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Gale A. Brewer, Borough President

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**Gale A. Brewer, Manhattan Borough President
The Things Conference, Amsterdam, The Netherlands**

Good morning Amsterdam. It is great to be here for the 2018 international conference of The Things Network.

I want to thank Wienke Giezeman for bringing the Things Network to life here in Amsterdam. And I extend my thanks to the Dutch Consul General of New York, Dolph Hogewoning for providing the support and guidance that made it possible for me to attend this conference.

The Netherlands is committed to international collaboration and exchange. That's clear from the kindness of Jos Wiene, the Mayor of Haarlem. He and his team worked with my office to create a new sister city partnership between Haarlem in The Netherlands, and New York City's Harlem neighborhood in the Borough of Manhattan.

Our partnership will be one that supports a free flow of entrepreneurial and cultural energy between our respective Harlems. So a big shoutout to everyone here today from either Harlem!

We are here to change the way we see our cities.

Those of you who are using LoRa technology to build smart cities are bringing The Things Network to communities across the globe,

improving access to I. O. T. service and inspiring makers from various areas of tech to build out the Internet of Things.

I want to talk about “Smart Cities” and what we’re doing in the Borough of Manhattan, but first I need to give you a little background about who I am, what I do, and why open data and civic tech matters to everyone.

NYC

Each of the 5 Boroughs of NYC has a Borough President. We advocate for our Borough, allocate capital and expense funds to local NGOs, appoint 1000 people to community, school, health, environments, cultural Boards, pass legislation with the City Council, and have an important role in the zoning and land use process.

Before becoming the Manhattan Borough President in 2014, I served on the New York City Council for 12 years where I chaired the Technology Committee and then the Governmental Operations Committee.

OPEN DATA

While I was in the Council, one of my biggest accomplishments was the Open Data Law of 2012, which created the world’s largest, legally-mandated open data portal.

Our goal in passing the Open Data Law was to increase government transparency and efficiency, arming citizens with the data they need to hold accountable New York City’s more than 100 government agencies.

In 2016, a quantitative analyst named Ben Wellington wrote a post in his “I Quant NY” blog about how the New York City Police Department had erroneously written almost 2 million dollars-worth of tickets for

parking in front of private pedestrian ramps.

I worked with Mr. Wellington to take his analysis to the NYPD and -- to their credit -- they thanked him and retrained the patrol officers who were writing the bulk of these tickets.

Open Data made a difference when even just one private citizen was looking at the story that the data was telling.

Believe me, there are many more stories like this one.

Once we had the portal up and every agency was required to post its data on line- in a searchable database- agencies started using the data themselves. They no longer had to request spreadsheets from other agencies. Decision-making became faster, we got increased efficiency and therefore cost savings, and more transparency for the public. If government knows that everyone else knows what it knows, there is nothing to withhold. Open Data changes the mindset of government.

An unintended benefit of the Open Data Law was the emergence of a community of civic hackers who immediately began to mine the data to create their own public-service focused projects.

This “fair use” doctrine is the foundation of civic tech, whose hackers create tools and resources to make communities better for their inhabitants. I think of this as “better living through digital chemistry.” And I love that those who use the data to make their city a better place for inhabitants are called “Civic Hackers.”

CIVIC HACKING SUCCESSES

There is a co-working space in Manhattan like no other. It’s called Civic Hall and its purpose is to empower civic hackers. This space fosters the collaboration that is the foundation of IoT in New York City.

And it's working. Civic Tech success stories are hiding in plain sight all across New York.

When transit authorities began publishing data on bus and train arrival times, people immediately started piping the data into apps. Google came onto the scene and put a huge amount of pressure on all of the big authorities to release their data in a standard format so transit countdown clocks could be developed by Google or anyone else ready to use an API.

We couldn't imagine riding our transit system without open data today.

Another successful project that sprang out of our open data environment is BoardStat -- which was developed for my office by the civic tech collective BetaNYC with support from Microsoft Civic.

BoardStat takes data from New York City's 311 hotline for local service requests and maps those requests into the boundaries of each of Manhattan's 12 community boards, giving local users- including elected officials- an open data dashboard view of what's going on in their communities, helping them spot trends, and take action.

If you want to see how millions of rows of complaints can fit into one little island I suggest you check it out on my website at manhattanbp.nyc.gov -- look under "community boards."

There are thousands of civic hackers in New York City and their numbers grow each year. I encourage all of you to call for open data laws in your own communities to foster this type of innovation and grow your own ecosystems.

