

TESTIMONY

Presented to the

New York City Council Committees on Technology

on the subject of The NYC Internet Master Plan- One Year Later

on Wednesday, April 14, 2021

Good afternoon Chair Holden and Committee members. I am John Paul Farmer, the Chief Technology Officer of the City of New York and I'm glad to be back here with you. Today, I'll discuss the NYC Internet Master Plan, the City's plan to realize the Mayor's commitment to Universal Broadband for all New Yorkers. The Master Plan is the most comprehensive approach of any city in the country to end the digital divide, reverse digital redlining and racial inequity, and ensure that the implementation of new technologies don't follow the historic patterns of inequity but indeed benefit all New Yorkers. The Internet Master Plan is a 4G and 5G technology Plan, an economic development Plan, and a digital equity Plan.

NYC Internet Master Plan Focus

As you're aware, in January 2020, the City released The NYC Internet Master Plan, the most comprehensive, bold, and forward-thinking approach of any major American city. The Master Plan will transform the inequitable system that has for too long resulted in digital redlining and instead, shift the market by opening up new access to infrastructure to companies large and small who want to help the City meet its affordability, performance, and equity goals. The Master Plan reflects this administration's years of work on demonstration projects, research and reports, standards and policy setting, and engagement with a wide array of stakeholders – including community organizations, small internet service providers, and large incumbent companies.

The Mayor's Internet Master Plan has been praised by the country's leading broadband experts, as "innovative," "a game-changer," and "the most thoughtful and comprehensive blueprint by any major city." The Mayor put the Master Plan on path to realize the City's goals by making the single largest municipal investment in broadband in history, \$157 million in capital funds.

Challenge and Solution

Through the development of the NYC Internet Master Plan, the City identified a primary challenge: the current oligopolistic system is broken and it has built digital inequity into the streets of and neighborhoods of New York.

Historically, companies alone determined where technology would be deployed and who would have access, often based on strategies of exclusive pricing. For decades, the City tried that approach but it failed the 3.4 million New Yorkers who are under-connected or fully disconnected. The Internet Master

Plan shows that 40% of NYC households are without home and mobile connections and an astounding 18% have neither.

Due to decades of physically deploying technology through an approach that failed so many New Yorkers, reversing digital inequity requires changing the way we build and deploy technology. The households without home and mobility connections are disproportionately in majority-minority neighborhoods with high rates of poverty – the same neighborhoods with gaps in infrastructure identified in the Master Plan.

The City's solution to this challenge is to take a new approach, investing in infrastructure to reverse the built inequity, opening up the market to competition, and engaging companies in reaching the City's Universal Broadband goals. The City will achieve this by:

- Partnering to build or acquire new infrastructure in areas of lowest competition and lowest connectivity.
- Leverage 100,000 public real estate assets to expand 4G and 5G networks equitably.
- Enable service delivery that meets the City's Broadband Principles.

This approach will generate an increase in \$142 billion in gross city product and 165,000 jobs for the City, much needed for economic recovery and to remain a competitive city, over the coming decades through 2045.

Progress and Policy Shifts

Since I testified on the City's Universal Broadband work in October 2020, the City has advanced its implementation of the NYC Internet Master Plan. I am pleased to share that last month, the City released its Universal Solicitation for Broadband Request for Proposals (RFP). The RFP invites companies large and small to propose solutions to address the current inequitable system described in the Internet Master Plan. Specifically, the City is seeking proposals for:

- New broadband infrastructure, such as fiber and conduit;
- Asset managers to make that infrastructure broadly available;
- New affordable internet service options that meet the City's Broadband Principles.

We received significant interest at the pre-proposal conference, more than 200 participants, and are looking forward to receiving proposals at the end of this month.

In May, the City will review the proposals, begin negotiations, and proceed with the process of licensing of City assets. The Mayor's Office of the CTO has created a digital tool that will help the RFP Review Committee visualize the geographic and neighborhood impacts of proposals and support its analysis and decision-making.

The 18 agencies that have contributed their assets to this endeavor are key partners in making the Internet Master Plan launch and implementation a success. It is the contribution of their rooftops, street furniture, spaces in buildings, and more that will allow the City to offer a first-ever coordinated point of entry for multi-agency assets and increase the City's ability to set higher standards of quality in exchange for use of its assets. The RFP allows the City to seek partners who will meet the City's

Broadband Principles that set high standards for equity, affordability, choice, privacy, and performance rather than negotiate one-off, ad-hoc deals or have multiple standards for multiple providers. This new system allows the City to realize the value of its assets and ensure that any use of them brings significant benefit to New Yorkers. The City has also prioritized working with Minority and Women Owned Businesses (M/WBEs) as part of this RFP.

