on job distribution and affordable housing for low-income populations. He also worked as a research assistant for Penn IUR Faculty Fellow Domenic Vitiello. At the time of publication, Mohieldin was pursuing work as a legal assistant following graduation.

The Nussdorf Student Award commends the work of "all of students serving as models, who seek out opportunities to better understand how cities work," Wachter said. "Their work considers how we might address the critical issues cities face for a better future for all."

The Lawrence C. Nussdorf Student Award is a complement to the Lawrence C. Nussdorf Urban Leadership Prize, which also recognizes <u>urban leaders</u> around the globe. ■

STUDENTS

Penn IUR Undergraduate Fellow Visits DC for a Glimpse of Urban Affairs at Work



Timethius terrell (C'24), shared his experience traveling to Washington, D.C. for a daylong trip to meet policymakers and urban policy experts as part of the Penn IUR Fellows in Urban Leadership program

THE TRAIN RIDE PASSED QUITE QUICKLY, WITH THE BRIGHT, RISING SUN raising my energy along with it.

Our itinerary began with the <u>National League of Cities (NLC)</u>, of which I knew very little before this trip. Soon, I learned about the work that the NLC does to encourage collaboration among cities throughout the country, ranging from initiatives focused on sustainability to diversity and inclusion to fundraising. NLC has branches that reach beyond D.C. and brings together scholars from a variety of disciplines.

We transitioned to the <u>Penn Biden Center</u> for lunch, where we were joined by Deputy Special Representative for City and State Diplomacy, <u>Daniel Ricchetti</u>. I was shocked by how quickly he rose through the ranks, despite his relatively young age (approximately 30 years old). His commitment to national and global collaboration between cities inspired me, and his pathway to this role was an untraditional one.

Olivia Reneau, Legislative Aide to Senator John Fetterman (D-PA), quietly arrived at the table and sat with us. She eventually jumped into the conversation, as someone who has also risen through the ranks at a young age. She described to us the winding path that led her to her

current position on Senator Fetterman's staff. She also told us what it is like to hold her role as a Black woman on Capitol Hill.

Our last guest speaker was <u>Solomon Greene</u>, who is the Principal Deputy Assistant Secretary for Policy and Research at the U.S. Department of Housing and Urban Development (HUD). I learned that one of his team's primary goals is to pursue U.S. urban interests abroad, which comes with a unique set of complications and drawbacks.

We wrapped up our official business and headed down the street to dine with a few members of the Penn IUR Board, including <u>Lawrence Parks</u>, co-founder of Forethought Advisors and <u>Melanie Nussdorf</u>, Partner, Steptoe & Johnson. At this lovely dinner, sponsored by Nussdorf, I was reminded of the Board members' insight into matters of urban affairs.

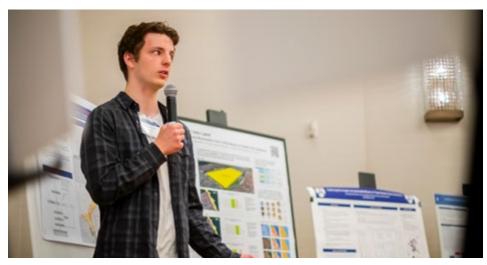
Our conversation ended our busy day on a high note, as they expressed tremendous hope in our generation's ability to solve complex urban issues in the U.S. and beyond by focusing on our unique niches. As a psychology major, it was very nice to hear the vital impact that my work could have in improving these cities.

After dinner, a group of us walked through the cherry blossoms near Union Station. We read how the Japanese government had donated these trees (years before World War II). As I watched my Singaporean peer conduct an impromptu photoshoot, I was reminded of D.C.'s importance as a historical city. Usually, I tend to view D.C. as more of an administrative region than as a city. On this trip, I learned that it is, in fact, both: an administrative region and a symbol of national unity and global engagement.

Our train ride back to campus provided time to reflect on our experiences along the way. Our day trip to Washington D.C. led me to see international city collaboration and engagement in a different light. There is still much work to be done, but I am enthusiastic to see what the future holds.

STUDENTS

2024 Penn Undergraduate Urban Research Colloquium Presents Findings



Simon Webber, UURC participant, presents at Urban Doctoral Symposium. Photo Credit: Eric Sucar

EACH SPRING SEMESTER, PENN IUR SPONSORS

the Undergraduate Urban Research Colloquium (UURC), an advanced research seminar for undergraduate scholars with an interest in urban-focused research. The program pairs students with a faculty mentor with expertise in their areas of interest and presents the opportunity to learn about urban related research in an interdisciplinary setting. Students and faculty teams come from academic departments throughout the University, with students receiving credits through the Weitzman School of Design's City & Regional Planning Department or the School of Arts and Sciences' Urban Studies Program.

