



MetroLab Network 2018 Annual Summit

Newark, NJ | October 15-16 | Hosted by New Jersey Institute of Technology and the City of Newark

<https://metrolabnetwork.org/2018-summit/>

Sunday, October 14

6:30 pm to 9:00 pm
Welcome Reception at
Hotel Indigo Rooftop

Monday, October 15

8:00 am to 5:30 pm
Conference at NJIT
Wellness & Events Center

Tuesday, October 16

8:00 am to 5:30 pm
Conference at NJIT
Wellness & Events Center

6:30 pm to 9:00 pm
Reception at
Newark Museum

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Media Partners



8:30 AM Registration, Light Breakfast

9:15 AM Welcome

Angela Garretson, Chief External Affairs Officer, New Jersey Institute of Technology
Mayor Ras Baraka, City of Newark

9:45 AM Civic Leadership, Technology & Urban Innovation

This panel will explore how Mayors foster civic participation, drive technology transformation, and support innovation economies. It will tell these stories through the lens of three cities that continue to define their own pathways to success.

Moderator: Governor Martin O'Malley, 61st Governor of Maryland and 47th Mayor of Baltimore
Mayor Ras Baraka, City of Newark
Mayor Andrew Berke, City of Chattanooga
Mayor Bill Peduto, City of Pittsburgh

10:30 AM Break

10:45 AM Technology for Civic Data Integration

This panel will introduce a new paper from MetroLab, Actionable Intelligence for Social Policy, and National Neighborhood Indicators Partnership focused on how governments are building integrated data systems from a technology perspective.

Moderator: Natalie Evans Harris, Consultant, Harris Data Consulting
TC Burnett, Associate Director, Actionable Intelligence for Social Policy
Jason Lally, Data Services Manager, City and County of San Francisco
Emily Wiegand, Researcher, Chapin Hall
Bill Yock, Chief Data Officer, Santa Clara County

11:30 AM Using Data to Understand People & Place

This panel will explore how data, mapping, visualization, and prediction are helping cities understand their residents, neighborhoods, and communities.

Moderator: Debra Lam, Managing Director of Smart Cities and Inclusive Innovation, Georgia Tech
Jason Jones, Analytics & Innovation Manager, Guilford County, NC
Santi Garces, Chief Innovation Officer, City of South Bend
Nancy LeMond, EVP & Chief Advocacy and Engagement Officer, AARP
Bill Skerpan, Innovation & Analytics Manager, City of Boulder
Ken Steif, MUSA Program Director, University of Pennsylvania

12:15 PM Morning Wrap-up

12:20 PM Lunch

1:15 PM

Breakout Sessions

How Data Use Varies Across Sectors

Lecture Room 2

This panel will build upon both morning discussions by exploring the strategic use of data from a technology and policy perspective. Panelists will share experiences with data usage across a number of sectors: transportation, air quality, workforce development, human services, and more. Panelists bring extensive experience navigating academic and public sector stakeholders in driving forward civic data efforts.

Commercializing Research to Solve Urban Challenges at Scale

Group Room 1

The process of moving a research project from lab to market is fraught with hazards. Intellectual property missteps, team dynamics, and a misunderstanding of customer needs and channel economics are but a few of the areas where teams struggle to scale their impact. Despite these risks, this is arguably the optimal time for new startups focused on solving urban problems to succeed. In this interactive session, the panelists will provide researchers interested in the startup journey with actionable insights and clear pitfalls to avoid.

Mapping for Air Quality Impact

Lecture Room 1

Cities have a powerful and underappreciated resource for understanding and fighting air pollution and climate change. Recent developments show how fleets equipped with new mobile air quality systems can map air pollution at a hyperlocal level, with just 10 to 20 vehicles. This session will explore how city leaders can design – and see the results of – climate and clean air investments that maximize local impact.

Moderator: Matt Gee, BrightHive
Natalie Evans Harris, HDC
Bill Howe, University of Washington
Christine Kendrick, City of Portland, OR
Jennifer Park, What Works Cities

Moderator: Micah Kotch, URBAN-X
Stonly Baptiste, UrbanUs
Beth Kauderer, Columbia Tech Ventures
Ioannis "John" Kymissis, Columbia University

Moderator: Aileen Nowlan,
Environmental Defense Fund
Tim Dye, TD Environmental Services
Conor Riffle, Rubicon
Paul Rothman, NYC Mayor's Office of
the Chief Technology Officer

2:15 PM Break

2:45 PM

R&D Lightning Talks

Civic Data

Group Room 2

Dan O'Brien, BARI | NU & BU: Pursuing Equity in the Age of Algorithms: Evaluating a Technological Approach to School Choice and Assignment in Boston, MA

Julia Koschinsky, Univ. of Chicago: Identifying Spatial Gaps in Service Access

Geoff Arnold, City of Pittsburgh: Analytics in Fire Prediction

Mobility & Urban Systems

Group Room 1

Ellen Dunham-Jones, Georgia Tech: Redesigning User Experience on Shared Autonomous Shuttle Buses