Since the fall 2020 hearing, the federal government's new leadership has also shifted its approach and the City finds itself with new opportunities related to broadband relief during the pandemic. The Congressional stimulus bill passed in early 2021 provided \$3.2 billion for the Federal Communications Commission's new Emergency Broadband Benefits program. The program will offer low-income New Yorkers the opportunity to access subsidies for the high-cost broadband that has been essential for their health and safety during the COVID-19 state of emergency. Eligible households would receive \$50 per month towards broadband service for eligible households and a one-time discount of up to \$100 to purchase a device. The Mayor's Office of the Chief Technology Officer is in communication with other City agencies to coordinate and maximize benefits of the new program for vulnerable New Yorkers. Congress has recognized connectivity as a key issue for economic recovery and is now considering additional legislation that would provide nearly \$100 billion in funding for broadband. We hope that this is the beginning of new opportunities on the federal level that will support and complement the City's leadership on broadband equity.

Partnerships

As we near the selection of proposals solicited by the RFP, the City recognizes the importance of engaging with partners and stakeholders. Organizations offering digital inclusion resources, health, education, workforce, and other community-based organizations, and financial institutions will be essential partners in ensuring that New Yorkers with new affordable internet access have the skills and tools to safely access online resources to meet their goals and realize their dreams in our shared City.

In closing, I am pleased to report that the City is on the cusp of bold, much-needed changes – in how we do business and what we expect of companies engaging in our broadband goals, in broadening who it is we work with and what types of companies can work with us, and in the quality of internet service options available to residents. 2021 is shaping up to be a landmark year of real, transformative progress.

Thank you for your attention to this matter. I look forward to your questions on this topic.

**Testimony to the New York City Council
Oversight Hearing on the Internet Master Plan
Committee on Technology
April 14, 2021**

Good afternoon Chair Holden, and members of the Committee on Technology. My name is Rodney Capel, and I am the Vice President for Government Affairs in New York City for Charter Communications (“Spectrum”). In response to your invitation to testify on the subject of the *Internet Master Plan- One Year Later*, Spectrum is providing written testimony highlighting its initiatives to bridge the Digital Divide and our views on the Internet Master Plan.

As detailed in our testimony, Spectrum believes the following:

- **The main cause of the Digital Divide in New York City is a lack of broadband adoption, not a lack of infrastructure to connect residents as the Internet Master Plan concludes. Spectrum has been working to bridge the Digital Divide for years, and has accelerated those efforts even more during the COVID pandemic as customers relied more heavily on our services for remote education, healthcare, entertainment and employment.**
- **Spectrum’s standing programs and initiatives, and participation in the federal Emergency Broadband Benefit, provide a robust response to ensuring low-income residents receive internet service. Spectrum has provided options to the City that would immediately bridge the Digital Divide for tens of thousands of New Yorkers and hopes the City will consider those opportunities as it explores ways to ensure broadband for low-income consumers.**
- **The Internet Master Plan and Universal Broadband RFP puts forth infrastructure buildout as the principle solution to bridging the Digital Divide in New York City, which we do not believe is the key to ensuring more broadband adoption. This approach does not acknowledge that broadband service in the City is ubiquitous and, in an overwhelming number of city neighborhoods, residents and businesses have several choices for internet service.**
- **Establishing a government-funded network as envisioned in the City’s Universal Broadband RFP is a risky gambit that has failed elsewhere. The City should instead work with existing providers to promote and enhance existing programs for low-income consumers and consider establishing a grant program using federal funds to**

provide low cost broadband to households in need over the existing networks that provide ubiquitous access to serve the City's broadband needs.

Mayor Bill de Blasio issued the [Internet Master Plan](#) in January 2020. The Internet Master Plan's central premise is that 18 percent of the City's residents – 1.5 million New Yorkers – do not have an internet connection via wireline or wireless service, and that the best way to address the lack of connectivity is to expand internet access - meaning increasing infrastructure buildout.

To that end, the Mayor in July 2020 announced an acceleration of the Plan in response to the COVID-19 pandemic, calling for \$157 million in public funds to be spent on expanding internet access to 600,000 underserved City residents, including 200,000 residents living in the New York City Housing Authority (NYCHA). The City issued a Universal Broadband Request for Proposal (RFP) in March 2021 seeking responses for the building and administration of a government funded network, in addition to providing low cost internet services on the newly established network to NYCHA residents. The RFP followed the issuance of a Request For Information (RFI) to collect information on providing low cost internet to NYCHA residents.

