



# NEW URBAN MECHANICS

## Year in Review

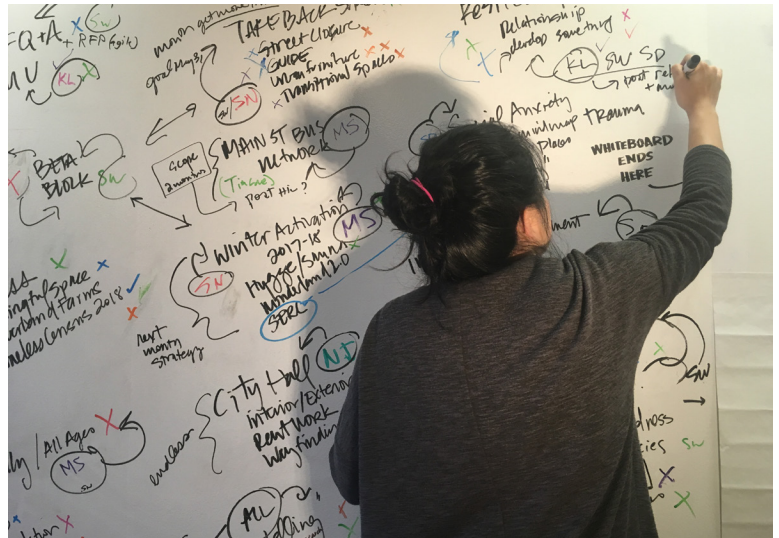
### WHO ARE WE?

The Mayor's Office of New Urban Mechanics (MONUM) was formed in 2010 and serves as the City's R&D Lab. Under the leadership of Mayor Walsh, we have expanded the breadth of our research and design work to cover a vast range of issues and mayoral priority areas, including civic engagement, racial equity, city infrastructure, and education. While we work across a variety of topic areas, all of our projects aim to serve the same goal: to improve the quality of life for Bostonians.

### WHAT DO WE DO?

MONUM exists to take risks that traditional City departments might not be able to take. Every experiment we undertake starts with a question. When an experiment works, we partner with departments to make it a permanent service - such as the **BOS:311 mobile app** and the **City Hall to Go Truck**. When an experiment doesn't work out, we document what we learned and share our findings with our partners and cities around the world.

In addition to these experiments, MONUM also acts as a "front door" for start-ups, universities, and residents wanting to collaborate with the City. We mentor other cities - as close as Cambridge and as far as Singapore - in how to form innovation offices in their local governments. Our team is a ragtag group of entrepreneurs, just as diverse as our project portfolio; we lend our varied backgrounds, training, and experience to each of our projects.



OUR GROWTH + REACH IN 2017

The Mayor's  
**HOUSING INNOVATION LAB**

became a permanent office in the Department of Neighborhood Development (DND)

We partnered with  
**20+**  
UNIVERSITIES

We hired a  
**CIVIC RESEARCH DIRECTOR**

We were awarded a  
**\$200,000**  
**KNIGHT FOUNDATION GRANT**  
for our Beta Blocks Initiative

We've had  
**100k+** on videos we've produced

We hired a  
**DIGITAL STORYTELLER**  
in collaboration with the Department of Innovation and Technology (DoIT)

We met with  
**20+**  
**INTERNATIONAL DELEGATIONS**

**12** Our **SUMMER FELLOWS** partnered with  
**15** **DIFFERENT CITY DEPARTMENTS**

With our  
**\$1.35M**  
**BLOOMBERG PHILANTHROPIES I-TEAMS GRANT**

we launched the  
**THIRD SPACE LAB**



## WHAT ARE WE UP TO?

In 2018, we're reflecting on the great projects, partners, and relationships 2017 brought us. Here's a sample:

### 2018 INAUGURATION

*"Together we have built a city of neighborhoods that care, a city of second chances, a city of learning and healing, a city of courage and creativity, a city of heart and hope."*  
**Mayor Martin J. Walsh**

## HOUSING FOR ALL

**How can we design, develop and fund housing differently to ensure all Bostonians have a comfortable, safe and stable place to call home?**



### HOUSING A CHANGING CITY

*"Boston is a city for everyone. Whatever your age, whatever your income, whatever your dream: you should be able to make a home here."*

**Mayor Martin J. Walsh**

## PROJECTS

### URBAN HOUSING UNIT

Working with the Boston Society of Architects (BSA) and What's In, we toured a mobile 365-sf unit, through 6 neighborhoods across Boston to learn what over 2,000 residents thought about compact living. This insight is being used to develop a Compact Living Policy for the city.

### HOUSING INNOVATION COMPETITION

Also working with the BSA, we put out a call for innovative housing proposals on City-owned vacant land in the Garrison Trotter neighborhood. Once built, the winning proposal by DREAM Collaborative, LLC will provide affordable middle income homeownership and rental opportunities.

