

ANNUAL REPORT

METROLAB NETWORK

A CITY + UNIVERSITY COLLABORATIVE FOR CIVIC INNOVATION

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40+ Cities



50+ Universities



100+ Projects

LETTER FROM THE EXECUTIVE DIRECTOR



Dear MetroLab Network members, friends, and advocates,

Presented here is MetroLab's 2018 annual report. From the onset, we want to thank you: the local government and university members that make MetroLab succeed; the supporters from the philanthropic and corporate community that have helped sustain MetroLab; and the civic innovators, policy wonks, and tech gurus who are interested and enthusiastic about in our work.

The past year has been one of tremendous growth and change for our organization. Some highlights from our year are included below, and covered in more depth in this report.

- We established a partnership with the National Science Foundation, focused on the scoping of the [Civic Innovation Challenge](#), including the launch of an Ideas Competition to elicit topics for a national “research and action” competition;
- We continued to build out our work in [Data Science and Human Sciences](#) by publishing a new report in partnership with Actionable Intelligence for Social Policy (AISP) and the National Neighborhood Indicators Partnership (NNIP) on [Technology for Civic Data Integration](#);
- We've continued to tell your stories through our partnership with GovTech to publish our [Innovation of the Month](#) series;
- We hosted a successful [Annual Summit](#) this past fall in Newark, NJ; and
- We've expanded our network, having welcomed several new partnerships (catch up [here](#) and [here](#)).

Amid these programmatic activities, we have also undertaken an organizational transition. As many of you are aware, since we launched, we've been based in DC but housed during our initial phase within Carnegie Mellon University, for fiscal and operational purposes. It was always our intention to spin-off as an independent organization, and over the course of the past year, we've established an independent 501c3 and began moving our activities into that 501c3. By the summer of 2019, we will be a fully independent organization and know that this transition will afford us flexibility to take on new activities in the coming years. We are deeply grateful to Carnegie Mellon University for the role that it has played over the past several years.

As part of our reflection after our initial phase as an organization, we considered what types of activities are worthy of increased investment and activity. We spent the summer and fall of 2018 in a series of discussions with our members, sharing our vision for MetroLab over the next several years. In short, we plan to increase successful activities to-date, including our critical role as a convener, communications platform, and community of cities and universities poised to change public sector practice. We plan to invest additional time and energy in a new layer of programming, that will bring research and deployment opportunities to our city and university members.

To support that portfolio, we will be implementing membership dues, effective at the start of 2020, on the universities involved in the network. Those resources will help sustain our organization and help us invest in activities that expand the set of energy and resources at the intersection of city and university activity.

To the many partners have have signed-on to our next, exciting phase: thank you for your support and we look forward to our continued journey together! As a community, we will build cities and communities informed by analytics, evidence, technology, and purpose.

Sincerely,

A handwritten signature in black ink that reads "Ben Levine". The signature is written in a cursive, slightly slanted style.

Ben Levine
Executive Director

PROGRAMS



DATA SCIENCE & HUMAN SERVICES

As part of MetroLab's evolving [Data Science and Human Services Lab](#), efforts in 2018 focused on building knowledge and resources related to technologies for integrated data systems (IDS). MetroLab partnered with the National Neighborhood Indicators Partnership (NNIP) and Actionable Intelligence for Social Policy (AISP), to release a new report, "[Technology for Civic Data Integration](#)" that provides brief, practical guidance to describe key considerations in building and sustaining integrated data systems and the various technology approaches for overcoming challenges in data integration.

The report was written by [Natalie Evans Harris](#), a nationally-recognized leader at the intersection of strategic data usage and policy, in collaboration with team members from MetroLab, NNIP, AISP, and the Annie E. Casey Foundation and feedback from a small advisory group that provided insights and expertise on the topic area.

The report is primarily intended for government agencies and their partners who are working on using integrated data to improve services, drawing from NNIP and AISP's long-standing leadership in those fields, and developed as part of MetroLab's Data Science and Human Services Lab. The report was made possible thanks to the support of the Annie E. Casey Foundation. You can read our prior report on Predictive Analytics for Human Services [here](#).

THOUGHT LEADERSHIP ON CIVIC INNOVATION

Since mid 2018, MetroLab Network has been working with the Gates Foundation to understand the civic innovation landscape in the country.

MetroLab has developed and led a series of civic innovation excursions to six US cities: Boston, Chicago, Pittsburgh, New York, Houston, and Portland. The excursions explored topics at the intersection of people, government, civil society, data, and technology. The treks included discussions with local governments, universities, local non-profits and philanthropies, with a focus on identifying leading practices in civic innovation and engagement. MetroLab Network will be continuing its work with the Gates Foundation through 2019 with a workshop and report, shaped by the learnings from these treks.