Spectrum differs with the Internet Master Plan's and the Universal Broadband RFP's approach that infrastructure buildout is the solution to the Digital Divide. The report appears to conflate broadband *access* with broadband *adoption*, concluding that people who do not subscribe to broadband lack access to these service, which is not the case. **Lack of connectivity in New York City is not an issue of access to broadband, but rather adoption of service.**

This distinction is critical to bridging the Digital Divide in New York City because building a new network is not only extremely costly, but it will take a long time to complete. Those who do not have broadband want it now, not two, three, five or ten years from now. Acknowledging that the City has ubiquitous coverage - available from multiple existing broadband providers - helps focus the solutions on working with existing providers to bridge the adoption gap, which will take far less time and cost significantly less money. Furthermore, focusing financial resources on the real source of the problem - adoption - will allow the City to target its finances toward real infrastructure needs such as bridges, roads, public transportation, parks and other priorities that affect the everyday life of New Yorkers.

Bridging the Digital Divide by Addressing Internet Adoption

Spectrum has long recognized the need for a variety of different and affordable internet service options. We have diligently worked for years to bridge the Digital Divide, even before the COVID-pandemic heightened awareness of the issue across the country. In our past

testimony before this Committee in January 2021 and in October 2020, we provided detailed information on our low cost products, charitable work, and other contributions to narrowing the Digital Divide. Below are the ways in which we continue to address the Digital Divide, including recent actions since we last testified and during the COVID pandemic.

Participating in the Federal Communications Commission Emergency Broadband Benefit
Spectrum proudly announced this month its participation in the [federal Emergency Broadband Benefit \(EBB\) program](#), established in the December 2020 federal stimulus bill. The EBB provides a discount of up to \$50 per month to households that meet the program's eligibility criteria. Households can enroll with Spectrum before the end of April if one member of the household receives reduced or free lunch under the National School Lunch Program or the school breakfast program, has received a substantial loss of income during the COVID pandemic, received a federal Pell Grant in the current award year, or meets the criteria for our Spectrum Internet Assist program. The Emergency Broadband Benefit will last until 6 months after the public health emergency related to the COVID pandemic or the benefit runs out of funds.

Connecting Homeless Shelters

We continue to work with the City to wire homeless shelters to provide low cost internet to the City's most vulnerable families and children. We are currently contracted with DoITT to wire 63 buildings encompassing 3,309 units for 36 months, providing low cost internet to each apartment. As of April 2, 2021, Spectrum has completed construction on approximately 51 buildings with approximately 2,096 apartments. Spectrum has activated internet service to 40 buildings totaling 1,728 apartments. We may wire additional buildings at the request of DoITT.

Offering Low Cost Internet through Bulk Purchases

Spectrum is offering governmental entities and private and public housing developments the opportunity to bulk purchase internet and cable TV at reduced prices for large groups of customers or all residents in a building. By maintaining one account with the central purchasing entity, we can pass along savings on costs to customers and provide a deeply discounted service.

Spectrum can provide low cost internet to NYCHA residential buildings that purchase broadband internet packages for every apartment unit. While we cannot discuss the specifics publicly, Spectrum recently offered a bulk rate internet product in response to a Request for Information (RFI) to serve every New York City Housing Authority (NYCHA) building in our footprint, approximately 93,000 households. If the City acts on our offering, it would immediately result in even lower cost internet for hundreds of thousands of NYCHA residents.

Other localities have taken advantage of these bulk purchase offerings. In recent months, the Buffalo School System and the Buffalo Bills Social Justice Fund collaborated with Spectrum to provide low cost internet to thousands of students' homes (see *Remote Learning for Schools* later in this testimony).¹ Spectrum partnered with Cuyahoga Metropolitan Housing Authority in Cuyahoga County, Ohio to provide low cost internet to thousands of its residents in 19 of its properties.²

Offering Free High-Speed Broadband

During the earliest days of the pandemic response, Charter announced a remote education offer which provided 60 days of free high-speed broadband service with Wi-Fi, no up-front costs, contracts or data caps, at speeds of up to 200 Mbps for households with K-12 or college students or educators without internet service. The first enrollment period ran from March 16th through June 30th and during this time, 448,000 households nationwide were connected to home internet service. On September 21st, the offer was relaunched to provide additional connectivity relief for new subscribers without home internet access for the beginning of the fall 2020 academic year.

As their promotional period draws to a close, 60 days from the date they signed up, customers receive written notification of the transition off of the promotion, as well as an overview of the best rates available for their selected services should they choose to continue their subscription. The notice provides them with sufficient time to decide whether to keep services at their current levels, switch to other options depending on their needs, or to disconnect altogether before their accounts transition and they receive their billing statement.