### ADDITIONAL DWELLING UNITS

Working with the Boston Planning and Development Agency (BPDA) and the Inspectional Services Department (ISD), we are streamlining the process for homeowners looking to create an additional rental unit, creating safe opportunities for residents to stay in place, homeowners to earn additional income, and provide new housing options to their neighbors.

### INTERGENERATIONAL HOMESHARE

With the Elderly Commission and Nesterly, we are offering affordable housing to graduate students while helping older adults stay in their homes by pairing them as roommates.



## FUTURE STREETS + MOBILITY

How do we make our streets safer, our transportation system more equitable, and the experience of traveling Boston more delightful?



We saw over 3 million miles traveled and a 47% reduction in phone use among the top quarter of **Boston's Safest Driver** users.

### GO BOSTON 2030

*"We believe that we have a plan that will address long-term inequality, increase economic mobility, and improve climate resiliency within our neighborhoods, across the city, and throughout the region."*

**Mayor Martin J. Walsh**

## PROJECTS

### BOSTON'S SAFEST DRIVER

In partnership with the Boston Transportation Department (BTD), Cambridge Mobile Telematics, and Arbella Insurance, we launched a smartphone app competition that encouraged safer driving by nudging drivers towards better driving habits. Through this, we also collected valuable roadway data on safe and unsafe driving. The program has scaled to the State of Oregon and the City of Seattle, with more on the way.

### PERFORMANCE PARKING

Working with BTD, we aimed to better manage the curbside by pricing parking based upon demand. We studied how the City can use flexible meter rates, sensors, and modeling to reduce the amount of time it takes to find a parking space. The successful pilot opened up more metered parking and reduced unsafe behaviors like double-parking on our streets.

### AUTONOMOUS VEHICLES

In partnership with BTD and the World Economic Forum, we are co-creating the City's policies on AV testing and the future of mobility. We launched a phased testing program with over 1,000 miles of testing in its first year, and began to socialize the technology through a passenger pilot and the first **Robot Block Party** and **Autonomous Vehicle Petting Zoo** on City Hall Plaza.





## EDUCATION + YOUTH EMPOWERMENT

Can we shift perceptions of where and how learning happens in the City and reframe Boston's view on what it means to be an "expert"?



**Boston Saves** has reached 854 students, 45 classrooms, and 11 schools in 10 neighborhoods.

### BUILD BPS

*"We are going to create not just modern schools, but flexible spaces that will allow our district to meet new potential as the City and the world evolve."*

**Mayor Martin J. Walsh**

## PROJECTS

### BOSTON SAVES

Working with the Office of Workforce Development (OWD), Boston Public Schools (BPS), the Boston Educational Development Fund (BEDF), Metro Credit Union, Commonwealth, and fintech developer InvestCloud we launched a 3-year pilot that provides all public school kindergarten (K2) students in the City with a multi-generational tool to promote saving for college and career.

### LUNCH ON THE LAWN

Working with BPS Food and Nutrition Services (FNS) and the Mayor's Office of Food Access (OFA), we provided more than 1,000 free, nutritious lunches to anyone under 18 stopping by City Hall last summer.

### SAFEBOARD

We worked with the BPS Transportation Department to test various ways to proactively communicate students' school bus ride activity to families.

### PARTICIPATORY POKEMON GO

We worked with the Emerson Engagement Lab, the Mayor's Office of Resilience and Racial Equity (MORRE), and Niantic to challenge youth throughout the city to research, tell the story of, and celebrate the different histories and cultures of local places through augmented reality. The new locations were then added to the popular Pokemon Go game to encourage players to explore new neighborhoods.



## WELCOMING + RESILIENT PLACES

How might the City further support and strengthen Boston’s welcoming, connecting, and creative spaces?



### ENGAGEMENT CENTER

We helped the Office of Recovery Services (ORS) and the Boston Public Health Commission (BPHC) create a new space for those struggling with addiction and homelessness in the Melnea Cass area. We’re continuing to support the design, space activation, programming, and data collection, with an aim to make the space a welcoming and meaningful place for all.

### HOUSING A CHANGING CITY

*“A truly resilient city is one that works to achieve equity: ensuring that vital services reach all residents, including the most vulnerable; providing access to opportunity for all; and actively fostering cohesive communities.”*

**Mayor Martin J. Walsh**

## PROJECTS

### A WARMER CITY HALL

We partnered with Property Management and the Operations Cabinet to make City Hall a more welcoming place. Some design changes include: the installation and programming of **digital screens** on every floor; the **RFP for the new coffee cafe Recreo**; the **“front lawn”** summertime family game area; the **Twitter-enabled Tree and Menorah** for the holidays; and the new **Married in Boston mural** on the 6th floor of City Hall for newly married couples.

### THIRD SPACES

In partnership with the Streets Cabinet and the MORRE team, we launched a new lab that focuses on how the City can better support the places between home and work where people go to connect with others and feel recharged.