ANNUAL SUMMIT

The 2018 Annual Summit brought together over 200 leading representatives from local government, major research universities, smart cities and data science industry, and non-profit professionals for a two-day summit in Newark, NJ. The 2018 Summit was an opportunity for attendees to share, discuss, collaborate, and present their ideas and innovations in urban data and technology. The summit included high-level keynotes, panel discussions, and workshop sessions and addressed emerging issues including predictive analytics for local government services, use of sensor technologies to monitor the built and natural environments, and how cities interact with universities, students, and residents on innovation activities. We were pleased to include several mayors from MetroLab member cities, including Newark's Mayor Ras Baraka, Chattanooga's Mayor Andy Berke, and Pittsburgh's Mayor Bill Peduto.

A number of articles were published about the Summit covering topics such as [city partnerships](#), the [Civic Innovation Challenge](#), [autonomous shuttles](#), and [smart city data](#).

CIVIC INNOVATION CHALLENGE

Since July 2018, MetroLab, with support from the National Science Foundation, and in partnership with Smart Cities Lab, has been scoping the Civic Innovation Challenge. The Civic Innovation Challenge is a research and action competition focused on advancing smart and connected communities. Activities-to date have included:

- Execution of Ideas Competition, which received more than 100 responses from teams of more than 350 researchers and communities.
- An upcoming Ideas Festival at NSF in April, which will bring together ~25 teams who had leading submissions to the Ideas Competition.
- Developing an execution plan for the next phase of the Civic Innovation Challenge, which will include a targeted "research and action" competition that activates partnership between researchers and communities on a specific problem statement(s), drawn from the Ideas Competition / Ideas Festival process.
- Active discussions with a number of funders who could serve as potential co-investors in the Civic Innovation Challenge.

PROGRAMS



INNOVATION OF THE MONTH

MetroLab continues to curate and promote the excellent work happening across the network as part of our [Innovation of the Month series](#), which aims to highlight impactful tech, data, and innovation projects underway between local governments, and universities. A special thanks to our publishing partner, GovTech, for helping us push these projects to their broad audience.



Jan 2018

Pittsburgh uses data to predict fire risk

This project highlighted how **Pittsburgh's Bureau of Fire** is using predictive analytics to help their department prioritize commercial building inspections in partnership with **Carnegie Mellon University**.



Feb 2018

Ohio State University, partners develop 'smart paint' to help the visually impaired navigate cities

February's article focused on how a team at **Ohio State University**, along with the **City of Columbus** and private companies, is using smart, connected tech to help the blind and visually impaired.



March 2018

Universities partner to foster IoT development in Cleveland

With the Internet of Things Collaborative, **Case Western Reserve** and **Cleveland State** universities work together to use their resources to drive industrial and public sectors innovation in the region.



April 2018

Air quality sensor pilot offers lessons for other IoT installations

Portland, Ore., and **Portland State University** partner on sensors to improve air quality monitoring and delve into how other cities and municipalities can explore their own sensor projects.



May 2018

Data analytics helps Boston schools better serve students

Boston Public Schools partner with the **Boston Area Research Initiative** to create an Opportunity Index, which captures metrics about students that typical education statistics might miss.



June 2018

University students create spatial analysis tools to help cities do more with data

Graduate students from the **University of Pennsylvania's** Master of Urban Spatial Analytics Practicum work with city officials in **Philadelphia, Providence, and Minneapolis** to develop data science tools to improve safety, health and quality of life for residents.



July 2018

App aims to improve access to family services in Chicago

NowPow, an app developed in partnership with **Chapin Hall at the University of Chicago**, is being utilized by researchers to assess the use of technology to improve the children and family services system.



Aug 2018

Research predicts adoption rates of connected autonomous vehicles

In partnership with the **City of Memphis**, the **FedEx Institute of Technology at the University of Memphis** has developed a method for determining the potential of connected autonomous vehicle adoption.



Sept 2018

Analytics tool helps improve traffic planning in Austin

The **City of Austin**, in partnership with the **University of Texas at Austin**, is using video analytics to assess the city's traffic and road usage patterns to gather better transportation data.



Oct 2018

Rural wi-fi project improves wildfire monitoring in Southern California

Originally intended to extend Internet access to far-flung areas, a collaboration between **UC San Diego** and **San Diego County** has been used to monitor and respond to several recent wildfires.



Nov 2018

St. Paul, Minn., modernizes stormwater infrastructure

In collaboration with the **University of Minnesota**, the **City of St. Paul** is rethinking its approach to stormwater management through the use of green infrastructure and public-private partnerships.



Dec 2018

Real-time data helps Philadelphia improve green design

A partnership between the **Philadelphia Water Department** and **Drexel University's Sustainable Water Resource Engineering Lab** uses sensors on green infrastructure in order to manage city storm water more efficiently.

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Senior Fellow and Advisory Council Chair

Governor O'Malley chairs a council of 20 leaders from across sectors focused on civic innovation. You can see the full list of advisors [here](#).

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MetroLab's activities would not be possible without the generous support from our funders and sponsors.

2018 Funders

- National Science Foundation
- Annie E. Casey Foundation
- Kresge Foundation

2018 Annual Summit Sponsors

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