Keeping Customers Connected

In addition to the free service, our commitment to the Federal Communications Commission's Keep Americans Connected Pledge ensured customers who contacted us because of economic hardship due to COVID-19 would not be disconnected or charged late fees through June 30, 2020. Additionally under the Pledge, Charter opened all of the Wi-Fi hotspots across our footprint and made them available for public use through June 30, 2020. We also opened our Spectrum News, NY1, NY1 Noticias digital news services to non-customers to give them access to important updates, and information as the pandemic impacted New York State.

¹ "Spectrum, Bills team up to provide internet to Buffalo students at home, The Buffalo News, January 5, 2021," Available at: https://buffalonews.com/news/local/spectrum-bills-team-up-to-provide-internet-to-buffalo-students-at-home/article_54e58c96-2db0-11eb-a7c1-3bcaec8fbbcb.html

² "CMHA partners with Charter Communications to provide Spectrum Internet to residents in 19 properties," Cleveland.com, March 3, 2021. Available at: <https://www.cleveland.com/news/2021/03/cmha-partners-with-charter-communications-to-provide-spectrum-internet-to-residents-in-19-properties.html>

As the benefits of the Keep Americans Connected Pledge and our remote education offer free period ends, our goal is to work with our customers to find a plan that matches their needs and budget, including for qualified households, our affordable low-income broadband service Spectrum Internet Assist. For our customers who requested suspension of collections activities due to COVID-related financial impacts, in conjunction with their June of 2020 billing cycle we brought them current, forgiving a portion of their delinquent outstanding balance. These efforts lessened the financial burdens facing those who were most impacted by the pandemic and allowed them to remain connected to essential services.

Offering Low Cost Internet through Spectrum Internet Assist

We continue to offer our low cost, high speed broadband service Spectrum Internet Assist (SIA) at a rate of just \$14.99 per month (plus \$5 per month for Wi-Fi service) to make sure households that receive benefits under the National School Lunch Program or, for those 65 and older, the Supplemental Security Income (SSI) Program, can remain affordably connected. We have made significant outreach efforts to those customers who may be eligible to transition from the 60-day free service into SIA and will continue to do so moving forward. SIA offers broadband speeds of 30/5 Mbps.

Facilitating Remote Learning for Schools

Charter launched in 2020 a new “Stay Connected” product developed in response to the COVID-19 pandemic specifically for schools and school districts. It enables any school or district to purchase broadband internet delivered to student and educator households at a cost of \$29.99 per user provided the school or district maintains at least 50 connections on the account. This enables schools or a school district to provide low or no cost service to select students, and do so for a flexible time period like the length of the school year or summer school. The school or district maintains a business relationship with Spectrum. It handles billing and account management in conjunction with Spectrum, while Spectrum provides installation, technical and customer service directly to the student households the district or school finances. We believe low cost price offerings like these can make virtual education easier to implement. School districts or individual schools could utilize these programs on their own or New York City government can act administratively, legislatively or through a RFP to direct federal funding to schools for this purpose.

In November 2020, Spectrum announced with Buffalo Mayor Byron Brown that the Buffalo School System and the Buffalo Bills Social Justice Fund collaborated with Spectrum to provide internet to thousands of students’ homes for remote learning. Students received low cost internet at a speed of 50/5 Mbps with an in-home WiFi router, unlimited data usage, and round the clock customer and technical support to student households.

Funding Computer Learning Labs and Providing Digital Literacy Grants.

We built 40 technology labs for social service organizations by providing computer hardware, software, and internet connectivity to connect seniors and other underserved groups in economically challenged neighborhoods where not all families have in-home access to the internet. Spectrum also provides funding for digital literacy and education to ensure seniors and other groups can effectively use technology. Our partner nonprofits include the Central Family Life Center in Staten Island, the Bushwick and Greenpoint public libraries, Hudson Guild, the Brown Memorial Baptist Church, Asian Americans for Equality, the Stanley M. Isaac Neighborhood Center, and the First Corinthian Baptist Community Development Corporation. Spectrum has provided \$4 million in total for Learning Labs in neighborhoods across the City in Spectrum service areas. This initiative is unique to Spectrum among all wireline and wireless broadband ISPs in New York City.

These programs have made and will continue to make a substantial impact in closing the Digital Divide by providing internet to those in need. It is these efforts – not the building of a government funded network – that will make a real difference in connecting New Yorkers.

Internet Master Plan and Broadband Accessibility

As detailed in the previous section of our testimony, Spectrum is working tirelessly to bridge the Digital Divide by addressing internet adoption, the barrier to internet use. We do not think the Digital Divide in New York City is caused by a lack of infrastructure.