In the spring of 2024, Penn IUR sponsored the 20th annual UURC. The research projects ranged from the connection between air quality and zoning to stakeholder engagement post-natural disaster. Read more about the projects below:

MIKUN FASAN

Biochemistry and Urban Studies, College of Arts & Sciences, and Simon Webber, Urban Studies, College of Arts & Sciences
Research Mentor: Chris Quattro, Assistant Professor, Geography and Planning
Department, Appalachia State University
Spatial Analysis of Residential Zoning
Classifications and their Colocation with
Microclimate Externalities

According to the American Lung Association, Philadelphia is among the worst air quality for major cities in the United States. Our research focuses on the spatial co-location between ambient conditions and residential zoning designations throughout Philadelphia. The analysis focuses on particulate matter, carbon dioxide, formaldehyde, temperature, and humidity readings corresponding with different tiers of residential zoning in Philadelphia. Additionally, observational characteristics of each neighborhood were

also recorded to contextualize differences in the built environment for each location studied. The purpose of this research is to better understand variation among distinct classifications of zoning as it relates to shaping urban design and resulting microclimate conditions. Preliminary findings shed some light on differences in environmental conditions for neighborhoods of varying residential zoning tiers.

MARIELLE KANG Environmental Studies, College of Arts & Sciences Research Mentor: Simon Richter, Class of 1965 Endowed Term Professor of German, Germanic Languages and Literatures Analyzing Stakeholder Engagement in Cebu, Philippines during Typhoon Odette

Over the last decade, the province of Cebu. Philippines has emerged as one of the most vulnerable regions to climate change impacts. In 2013, Cebu was victim to super Typhoon Yolanda and the Bohol Earthquake, and in 2021, Cebu was hit by super Typhoon Odette. Given the growing severity of climate-related risks and disasters, as well as the significant role of private sector actors in Cebu's disaster risk management and reduction, this research seeks to characterize the contribution of private sector actors in the immediate relief operations following the 2021 super Typhoon Odette within the regional capital, Cebu City. Over the course of five months, we conducted and analyzed n = 17 semi-structured interviews with private relief providers in order to identify the risks and benefits of private sector-led climate resiliency. This analysis indicated the primary role that private sector business networks play within the context of limited public resources

STUDENTS

in facilitating the short-term collection, delivery, and distribution of immediate relief goods to high-risk communities. We further identified the necessity for future research in this field regarding the long-term impacts and continuity of these immediate relief operations, as well as the integration of aid recipient perspectives in order to evaluate the effectiveness of these initiatives.

VIVIAN LI

Business Analytics and Marketing, Wharton Research Mentor: Bruce Zou, Organizational Learning & Leadership, Graduate School of Education

Localizing International Manufacturing
Companies in the U.S. - Examining Successful
Labor Practices

This study examines how changes in labor practices influence the manufacturing sector, a key driver of urban economies. By understanding these dynamics, this research contributes to the broader context of urban development, particularly in addressing how cities can adapt to post-pandemic economic shifts and labor market challenges. The resurgence of manufacturing, termed as a "manufacturing supercycle," has significant implications for urban infrastructure, workforce development, and economic sustainability.

KHALID MOHIELDIN

Urban Studies, College of Arts & Sciences Research Mentor: Heidi Artigue, PhD Student, Applied Economics, Wharton

Assessing the Spatial Dimensions and
Consequences of Suburban Poverty in the US

Although most academic and policy attention towards poverty has been focused on the inner-city, a growing share of the American impoverished population is living in the suburbs. Over the past 30 years, America's suburbs have experienced gradual economic and racial diversification. This trend is challenging our assumptions about how poverty manifests in American neighborhoods and how poverty is experienced by American households. This presentation will delve into the changing geographies of lowincome people in the U.S., including the

distribution of poor people in America's suburbs and predictors of poverty in suburban neighborhoods. This presentation will also explore the challenges experienced by low-income Americans, including barriers preventing low-income people from accessing vital welfare resources. Overall, this presentation aims to offer a statistical lens at the changing economies and geographies of America's suburbs.