Abhishek Dubey, Vanderbilt Univ, Using Neural Networks to Predict Transit

Charlie Catlett, Univ. of Chicago: Update on the Array of Things Partnership Program

Civic Research Networks

Lecture Room 1

Jon Fink, PSU & Kevin Martin, Portland: Creating a network of academic, corporate & nonprofit campuses as testbeds

Tony Luppino, UMKC: Legal Technology Lab national network and the regional urban innovation initiatives

Kim Lucas, Boston: Developing a Civic Research Agenda

Housing & Health

Lecture Room 2

Carl DiSalvo & Chris LeDantec, Georgia Tech: Smart Home Development

Meghan Cook, Univ of Albany: Community Officials Data Exchange

Dan Hoffman & Ariella Bak, Gainesville: The Evolution of Community Medicine

3:45 PM Transition to Plenary

3:50 PM **Welcome from MetroLab Board** – Michael Mattmiller, Director, Government Affairs, Microsoft

4:00 PM **Are Smart Cities Utopian or Dystopian?**

This panel will explore smart cities from an ethical, philosophical, and design perspective. It will address issues associated with data privacy, including who owns data generated by smart cities deployments and how are they monetized. It will explore the ethics of new predictive tools. It will explore the balance of spontaneity and planning, and test the notion that cities ought to be systematized at all.

Moderator: Ben Green, Author, *The Smart Enough City: Putting Technology in Its Place to Reclaim Our Urban Future*

Brenna Berman, Executive Director, CityTech

Dan Correa, Strategic Advisor, Partnership for Public Service

Ryan Gerety, Technology Fellow, Ford Foundation

Rayid Ghani, Director of the Center for Data Science and Public Policy, University of Chicago

4:45 PM **Smart Tech Newark: The Rise of an Innovative Urban Tech Hub**

The city of Newark is making a broad range of investments to accelerate its growth as a tech-hub destination. From real estate to fiber infrastructure, Newark, its anchor institutions and leading corporate partners are aligning the city's assets to attract a community of entrepreneurs focused on the challenges common to urban life.

Moderator: Don Sebastian, Chief Executive Officer, New Jersey Innovation Institute

Dan Borok, Managing Partner, Newark Venture Partners

Tawana Johnson, Acting Chief Information Officer, City of Newark

Citi Medina, Creative Director, MedinaCiti Firm

Colin Newman, Vice President, Public Policy & Community Affairs, Audible, Inc.

Benjamin White, Team Distribution Leader, PSEG

5:30 PM **Closing Remarks** – Ben Levine, Executive Director, MetroLab Network

5:35 PM **Program Concludes**

6:00 PM **Walking Tour: Newark Past and Present (Optional)** – will include a demo of Newark's new Smart Cities Deployments
Will depart from the [Hotel Indigo Lobby](#) and proceed to the reception at the Newark Museum

6:30 PM **Reception Commences** at the [Newark Museum](#)

9:00 PM Reception Concludes



8:30 AM Registration & Light Breakfast

9:00 AM Welcome – Joel Bloom, President of New Jersey Institute of Technology

9:15 AM MetroLab Network Updates and the Year Ahead – Ben Levine, Executive Director, MetroLab Network

9:45 AM Making Civic Research a University Priority

Universities are increasingly harnessing their intellectual assets – their faculty, researchers, and students – to drive civic innovation. This panel will explore how a number of universities have created an academic culture that encourages and incentivizes engagement with civic partners, including cities, industry, and non-profits. It will address how universities have created programs and institutes that house city-university collaboration. It will review the successes to-date and the challenges that remain.

Moderator: Meghan Houghton, Program Officer, National Science Foundation

James Bean, Provost, Northeastern University

Ramayya Krishnan, Dean, Carnegie Mellon University

Miroslav Krstic, Senior Associate Vice Chancellor for Research, University of California, San Diego

Suzanne Rivera, Vice President for Research and Technology, Case Western Reserve University

10:45 AM Break

11:15 AM Land Use in the Age of Smart Cities & Smart Mobility

This panel will explore how technology and data affects cities at a macro- and micro-level. It will explore how data, mapping, visualization, and prediction are presenting opportunities for city planners; it will also explore how new technologies affect cities at the street level -- including the on-demand economy, dockless bikes, and increased freight.

Moderator: Bill Fulton, Director of the Kinder Institute, Rice University

Karina Ricks, Director of Mobility and Infrastructure, City of Pittsburgh

Nick Tyler, University College London

Chris Watson, Planning Officer, City of Newark

12:00 PM Morning Wrap-Up and Lunch

12:45 PM

Breakout Sessions and Workshops

Ethics and Algorithms Workshop

Group Room 1

Use of algorithms is inevitable. All algorithms and the data that feed them have bias. During this workshop, a team from the Center for Government Excellence, part of What Works Cities, will introduce a new toolkit that helps assess risk factors and identify mitigations, all in a real-world context.