Spectrum has built out its network across its New York City footprint. In fact, we are obligated in our franchise to maintain a full residential build. Our franchise states, “franchisee shall make Cable Service available...to all residential dwelling units in the Franchise Area...” We currently provide internet service to all of Manhattan, Queens and Staten Island and the westernmost neighborhoods of Brooklyn from Greenpoint south to Fort Hamilton (inclusive of parts of Councilmanic districts 33, 34, 35, 36, 38, 39, 43, and 44). There are a few dozen buildings in our entire footprint in which landlords have blocked our access to do internal wiring, which we have notified the Public Service Commission about. We also continually work with newly constructed buildings in our footprint to provide wiring as they come online.

Furthermore, broadband internet service is ubiquitous in all City neighborhoods. Residential and business customers already have choices between multiple providers. The independent internet research website *Broadband Now*, which is widely relied on by major news outlets, provides information on internet connectivity. It states the following about broadband connectivity in New York City:

- The average household in Manhattan has access to 5 to 6 internet providers. Just 0.8% of people in Manhattan has access to one or fewer providers.³
- Three wired internet providers offer residential service in Staten Island. Just 0.1% Staten Islanders are limited to one or fewer providers.⁴
- In Brooklyn, approximately 100% of Brooklyn residents are serviced by multiple wired providers, of which there are 8 providing residential service in the borough. 0.18% of residents do not have a wired broadband connection available to them.⁵
- Six wired internet service providers connect residential homes in the Bronx, and just 0.9% of customers are limited to one or fewer providers.⁶
- One hundred percent of Queens has broadband service.⁷

In fact, a zip code search of City neighborhoods on *Broadband Now's* website reveals neighborhood snapshots and maps that show widespread coverage and competition among providers, with the number of providers often in double digits when business services are included.⁸ Consequently, *Broadband Now* concludes that New York State ranks 2nd in the nation in broadband access (with the following proportion of New Yorkers having broadband access in NYC counties: Queens, 100%; Richmond, 100%; New York, 99.9%; Kings, 99.8%; Bronx 98.1%). Ninety-eight percent of New York State residents have access to speeds of 100Mbps or faster.⁹

The *Broadband Now* data showing comprehensive broadband access in New York City is affirmed by the testimony delivered to this Committee in October 2020 by Michael J. Santorelli, Director of the Advanced Communications Law & Policy Institute at New York Law School. In Santorelli's assessment, "instances of households without any access to a broadband connection are likely to be exceedingly rare in a City where, as previously noted, multiple options for broadband exist."¹⁰

³ Broadband Now. Internet Access in New York, New York. Available at: <https://broadbandnow.com/New-York/New-York>

⁴ Broadband Now. Internet Access in Staten Island, New York. Available at: <https://broadbandnow.com/New-York/Staten-Island>

⁵ Broadband Now. Internet Access in Brooklyn, New York. Available at: <https://broadbandnow.com/New-York/Brooklyn>

⁶ Broadband Now. Internet Access in Bronx, New York. Available at: <https://broadbandnow.com/New-York/Bronx>

⁷ Broadband Now. Internet Service in New York. Available at: <https://broadbandnow.com/New-York>. Countywide data is not provided for Queens on Broadband Now but neighborhood data is available.

⁸ Broadband Now Search. Available at: <https://broadbandnow.com/search>

⁹ Broadband Now. Internet Access in New York, New York. Available at: <https://broadbandnow.com/New-York/New-York>

¹⁰ Santorelli, Michael. "Testimony Regarding Broadband and the Digital Divide," New York City Council Committee on Technology and Subcommittee on Zoning and Franchises. October 13, 2020. Available at: <https://legistar.council.nyc.gov/LegislationDetail.aspx?ID=4658697&GUID=1B1FC91C-7AF8-4D79-8E6D-BF665CA0B6E3&Options=&Search=>

Santorelli further testified, “Over the years, it has been suggested that the only way to close New York City’s Digital Divide is for the City to construct a public broadband network. Such a network, it is argued, is the only way to deliver fast, cheap broadband to every resident in the City. Universal access to more ‘affordable’ broadband, the reasoning goes, will appeal to the unconnected, convince them to go online, and thereby ‘solve’ the divide . . . this reasoning is deeply flawed. Moreover, previous attempts by the City to deliver fast, cheap Internet access have fizzled vis-à-vis closing the Digital Divide. Equally as important, efforts by other city governments to ‘solve’ broadband issues by building their own networks often fail. Indeed, the history of municipal broadband in the United States is littered with failed systems, and those that do not fail rarely thrive. To the contrary, many end up becoming financial albatrosses.”¹¹

Below is a chart showing a few localities whose own efforts to establish a government-owned network ended in failure supporting the conclusion of Michael J. Santorelli.