NATALIE VASQUEZ

Urban Studies, College of Arts & Sciences Research Mentor: Heidi Artigue, PhD Student, Applied Economics, Wharton

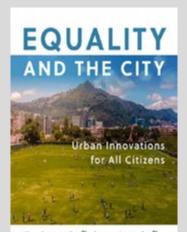
Safety Perceptions Among Womxn from Socially Marginalized Communities in Philadelphia: Preliminary Findings

This research aimed to understand perceptions of safety within Philadelphia. experiences with community and public services, and how these factors impact daily life for womxn from socially marginalized communities. Preliminary findings, gathered through five interviews with key informants revealed that for womxn, safety encompasses physical protection, freedom from fear, and the ability to express oneself without negative repercussions. However, womxn in Philadelphia generally feel unsafe within the city, with some calling it unpredictable and characterized by "dense energy," while most believe that public transportation is reflective of broader safety issues. Despite this, strong community ties help some feel secure in familiar neighborhoods, emphasizing the value of local support networks. Understanding these issues can guide policymakers and organizations to create strategies that address the unique challenges faced by womxn in urban environments.

NOW AVAILABLE

EQUALITY AND THE CITY

by Enrique Peñalosa Londoño



Enrique Peñalosa Londoño

"This book offers a charismatic mayor's insights into how a city's DNA can be shaped to promote greater social inclusion, environmental equity, and human well-being at a time when cities are at the frontline of planetary change."

—Ricky Burdett, London School of Economics

For the complete list of titles, visit **PennPress.org**

EVENTS

Sixth Annual Jeremy Nowak Memorial Lecture Highlights Key Role of Community Development Financial Institutions

HOW CAN COMMUNITY DEVELOPMENT FINANCIAL

Institutions (CDFI) combat economic disparities and revitalize communities? The Sixth Annual Jeremy Nowak Memorial Lecture, a collaboration between the Reinvestment Fund and the Penn Institute for Urban Research (Penn IUR), brought together a panel of CDFI leaders to explore their pivotal role in fostering economic opportunities for all.

The event, held in honor of the late <u>Jeremy Nowak</u>, a visionary in urban economic development, centered on innovative strategies employed by CDFIs aligning with the key priorities and vision of Philadelphia's 100th mayor, <u>Mayor Cherelle Parker</u>. The Parker administration's central focus is to make Philadelphia the safest, cleanest, and greenest big city in the nation with economic opportunity for everyone.

Don Hinkle-Brown, President and CEO of the Reinvestment Fund and Jeremy Nowak's successor, commenced the lecture by paying homage to Nowak's enduring legacy and the transformative impact of his work on Philadelphia's communities. He set the stage for an engaging discourse rooted in both tradition and forward-thinking approaches to urban development.

Karen Fegely, Deputy Commerce Director from the City of Philadelphia, offered valuable insights into Mayor Cherelle Parker's administration's economic development plans, emphasizing their alignment with the mission of CDFIs. Fegely highlighted the mayor's dedication to streamlining regulatory processes to encourage entrepreneurship and business growth, essential elements for economic revitalization. She also underscored the importance of partnerships between the city and CDFIs in achieving sustainable urban development and expanding economic opportunities for all Philadelphians.

Mark Pinsky, founding partner of CDFI Friendly America, moderated the conversation and provided a comprehensive overview of CDFIs, describing them as private, public-purpose financial institutions that operate on a business model that is profitable but not profit-maximizing. He emphasized the extensive reach and impact of CDFIs across the United States, particularly in Philadelphia, where they have invested over a billion dollars, with a significant portion supporting minority communities.

The panel featured four distinguished speakers who each shared insights into their organization's role in driving economic opportunity and the innovative approaches they employ:

- <u>Della Clark</u>, President of The Enterprise
- <u>Jodie Harris</u>, President of Philadelphia Industrial Development Corporation (PIDC);
- Mihailo Temali, CEO of Build from Within Alliance; and
- <u>Don Hinkle-Brown</u>, President and CEO of the Reinvestment Fund.

Clark discussed The Enterprise Center's evolution from a program-centric model to a capital and investment center, focusing on building their clients' balance sheets and financial strategies. She emphasized the importance of understanding the difference between underserved and low-wealth communities and the need for a combination of debt and equity to support business growth.

Harris introduced PIDC's multifaceted role in Philadelphia's economic development, highlighting their CDFI arm, PIDC Community Capital. She spoke about the significance of flexibility and collaboration among CDFIs in meeting the diverse needs of small businesses across the city.

For his part, Temali shared the Build from Within Alliance's grassroots approach to economic development, which focuses on empowering local entrepreneurs in low-income neighborhoods through partnerships, training, and targeted support. He stressed the importance of concentrated opportunities in areas of concentrated poverty.

Hinkle-Brown then elaborated on the Reinvestment Fund's business model, which encompasses organizing capital, data, and capacity to drive impactful change. He discussed their role as a data advisor, program implementer, and financier of transformative projects in Philadelphia and beyond.

To conclude, the panelists also addressed questions from the audience on topics such as setting impact targets, supporting immigrant entrepreneurs, and the role of CDFIs in the impact investing landscape. The discussion highlighted the need for organizational capacity building, collaborative funding models, and targeted support for CDFIs to effectively serve their communities.