To see how Boardstat works, come visit New York. We'll show you the inside of our open data portal, how we keep new datasets rolling out, and working with good government advocates to refine the law and makes it all possible. In 2017, I sponsored and we passed a strengthened Open Data Law 2.0 that incorporated best practices and lessons learned.

LoRa

I believe that if we give people more data sources in a usable format, they will adapt it to make the world a better place. Every day we prove that this is true, and that's why LoRaWAN (*prounounced LAURA-WAHHN*) is key to the shared spaces we create.

It has the potential to generate incredible amounts of detailed, targeted information about our communities. Civic hackers can then use The Things Network to develop a culture of sharing, unlock the potential of that rich LoRaWAN-generated data, and use it to improve people's lives.

In New York City, a local "The Things Network" group -- initiated by Terry Moore -- is organizing to build a network that serves the entire Borough of Manhattan, which is among the world's densest and most populous environments. Next is LoRa coverage across all five boroughs of New York City.

Each LoRa gateway powered by "The Things Network" that goes on-line in my borough will quickly become essential to our thousands of not-for-profit organizations, and startup incubators and accelerators.

We are already seeing results. LoRa coverage in Manhattan's Harlem neighborhood has enabled a not-for-profit, "Heat Seek," to protect tenants from landlords who illegally shut off heat in the wintertime.

“Heat Seek” places a LoRa node in rent-regulated apartments where it measures the temperature. If a landlord shuts off the heat when it’s cold outside, Heat Seek provides the tenant with documented proof that the landlord has broken the law that requires that buildings maintain a comfortable indoor temperature.

Similarly, the company “Pansofik” is improving the quality of life of people who live in public housing by using humidity sensors to alert building managers about potential mold growth so they can act proactively to limit harm from respiratory ailments.

And a company called “WeRadiate” is making urban agriculture more effective by remotely monitoring compost temperatures.

Partnerships are vital in building a local Things Network.

As we roll out LoRa, we’ve worked with a lot of great organizations and one of them is Silicon Harlem- a pioneer in next generation wireless technology committed to helping us offer complete neighborhood coverage. They just brought a gateway on-line in the Harlem WeWork.

And City College, the storied public university on a hill in Harlem, already has a gateway atop a 13-story science building.

To help expand the network, I’m installing two MultiTech Gateways, one for our Harlem storefront office on West 125th Street and one for our downtown office next to the Brooklyn Bridge and City Hall.

Here I have to reiterate -- partnerships are driving these community tech advances. Schools, non-profits, and for-profit organizations are all getting involved in bringing LoRa to New York City – helping to solve the

chicken and the egg problem with open data apps and the networks needed to support them.

The Things Network lets independent municipal leaders like myself walk down a path that was previously unavailable to government, a third way between a municipal build out of a Wide Area Network and a massive franchise agreement with a private corporation.

Together with The Things Network, government may now organize in concert with a diverse coalition of partners to create and enhance services at the local community level.

We are building a network that will change lives by empowering New Yorkers to explore IoT.

New York can lead by example, showing American technologists that there is more than one way to do an IoT rollout. They don't need to be done from the top down, with a government franchise and loads of commoditized data.

Instead, I want civic hackers to envision and create networks where open data laws enable free data sharing and ecosystems of local users who can identify and address local and global needs.

I want entrepreneurs, advocates, makers, and academics to commit themselves to creating networks free from barriers to entry where experimentation in urban tech is encouraged and supported.

Meeting these goals means we can build an IoT network that embodies the values of responsible tech, and has empathy, openness, and public service at its core.

CALL TO ACTION

My challenge to all of you is to promote The Things Network and LoRa in your own communities. Do this by showing what the network can do and sharing the quality and scale of the data that remote nodes can generate.

I urge you to help create a centralized portal where civic hackers know they can find great data sets that intersect with other kinds of open data, government or private.

The potential of the LoRa community is vast – and things are moving quickly.

It was not long ago that LoRa was mainly a network for Amsterdammers to make sure their canal boats were still afloat.

Today, it is keeping renters safe and warm in New York City.

And perhaps tomorrow it could lead to next-level growth for the green revolution in urban agriculture.

When given the right tools, communities can meet almost any challenge.

Keep building your LoRa networks and demand that your elected officials make government data open and free for all to utilize.

Together we will set the data free – and I can't wait to see what gets built in all of your cities when we do.