Locality	Investment	Outcome
Bristol, Virginia	The locality spent \$130 million constructing a fiber-to-the home network expanding on a local utility’s network.	The networked struggle financially after a few years, and was ultimately sold at a loss of \$80 million, 2.5 years after it was put up for sale.
Burlington, Vermont	This fiber-to-the home system was launched in the late 2000s but struggled financially.	The system could not pay its debt, and the City’s credit rating was downgraded multiple times. After creditors sued, the City was forced to sell the system in 2018 for a mere \$6 million after spending \$50 million.
Provo, Utah	The City issued debt to raise most of the \$60 million to deploy a fiber-to-the-home network but attracted few subscribers	The City sold the system to Google for \$1, leaving it and its residents to pay off \$40 million in debt.
Mooresville, North Carolina and Davidson, North Carolina	The Charlotte suburbs of Mooresville and Davidson borrowed \$80 million in 2007 to purchase a bankrupt cable television system and turn it	Mooresville and Davidson ran a \$6 million deficit in 2009, and paid several millions annually thereafter to support the network, which only attracted

¹¹ Ibid.

	<p>into a government owned network called the MI-Connection, investing \$12.5 more in upgrades.</p>	<p>subscription rates of about 20% of households in the area. It eventually decided to sell it in 2019 to TDS for \$80 million, the same amount it borrowed 12 years prior to purchase it.</p>
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The fact that several localities have sold their government networks at a loss after investments with taxpayer funds did not achieve their stated goals should give the City pause in establishing a government funded network. It is also notable that the funds allocated for the City’s government funded network of \$157 million is not much larger than the \$130 million provided for Bristol, Virginia, a city of about 17,000 people. In all likelihood, any network of meaningful size would cost taxpayers far more than the City has allocated for this purpose. The City’s initial allocation does not appear to include the costs of running the network once it is built, including marketing, modernization upgrades, customer service, among other responsibilities. Installing wires and lines in the dense environment of NYC, to provide one example, is particularly expensive, especially underground.

In conclusion, public funds would be better spent on addressing internet adoption for residents truly in need, as Spectrum has been doing through its various product offerings, charitable work, and participation in federal programs. Federal funds provided through the many COVID stimulus bills at the federal level provide a unique opportunity for the City to address internet adoption in conjunction with all internet service providers large and small. Spectrum believes the City should establish a centralized purchasing/bulk billing arrangement in NYCHA public housing and with the NYC schools system, as well. A grant program using federal funds should be established in which low income households apply to the agency administering the program, which would determine eligibility, and provide households a voucher to pay the internet service provider for broadband delivered. The City should seize the opportunity provided by federal funds to assist low income households, utilizing the existing networks in place that already physically enable internet to be provided throughout the City.

Greta Byrum
Policy Director, Community Tech NY
Previously Co-Director, Digital Equity Laboratory at The New School

4/14/21

Testimony for New York City Council Tech Committee:

Forward Planning for Full Implementation of the Internet Master Plan

Good afternoon. Thank you for having me and I am happy to share thoughts on how New York City's agencies and departments, as well as City Council, must take measures right now in order to achieve the full benefits and stated goal of The Internet Master Plan: that is, to create quality affordable internet service for all New Yorkers. This issue is of course particularly urgent as we rebuild out of the pandemic, and as the public sector plans for recovery especially for those communities hardest-hit by COVID-19 and the resulting crisis.

I would like to start by re-stating the Broadband Principles articulated by the city in its framework and vision for universal broadband: Equity, Performance, Affordability, Privacy, and Choice.

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Based on my experience listening to New Yorkers as a researcher and a digital equity consultant in the development of the Master Plan, I believe it is critical right now to lay the groundwork to ensure that plan implementation achieves its goals in alignment with these Principles.

In particular, I believe we are at a critical juncture to start implementation of Phase 4 of the plan: *Ensure all New Yorkers benefit from connectivity.*

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What I mean is that we need an explicit strategy to ensure that infrastructure built with the capital funds allocated for implementation of the Plan is designed to serve these principles and goals, or we will lose ground in the ongoing effort to close New York's digital divide. As documented in the Plan, we know that 29% of New Yorkers do not have broadband at home, and 18% (1.5 million), have neither a mobile or home broadband connection. This is an embarrassment for one of the wealthiest cities on the planet, and has certainly deepened the disproportionate impact of the pandemic as critical services have moved online.

The stated goals of the Plan are laudable, and the Plan clearly lays out a strategy for solving this problem -- which has not in the past two decades been solved by the City's incumbent internet service providers. However, without sufficient guiderails on implementation -- and a process solely dedicated to contracting for the sake of infrastructure itself, we will not achieve these goals.

Mission creep, bureaucratic challenges, and special interests could determine the shape of impact of any infrastructure invested in with public funds, without sufficient guidelines.