About the Jeremy Nowak Memorial Lecture

The Jeremy Nowak Memorial Lecture series honors the late visionary urbanist Penn IUR advisory board member and Jeremy Nowak, who worked tirelessly to create equitable communities. As leader of the Reinvestment Fund from 1985 to 2011, Nowak reimagined what it means to organize people, capital, data, and capacity in service of a more equitable future.

The Nowak Memorial Lecture series aims to highlight Nowak's enduring work to integrate public, private, and non-profit expertise to achieve collective urban prosperity. For a list of previous lectures and topics, please visit https://penniur.upenn.edu/events.

EVENTS

Special Briefings

SPECIAL BRIEFING ON THE FISCAL OUTLOOK OF State and Local Governments, a monthly event series and co-sponsored by the Volcker Alliance, The Century Foundation, and members of the Penn IUR Advisory Board, is a series of sixty-minute online conversations featuring experts from national research networks, along with other leading academics, economists, and federal, state, and local leaders. Each episode is moderated by Penn IUR Fellow and Volcker Alliance Senior Director, William Glasgall, and Penn IUR Co-Director, Susan Wachter.

JANUARY 25, 2024

Special Briefing: 2024 Fiscal Outlook for States and Cities

Speakers: Clarence Anthony, CEO and Executive Director, National League of Cities; Mark Ferrandino, Director, Colorado Office of Statpodcast e Planning and Budgeting; Eric Kim, Senior Director, Fitch Ratings; Kim Norton, Mayor of Rochester, Minn.; and Mark Zandi, Chief Economist, Moody's Analytics

For America's states and municipalities, 2024 is likely to bring long-awaited relief from inflation and higher interest rates while presenting challenges—and not just because it's a presidential election year. States, cities, and counties will have to contend with the imminent end of \$350 billion in federal pandemic budget aid even as the revenue boom of recent years cools and the need for increased spending to ameliorate the risks of a changing climate put pressure on infrastructure spending.

FEBRUARY 28, 2024

Special Briefing: State Tax Cuts

Speakers: Geoffrey E. Buswick, Managing Director and Government Sector Leader, S&P Global Ratings-US Public Finance; Can Chen, Associate Professor, Andrew Young School of Public Policy, Georgia State University; Natalie Cohen, Founder and President, National Municipal Research; and Alex Hathaway, Senior Research Associate, Center for State and Local Finance, Georgia State University

This Special Briefing discussed the latest Volcker Alliance issue paper, State Tax Cuts after the Pandemic: Strategies to Sustain Fiscal Health, which analyzes how states embarked on the biggest wave of tax cuts in decades. Since 2020, states have slashed levies by at least \$124 billion on everything from personal income to groceries and gasoline following record high revenues and cash reserves driven in large part by federal pandemic aid.

MARCH 28, 2024

Special Briefing: America's Hot Growth States

Speakers: Alex Adams, Budget Director, State of Idaho; Thomas Doe, President, Municipal Market Analytics, Inc.; and Torsten Slok, Chief Economist, Apollo Global Management

Western and southern states including Idaho and Florida were among those growing the fastest from the eve of the pandemic in 2019 through 2022. But there were some surprises as well, with Delaware, Maine, and New Jersey also joining the Census Bureau's hot growth list. While the ability of many Americans to move to low-tax states and work from home played a large role in the population shift, other factors may have been at play as well. Meanwhile, rapid population expansion will pose challenges in many of these states as they cope with enlarging school systems, updating infrastructure, and preparing communities for the impact of extreme weather conditions.

APRIL 25, 2024

Special Briefing: America's \$900 Billion Water Crisis

Speakers: Former Senator Bill Bradley, State of New Jersey; Doug Evanson, Executive Vice President and Chief Financial Officer, San Antonio Water System; Howard Neukrug, Executive Director, The Water Center, University of Pennsylvania; Nicole Lick, Senior Life Scientist, Water Division, United States Environmental Protection Agency Mid-Atlantic Region; and Reese Tisdale, President and Chief Executive Officer, Bluefield Research

While the 2021 Bipartisan Infrastructure
Law provides \$50 billion to upgrade America's
drinking water, wastewater, and stormwater
systems, much more will be needed to address
the nation's water infrastructure needs amid a
changing climate and shifts in population. The
Environmental Protection Agency estimates
the U.S. will need almost \$900 billion in water
investment over the next 20 years, plus
hundreds of billions more for maintenance.
These sums will burden federal, state and local
budgets but also pose new opportunities—and
risks—for investors in water projects.