Facilitators:

Miriam McKinney, Center for Gov't

Excellence, Johns Hopkins Univ

Andrew Nicklin, Center for Gov't

Excellence, Johns Hopkins Univ

Programs that Strengthen City/University Partnerships

Lecture Room 1

This session will build upon the morning's discussion by diving deep on a number of efforts at cities and universities that provide structured mechanisms for faculty and students to engage with cities on real-world priorities.

Moderator: Karen Lightman, Metro21
CMU

Bartosz Bonczak, NYU CUSP

Jen Duthie, City of Austin

Emily Robbins, Boston Univ

Sarah Stone, Univ of Washington

Future of Privacy Forum Workshop

Lecture Room 2

This workshop will introduce FPF's Smart Cities Privacy Research Collaborative, whose mission is to provide resources for stakeholders to incorporate privacy considerations and assessments into smart city projects and develop widely acceptable principles, processes, and best practices. The project is supported by NSF and done in partnership with MetroLab.

Facilitators:

Kelsey Finch, Future of Privacy Forum

John Verdi, Future of Privacy Forum

1:45 PM Break

2:00 PM

Breakout Sessions

Implementation of Technology for Community Referral Services

Lecture Room 2

This section will discuss the implementation of a community resource referral technology in a preventive Child Welfare services setting. The principles discussed will be applicable to multiple settings and will introduce the technology, present results on the feasibility of implementation, and include a moderated discussion of barriers and facilitators of community resource referral technology adoption. You will leave this session with ideas for experimental evaluation of client and cost outcomes using this tech in your own setting.

Sylvie Doppelt, NowPow
Julia Miller, IL Dept of Children & Family Services
Chenab Navalkha, Univ. of Chicago
Mike Stiehl, Chapin Hall

Incentivizing Engagement by Faculty and Students

Lecture Room 1

This session will build upon a theme throughout the day: how cities and universities can foster collaboration. This discussion will address two critical questions: first, how can universities incentivize faculty to conduct research with civic purpose, including how these projects intersect with pressures caused by the need to publish and secure tenure; second, how can students get involved in a city-university collaboration? How can universities use courses, capstones, and other mechanism to encourage their engagement?

Moderator: Jonathan Sprinkle, NSF
Lisa Camp, CWRU
Andrei Lapets, Boston Univ
Mina Sartipi, Univ of Tenn.-Chattanooga

What Urban Technology Means for Equity and the Future of Work

Group Room 1

This panel will unpack the role of technology in creating opportunity and taking it away. It will explore how new tools and methods will increase the precision and availability of services but also risk driving inequality and joblessness. It will explore tech's impact on economic development, manufacturing, human services, and housing. It will introduce new ideas and policy approaches that will allow us to manage rapidly changing economies and communities.

Moderator: Santi Garces, City of South Bend
Aisha Glover, Newark Community Economic Development Corporation
Signe-Mary McKernan, Urban Institute
Michael Shaw, Kresge Foundation

3:00 PM Break

3:15 PM

R&D Lightning Talks

Civic Technology

Lecture Room 1

Ari Anisfeld & Vishwanath E.V.S., Univ. of Chicago: Civic Scopeathon: A people-centric approach to civic tech education

Eli Turkel & Betsey Suchanic, Univ of Delaware: The Hackathon Revisited

Resilience & Sustainability

Group Room 1

Matthijs Bouw, One Architecture: Designing Circularity from the Ground Up

Jason Whittet, 100 Resilient Cities: Selling the Future- How to Leverage Innovation to Catalyze Urban Resilience

Yuan Lai, NYU CUSP: Big Data for Local Climate Change

Mobility & Transportation

Lecture Room 2

Branislav Dimitrijevic, NJIT: Empowering the Traveling Public Through Urban Transportation and Travel Analytics

Kyle Rakow & Mike Watson, AARP: Leveraging Data to Improve Driver Safety and Community Mobility for Older Adults

4:00 PM Break

4:15 PM **Keynote** – Beth Noveck, Chief Innovation Officer, State of New Jersey
Introduced by: Thomas Motyka, Senior Executive Director, New Jersey Innovation Institute

4:45 PM Planning for Urban Technology Transformation

The final panel of the MetroLab Summit will focus on how are cities transforming and who is transforming them. This panel will explore the opportunities and challenges associated with driving tech change in government and communities at the city-scale. It will explore how cities are approaching a range of issues: advanced connectivity, driverless vehicles, technology inequality, urban sustainability, and more. It will create a vision for the future, shared through the stories of those shaping the present.

Moderator: Heather Hardman, Innovation Design Manager, Grant Thornton LLP
David Graham, Deputy COO, City of San Diego
Kevin Martin, Smart City PXD Manager, City of Portland
Samir Saini, City-wide CIO and IT Commissioner, City of New York

5:30 PM **Closing Remarks and Conclusion of Summit** – Ben Levine, Executive Director, MetroLab Network