In particular, it is my belief that the scoring criteria for prospective vendors in the current Universal Solicitation for Broadband (USB) may not sufficiently prioritize community engagement and support. Further, I believe that the process around development and release of the Universal Broadband Solicitation has lacked sufficient engagement and communication with key digital equity and justice leaders. Without this engagement, there is a lack of public knowledge and understanding about the Plan and any programming and digital support efforts that will enable Phases 1 & 2 to lay the groundwork for Phases 3 & 4.

To address these shortcomings -- as well as delays in the planned timeline of implementation which pushed planned vendor contract execution past October 2021 -- I believe it is critical right now for City Council to:

- 1) Ensure the development of an evaluation framework, based in the Broadband Principles, to guide Master Plan implementation through all four phases of the Plan; and
- 2) Ensure the near-term allocation of sufficient ***programmatic*** funds and resources (unlimited by the restrictions placed on the capital funds released via the USB) and support for the key organizations providing NYC communities with engagement, support, and critical information around digital equity and justice.

We know from experience that incumbent-driven subsidy programs for low-cost service cannot on their own solve this problem. We have tried that approach for too long. Indeed, "if you build it they may ***not*** come"- especially if people don't know about it, or if service is too expensive, substandard, or includes fatal flaws such as data caps, throttling, slow speeds, limits on types of uses, eligibility barriers, or time limits on low-cost service along with escalating costs.

Some may argue that investing in underlying infrastructure such as commercial fiber could create an "overbuild," but given the limited options and lack of choice in New York's broadband market -- documented in the Plan -- it is clear that additional build-out is needed. Adding fiber infrastructure will likely lower barriers to entry for new, smaller providers in the market.

Indeed, New York City has already made the choice ***not*** to depend solely on broadband subsidy programs, which all too often become shaped by special interests by taking on the flaws just mentioned -- but rather, to invest in durable, high-quality, open-access infrastructure to ensure Equity, Performance, Affordability, Privacy, and Choice. Let's not waste this opportunity to make progress towards not just ***digital*** equity but ***full*** equity and inclusion for all New Yorkers.

Instead, let's put good (programmatic and operational) money after good (capital funds) by fully resourcing and guiding public and community efforts to close the digital divide in line with the City's stated policy goals.

Statement of Altice USA
New York City Council Committee on Technology Hearing
“Oversight: Internet Master Plan One Year Later”
April 14, 2021

Altice USA, Inc. (“Altice” or the “Company”) respectfully submits this Statement to the Committee regarding the City’s Internet Master Plan. Through its Optimum branded service, Altice has longstanding and robust presence in the City as a provider of video, broadband and voice services to residents and small-to-medium sized (“SMB”) businesses throughout the Bronx and in two thirds of Brooklyn. In particular, we offer perspective on the proposals in the City’s pending Universal Submission for Broadband (“Broadband RFP”), which makes repeated reference to the Master Plan.

Summary

Among the goals stated in the Master Plan and sought to be advanced in the Broadband RFP are to: (1) ensure all New York City residents and businesses have **access** to high-speed broadband; and (2) address barriers to **adopting** broadband, including affordability, to foster universal adoption of high-speed Internet.

Altice offers its full suite of Optimum broadband products – from a \$15/mo. 30 Mbps service for lower income households, to the Company’s 1 Gig service – *throughout its service territory* in the City. As a result of this private investment by Altice, all residential households and SMBs passed by the Company’s network in NYC have access to a range of broadband offerings. Broadband adoption rates in Altice’s NYC footprint are comparable to those rates throughout its New York service area.

At least in Altice’s footprint in New York City, the Master Plan premise that broadband is not available to all NYC households is incorrect. Given this fact, Altice respectfully suggests that the City focus on initiatives to remove any barriers to adoption as opposed to investing public funds into building a duplicative network. Altice would welcome the opportunity to further partner on such initiatives, such as the Company’s ongoing work with NYC to install broadband in homeless shelters, a centralized purchaser model to support remote learning, and leveraging the substantial federal funding available for broadband.

Optimum Broadband Is Available Throughout Altice’s NYC Service Territory, And Adoption Rates Are Comparable to Optimum’s Statewide Average

The Internet Master Plan contends that there is a lack of adequate broadband availability in New York City, particularly in the outer boroughs and for low income households.¹ Every household Altice passes with its network, including more than 82,000 multi-dwelling units in

¹ See New York City Internet Master Plan (final version released January 7, 2020), https://www1.nyc.gov/assets/cto/downloads/internet-master-plan/NYC_IMP_1.7.20_FINAL-2.pdf.

New York City Housing Authority (NYCHA) buildings, has access to the full Optimum broadband product suite, including the 1 Gig product, and, for income-eligible households, the 30 Mbps *Altice Advantage Internet* product for \$15/mo., with no equipment fees.