MAY 29, 2024

Special Briefing: Doom Loop or Boom Loop— Work from Home and the Challenges Facing US Cities

Speakers: Jose Maria Barrero, Assistant
Professor, Instituto Tecnológico Autónomo de
Mexico; David Stanek, Vice President, Econsult
Solutions, Inc.; Stijn Van Nieuwerburgh,
Professor of Real Estate, Columbia Business
School; Richard Voith, Founding Principal,
Econsult Solutions Inc.; and Kathryn Wylde,
President and Chief Executive Officer,
Partnership for New York City

Ever since the arrival of the COVID-19 pandemic in the U.S. in 2020 led to a surge in people working from home, New York and other big cities have been forced to reckon with the possibility of a "Doom Loop" scenario of vacant offices and flagging economies. But given the right set of policies, cities can reverse their fortunes and embark upon a path to a "Boom Loop" of greater productivity and economic growth.

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Informing, Supporting and Protecting Vibrant Cities

DURING THE PANEL DISCUSSION, VIBRANT CITIES: ADVANCING

Green, Resilient, and Inclusive Urban Development, Somik Lall, Staff Director, World Bank 2024 World Development Report and Forhad J. Shilpi, Senior Economist, Development Economics, The World Bank shared a new World Bank paper, Vibrant Cities - On the Bedrock of Stability, Prosperity, and Sustainability, which emphasized the critical role of cities in developing countries in driving economic dynamism and boosting development. The authors define a vibrant city as one that offers firms and families high expectations of economic returns on investments while ensuring sustainability, resilience, and inclusivity, and identified three pillars crucial for cities to achieve these goals: inform, support, and protect.

Lall and Shilpi stressed the importance of setting expectations and motivating firms and families to act on market signals and government policies. They highlighted the need for investments in infrastructure and services based on rigorous assessments and the significance of buffering shocks to protect vulnerable firms and families. They also presented groundbreaking research on carbon emissions in cities, revealing the relationship between urban density and CO2 emissions and the importance of income growth in achieving CO2 savings.

Guy Michaels, Associate Professor, Economics, London School of Economics, commended the report's scope and the combination of evidence and concrete policy advice. He offered suggestions for further exploration, such as the role of green transition for oil exporters, the impact of global policies on poor cities, and the potential of solar energy in the Middle East and North Africa.

Mohammad Omar Masud, CEO, The Urban Unit, shared his perspective as a policymaker and practitioner in Pakistan. He emphasized the need for indicators to measure resilience, inclusivity, and productivity and highlighted the importance of disaggregated data at the city level. Masud also stressed the significance of equipping existing rules and organizations for implementing policies related to resilience and productivity.

Examining Urban Informality in Islamabad

AMONG URBAN DESIGNERS AND MUNICIPAL OFFICIALS, THE TERM

encroachment is defined as a deviation from the official master plan. But in cities today, such informal modifications to the urban fabric are deeply enmeshed with formal planning procedures. On February 26, Penn IUR and the Forum on Urban Informality hosted a book talk and discussion on *Master Plans and Encroachments: The Architecture of Informality*, a new book in the Penn Press series The City in the Twenty-First Century, edited in conjunction with Penn IUR. The book examines informality in the high-modernist city of Islamabad as a strategic conformity to official schemes and regulations rather than as a deviation from them.

The book's author, Faiza Moatasim, Assistant Professor, Architecture in Urbanism and Urban Design, USC School of Architecture, alongside discussants Aasim Sajjad Akhtar, Associate Professor of Political Economy, Quaid-i-Azam University, and Liza Weinstein, Department Chair and Associate Professor, Sociology, Northeastern University, delved into the intricate relationship between formal and informal urban development. Moatasim highlighted how informal settlements and practices often emerge as direct responses to the gaps and opportunities presented by official urban policies and master plans, coining this phenomenon as "strategic conformity." This concept underscores the nuanced interplay between legality and strategic exploitation of regulatory frameworks by residents of informal settlements, thereby complicating the binary view of formality and informality in urban spaces.

Through the lens of Islamabad's development history as a meticulously planned city, Moatasim shed light on the unintended consequences of modernist urban ideals that inadvertently fostered conditions conducive to informal practices. She presented detailed case studies illustrating the integration of informal settlements and commercial encroachments into the urban fabric of Islamabad, challenging prevalent notions of urban illegality and disorder. These case studies reveal how informal practices serve essential roles within the urban ecosystem, addressing critical needs and providing indispensable services to marginalized populations.

The discussion broadened to consider the research's implications for urban planning and policymaking, with a strong call for a reevaluation of current perspectives on informality. Moatasim advocated for recognizing the strategic and functional dimensions of informality, suggesting that such acknowledgment could pave the way for more inclusive and effective urban governance strategies. Traditional urban planning paradigms often prioritize the eradication of informality without fully appreciating its socioeconomic dynamics and vital contributions to urban life.