Our team explored everything from civic healing spaces (**Social Emergency Response Centers**) to connections between main streets (**the Main Streets Explorer**). We launched **Community Made**, a crowdfunding partnership with ioby.org for residents to create their own third spaces; **Beta Blocks**, an initiative aimed at making it easier for neighborhoods to experiment with new civic technology; and **City University**, a collaboration with Boston’s academic community to strengthen our research- and evidence-based policies, services, and innovation.

### STREET PROTOTYPES

**The Public Space Invitational** funded the installment of **the Franklin Street Neighborway**, a community-driven street mural in Allston, and **Seat Light Control**, a project that transforms a street light control box into a beautiful bench.



## STORYTELLING + ENGAGEMENT

How can the City support new ways of listening to residents, and how can we better tell the stories of what we are collectively doing?



### IMAGINE BOSTON 2030

*“Boston is uniquely positioned to guide growth and shape a thriving city for the next generation. As it has throughout its history, Boston will be a “City of Ideas,” generating creative responses to challenges.”*

**Mayor Martin J. Walsh**

## PROJECTS

### STORY LAB

We partnered with a number of citywide events to explore new storytelling modalities for engaging stakeholders and gathering feedback - including video, VR, writing, and drawing.

### AV CLUB

We explored how we can improve storytelling in municipal government by convening a weekly “AV Club” for storytellers throughout City Hall to gather and workshop ideas. We also helped craft two brand-new City roles: a **Digital Mechanic** to support interactive storytelling, and, in collaboration with DoIT’s Digital Team, a **Digital Storyteller** to explore cutting-edge approaches to digital storytelling.

### VIDEO STORYTELLING

We produced, filmed, and edited more than 50 videos for the Mayor and citywide initiatives, with over 150,000 minutes watched in 2017 alone.

### ROBOT BLOCK PARTY +

### AUTONOMOUS VEHICLE PETTING ZOO

We partnered with Mass Robotics to throw an event at the HUBweek Festival where robotics companies were challenged to put on interactive activities for people of all ages. Over 4,500 people attended and engaged in conversations about the ethics of artificial intelligence, the socialization and regulation of autonomous vehicles, and youth involvement in Boston’s robotics ecosystem.





## HIGHLIGHTS FROM OUR FELLOWS

### **BANK ON BOSTON**

*Joe Christo, University of Maryland College Park*

We worked with the Office of Financial Empowerment (OFE) to design and launch Bank On Boston, a program that connects unbanked and underbanked Boston residents with reliable financial services that can help them save, grow, and access their money. This initiative is part of a nationwide movement coordinated by the Cities for Financial Empowerment (CFE) Fund, and has grown from a summer fellow project into a program announced by the Mayor in October 2017, set to launch in early 2018.

### **ACCESSIBILITY FOR SENIORS**

*Brian Ho, Harvard University GSD*

We partnered with the Elderly Commission, Public Works, and Walk Boston to address multiple Age-Friendly Action Plan items. This work is enabling an upcoming Age-Friendly Boston Bench expansion program and a digital wayfinding system for public restrooms. Soon, if you're out and about and need a bathroom, you'll be able to look on [boston.gov](http://boston.gov) or call 311.

### **COOL BOSTON**

*Cindy Noe, Harvard University KSG/MIT Sloan*

We worked with MORRE and Climate Ready Boston to explore a key question: How can we keep residents who are most affected by extreme heat safe and aware of its risks? Our approach was to prototype creative ways to reach vulnerable residents with more information about heat safety measures that the City provides.



### **BEYOND FARMERS MARKETS**

*Aparna Ramesh, Princeton University*

We worked with OFA to rethink the City's SNAP match program. Our goal was to try to put money in the pockets of residents in need in order to afford healthy food, while also building a stronger local food economy in the long-term. The City is currently working to pilot an expansion of the produce match in several bodegas and corner stores in areas with the highest number of food insecure Bostonians.

### **WHOSE VISION ZERO?**

*Taylor Cain, Boston University*

We developed an equity-centered process for project prioritization to guide decision making and planning for BTM, Public Works, and Vision Zero initiatives. In partnership with BTM and DoIT, we developed indicators of vulnerability that could be visualized as the transportation team makes decisions about redesigning streets to reduce the number of crashes. This effort has informed conversations on the Vision Zero Task Force and spurred a significant pending grant application.

**Thank you again to all of our fellows!**





**TO EVERYONE,**

Thank you for sharing your wisdom, your imagination, and your passion for making Boston a better place for all. Here's to another year of being different.

**LOVE,**

THE MAYOR'S OFFICE OF  
**NEW URBAN MECHANICS** 

*Jayyn*

*Paul*

*Keis*

*Sabrina*

*Marcy*

*Mevas*

*Steve*

*MAX*

*Joe*

*Darre*

*Dan*

*Suzon*

*Fernanda*

*HIM*

For a full list of our current projects visit  
[www.boston.gov/mechanics](http://www.boston.gov/mechanics)