Moatasim's work offers a profound examination of urban informality, advocating for a paradigm shift in how it is perceived and integrated into urban governance and planning strategies. It prompts a reconsideration of conventional urban planning approaches and the importance of integrating informality into governance strategies for more adaptive and inclusive urban growth management. This discussion underscored the need for policies that address the realities of urban informality, advocating for a nuanced understanding of urban dynamics and a shift towards more equitable urban development strategies.

EVENTS

Master of Urban Spatial Analytics Program Explores AI for Housing Justice Research

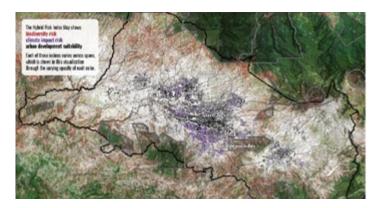
THE MUSA (MASTER OF URBAN SPATIAL ANALYTICS) DEGREE IS A 9-month master's program, jointly administered by the Weitzman School of Design and Penn IUR. Coupling spatial analysis skills with substantive knowledge in urban content areas of students' choosing, such as criminology, economic and community development, education, public health, real estate, social welfare, and transportation, the program hosts a public master class each semester.

In March 2024, MUSA hosted Esteban López Ochoa, Assistant Professor, Urban and Regional Planning, School of Architecture and Planning, University of Texas at San Antonio, for a master class called, "Leveling the Field: Combining Proprietary Micro-Level Data with Machine Learning Methods for Housing Justice Research."

Dr. Ochoa presented his research on the application of data science, machine learning, and artificial intelligence to address equity concerns stemming from rapid urban growth and development in U.S. cities. Dr. Ochoa's work focuses on leveraging newly available data sources to quantify and analyze issues such as displacement, gentrification, and low-income housing demolitions, which have been challenging to measure in the past. In doing so, he aims to empower communities and level the playing field in data-driven equity advocacy for urban issues.

Dr. Ochoa used two of his projects to illustrate his work. In his first project, Dr. Ochoa developed a property-level gentrification index using proprietary micro-data from Data Axel. This approach allowed him to identify gentrification patterns at a more granular level compared to traditional methods that rely on aggregated data. By tracking household movements and comparing income levels of incoming and outgoing residents, he was able to provide a more detailed picture of gentrification processes. The results, visualized through maps, will be made available to the public via a dashboard, enabling communities to access this information and inform their decision-making processes.

The second part of Dr. Ochoa's presentation focused on predicting housing demolition orders in San Antonio using machine learning techniques. He trained models using Google Street View images of homes that had received demolition orders and those that had not. While the models achieved high accuracy in predicting at-risk homes, Dr. Ochoa also discovered that the perceptions and biases of code enforcement officers significantly influenced the number of homes identified for demolition. This finding stresses the need for bias training and the development of more objective assessment methods in code enforcement practices.



Using global datasets, this tool assesses risks by combining hazard model outputs with asset data, such as biodiversity intactness and human populations, to evaluate potential risk. By Oliver James Atwood.

Central to Dr. Ochoa's research is the importance of community engagement. He collaborated with local residents to create a housing conditions survey using GIS and smartphones, empowering them to collect detailed data on the state of homes in their neighborhood. He hopes that this data will serve to refine the demolition prediction models and support advocacy efforts for targeted resources to improve housing conditions.

Dr. Ochoa also discussed an ongoing project involving the installation of air quality sensors in homes to investigate the relationship between housing conditions and indoor environmental quality. His research demonstrates the growing role of data-driven approaches in understanding and addressing urban equity concerns, and throughout his presentation, he emphasized the potential for data science to address critical social justice issues related to housing inequalities. Dr. Ochoa stressed the necessity of using these tools in service of the community, highlighting the importance of collaborative efforts between researchers and local residents in tackling the challenges posed by rapid urban development and growth.

The MUSA academic program concluded with student presentations of their capstone projects in the <u>Weitzman End of Year Show</u>. Overseen by a faculty member, students applied spatial analytics to real-world problems. Projects included:

EVENTS

- "Multimodal Optimization of CO2 Transport in Texas," by Timothy Oliver, Hang Zao and Ke Zhou, sought to determine if existing CO2 freight transportation infrastructure provides adequate alternatives to the dominant pipeline in the Texas study area in regards to monetary cost.
- "Automated Detection of Land Use," by George Chen and Yang Yang, aimed to develop a machine learning based pipeline for detecting land cover changes in Chester County's East Nottingham region, leveraging aerial imagery.
- "Exploring Environmental Justice in the Delaware River Valley," by Richard Barad, applies k-means cluster analysis to investigate environmental justice issues in the Delaware River Basin.
- "Women in Transit Geography: Topic Analysis Using Bertopic & Regression," by Ann Zian Zhang and Sofia Fasullo, aimed to reveal the unique contributions of female-identifying researcher-led research in the field of transport geography.
- "A Predictive Framework for Siting Curbside Loading Zones," by Ling Chen, Michael Dunst, Samriddhi Khare, Yueqi Tiffany Luo, and Shengqian Wang, leveraged data collected by the City of Philadelphia to provide city planners and policymakers with a data-driven approach to optimize the placement of smart loading zones, thereby improving traffic flow, reducing congestion, and enhancing the efficiency of urban logistics in Philadelphia.
- "Intersectional Risk Modeling & Mapping in Data Scarce Regions," by Oliver James Atwood, develops a machine learning and data processing workflow for integrated risk modeling and mapping in data-scarce Low to Middle Income (LMI) countries, containing significant biodiversity prone to climate change.
- "Planning Support Tool for Affordable and Workforce Housing Site Identification," by Jingyi Cai, Yinan Li, Alice Han, Jarred Randall and Kathleen Scopis, developed an application-based data framework that is designed to identify land parcels based on their likelihood to be developed for affordable workforce housing.
- "A Vision-Zero Planning Information System," by June Jaegal, Emmy Park, and Sihan Ren, consolidated information about street and intersection features into a dashboard, so that planners can have all the information they need in one location.
- "A Data Framework to Correct Underperforming Transit Lines," by Teresa Chang, Roshini Ganesh, Jingyi Li, and Jonathan Manurung, developed a proof-of-concept analytical and informational system to identify underperforming stops or routes within Charlotte's bus transit network.
- "The Infrastructural Implications of Pickleball Proliferation," by Alec Jacobs, examines the remarkable growth of pickleball in the United States and its urban implications, particularly the need for both expanded and adapted infrastructure.
- "Data-Driven Interdiction of Urban Marine Pollution," by Shreya Bansal, Tianxiao Chen, Stephanie Cheng, Trevor Kapuvari, and Xiaofan Liu, created a data-driven dashboard that aims to support the narrative-building and decision-making of zerowaste pilots.

Introducing Renewable Energy to Informal Settlements

A NEW POLICY DIGEST FROM THE KLEINMAN CENTER FOR

Energy Policy by Penn IUR Fellow James Kwame Mensah and Co-Director Eugénie Birch served as a point of departure for a conversation that explored ways of introducing renewable energy to informal settlements in Accra, Ghana. Ghana's electrical system is heavily reliant on fossil fuels and unable to meet demand due to rapid urban population growth; as a result, the discussion focused on diversifying the energy mix to provide affordable, reliable, and sustainable energy in informal settlements. This session was part of the University of Pennsylvania's Energy Week.

Mensah discussed the use of solar energy in slums and its impact on improving living conditions. His work, co-authored with Birch, examined solar energy solutions in informal settlements, emphasizing public solar-powered facilities, especially toilets.

Mensah emphasized the transformative potential of solar energy in addressing energy poverty. He elaborated on the critical role of public infrastructure in this paradigm, highlighting how solar installations could lead to significant improvements in safety, health, and overall quality of life. This aspect of his presentation shed light on the broader implications of energy access, suggesting that the integration of renewable energy sources is not merely a matter of utility but a foundational component of urban resilience and sustainable development.

The dialogue between Mensah and event attendees further enriched the discussion, providing a platform for an exchange of ideas and perspectives on the challenges and opportunities inherent in implementing solar energy solutions in informal settlements. Questions from the audience prompted reflections on the logistical, financial, and social considerations that influence the success of such initiatives. Mensah's responses emphasized the importance of community engagement and the need for policies that support the integration of sustainable energy solutions into urban planning and development strategies.

This research offers an interesting exploration of the role of solar energy in mitigating energy poverty in informal settlements. Through successful case studies and presenting a compelling case for the scalability of solar solutions, the discussion iterates the importance of innovative energy access as a cornerstone of sustainable urban development—advocating for a collective approach to overcoming challenges in the world's most vulnerable urban populations.

RESEARCH

Further Reflections on Work from Home and the Challenges Facing America's Big Cities

PENN INSTITUTE FOR URBAN RESEARCH (PENN IUR) RESEARCHERS provided insights into the report, "Doom Loop or Boom Loop: Work from Home and the Challenges Facing America's Big Cities," during a Special Briefing webinar co-hosted with the Volcker Alliance on May 30, 2024.

The report, co-authored by Penn IUR and Alliance researchers David Stanek, Richard Voith, Susan Wachter and Hyojin Lee, examines how cities across the country are adjusting to new urban realities post-COVID. Will the remote work challenge lead to a "Doom Loop" or "Boom Loop" for cities? The permanence of remote work requires that cities take action to ensure future success.

The report recommends actions cities facing the Doom Loop can take. Restructuring to focus on in-person industries is one, followed by addressing transit and housing – which go hand-in-hand – particularly as younger people return to cities. Finally, the report calls for looking at

city amenities and addressing crime and other issues that increase the quality of urban life.

Penn IUR captured the Special Briefing discussion in a new brief, which offers new insights into how cities can face the "Doom Loop" landscape of empty offices, struggling centers, and economic and fiscal woes. Penn IUR and the Alliance conclude the brief with data from 2023 and 2024 showing shifts away from urban centers and sluggish recovery in major urban centers, confirming current trends are continuing with flexible work. The brief also highlights the upsides included in the report, including the possibility of converting vacant offices into housing and pulling in talenthungry new technologies like Al.

To review "Reflections on Doom Loop or Boom Loop: Work from Home and the Challenges Facing America's Big Cities" and other studies, visit https://penniur.upenn.edu/publications. ■

A New Tool for Assessing Urban Innovation

IN PARTNERSHIP WITH THE Guangzhou Institute for Urban Innovation, Penn IUR published an urban innovation assessment tool in 2023 to catalyze urban transformation by helping leaders evaluate systemic innovation as a set of competencies that can be applied holistically to a wide range of urban challenges. This tool is the outcome of a retrospective review of the 2012-2018 winners of the Guangzhou Award for Urban Innovation.

Upon additionally completing an extensive landscape review of research on urban innovation, Penn IUR designed a methodology framework to help cities understand innovation as an ecosystem of learning opportunities and exploration, going beyond the typical view of innovation as disruptive

technology or entrepreneurship. This methodology is suited to helping the public sector deal with current crises such as climate change, and to reimagine how cities will become more resilient, equitable and nature-positive moving forward.

In the spring of 2024, Penn IUR began beta testing the methodology with cities. First, Penn IUR conducted a workshop with Lincoln Institute's Legacy Cities initiative members to get valuable feedback from cities on the assessment. Next. Penn IUR created an online version of the assessment tool in English and Turkish to work with its first city, Kocaeli, Turkey. A workshop in the summer of 2024 will explore results of the assessment, and Penn IUR expects to engage additional cities going forward.



Exploring Shared Equity to Address America's Affordable Housing Scarcity



Penn IUR Scholar Meagan Ehlenz, second from left, participates in a roundtable discussing shared equity housing

roundtable on shared equity housing (SEH) convened by Penn Institute for Urban Research (Penn IUR) and the Lincoln Institute of Land Policy last year, Penn IUR published the paper The Challenge of Affordable Housing: Shared Equity as a Way Forward.

With housing shortages impacting communities of all sizes, Penn IUR Research Associate Meagan Ehlenz, PhD, AICP teamed up with Susan Wachter, Penn IUR Co-Director and Wharton Albert Sussman Professor of Real Estate and Finance, to explore shared equity as a strategy to respond to the urgent demand for affordable housing.

SEH is an umbrella term that covers a range of specific tools. SEH models such as Community Land Trusts (CLT) seek to leverage housing subsidies to generate long-lasting

affordable housing supply, provide accessible wealth creation opportunities, and pathways for community-based land ownership. The "shared equity" structure ensures housing subsidies remain with the unit, passing the affordability benefit on from one occupant to the next instead of being absorbed only by the initial homeowner.

Ehlenz revisited the idea of scaling SEH solutions discussed at the roundtable, including new policy tools that federal, state, and local jurisdictions can deploy as well as land acquisition and assembly tactics, and capital aggregation strategies.

The summary report contextualizes the shortfalls in existing models of subsidized affordable housing, particularly Low-Income Housing Tax Credit (LIHTC) projects, the largest federal program. It outlines SEH strategies and

specifically examines CLT programs. The report also describes key challenges for CLTs—namely, the small scale of the solution—and summarizes emerging innovations.

To read this and other Penn IUR-produced studies and white papers, visit https://penniur.upenn.edu/publications.

Meagan Ehlenz is an Associate Professor at Arizona State University's School of Geography and Urban Planning. She is also the Associate Director of Planning programs. Her major fields of study include urban revitalization and community development, with specializations in the role of anchor institutions in urban places and mechanisms for building community wealth.

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THE PENN INSTITUTE FOR URBAN RESEARCH IS DEDICATED TO

advancing cross-disciplinary 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 has a strong focus on research that informs the sustainable and inclusive 21st-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.

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