NYC households and SMBs are subscribing to Optimum broadband products on a comparable basis to penetration rates in the rest of New York State. We note that these adoption rates are meaningfully higher than those reported in the Internet Master Plan.

Altice has a number of initiatives intended to reduce any barriers to broadband adoption in NYC. First, since 2017, Altice has offered *Altice Advantage Internet (AAI)*, a high-speed broadband service up to 30 Mbps for \$15 a month (including modem) for lower-income customers, including all HHs with a child in the New York City public school system. Since the inception of AAI, the Company has made a targeted effort to increase awareness of this product among eligible customers, including with City public officials and community organizations. During the pandemic, Altice offered AAI *free* to all households with K-12 and college students that lacked internet access for the remainder of the 2019-2020 school year and again for 60 days this past Fall. Beyond AAI, Altice offers its full suite of Optimum broadband products, at different price points to suit different budgets, throughout its service territory in NYC.

The Importance of Partnerships

Instead of the significant public expenditures proposed in the Internet Master Plan, Altice encourages the City to invest in programs, including public-private partnerships, to address remaining obstacles to universal adoption. Indeed, a version of this public-private partnership model is currently underway between Altice and NYC to bring high-speed broadband to families in homeless shelters. The Company is actively installing services in homeless shelters based on the requirements set forth by the City; these collaborative efforts have already connected thousands of families through this initiative.

Another model would allow the City of New York to partner with Altice to enable schools or other entities to act as a “centralized purchaser” and to pay for broadband service to households with students that lack connectivity². A core strength of this approach is that schools, who are trusted by families, are in a strong position to identify households that lack broadband connectivity and promote the program to encourage adoption. Altice used this model for partnerships with the State of Connecticut and has shared this model with the NYC Department of Education.

In addition, such partnerships could leverage the substantial federal broadband funding made available under recent federal COVID-Relief bills. These include the Federal Communications Commission’s \$3.2B Emergency Broadband Benefit (EBB) program – providing an up to

² Federal Communications Commission E-Rate: Universal Service Program for Schools and Libraries. (last updated Wednesday, September 16, 2020), <https://www.fcc.gov/consumers/guides/universal-service-program-schools-and-libraries-e-rate>

\$50/month discount for broadband service to eligible customers. Altice is participating in the EBB Program, which is expected to launch later this month. In addition, Altice is enthusiastic about the FCC's \$7.2B Emergency Connectivity Fund, which will fund remote broadband connectivity for students and library patrons. These and similar programs present the opportunity for productive partnerships with the City of New York to advance adoption goals articulated in the Master Plan.

Conclusion

Altice is committed to delivering affordable, high-speed broadband internet to residents and small businesses in the Optimum service territory. Through existing and future partnerships with the City, the Company looks forward to addressing obstacles to broadband adoption.



**Testimony of the Partnership for New York City
New York City Council Committee on Technology
Internet Master Plan
April 14, 2021**

Thank you, Chair Holden and members of the committee, for the opportunity to testify on New York City's Internet Master Plan (IMP). The Partnership for New York City represents private sector employers of more than one million New Yorkers. We work together with government, labor and the nonprofit sector to maintain the city's position as the preeminent global center of commerce, innovation and economic opportunity.

The COVID-19 pandemic has highlighted what New York City's business community has long recognized – the importance of high-speed internet in our increasingly digital economy. It has also focused attention on the needs of many households and small businesses for more affordable broadband services and equipment. The Partnership supports the goals of the IMP to address issues of equity, performance and affordability and to achieve universal access to internet services. We note, however, that historically the city's own regulatory and bureaucratic processes have hindered industry efforts to tackle these challenges.

The IMP includes some discussion of increased internal coordination among city agencies but does not commit to the reforms required to achieve a more efficient and cost-effective system for granting franchises and approving infrastructure upgrades. For example, one source of frustration has been that service providers must get approval from multiple agencies and private property owners to install or upgrade equipment. These hurdles impede the deployment of wireline fiber, delay implementation of new technologies like 5G and substantially increase the cost of services.

We do not believe government needs to fund or build a network to provide internet service as suggested in the IMP, but rather should coordinate infrastructure development with private sector providers that have the resources and expertise to meet the city's needs. According to the independent broadband research site Broadband Now, there is widespread coverage and competition among providers in the city. Additional competition is expected to develop in the coming years due to the implementation of 5G and the expected entry of large technology companies to satellite internet service.

The city's existing broadband providers are eager to work with government to continue to maintain and modernize their infrastructure as new technologies develop and to encourage increased adoption. These companies have programs to provide discounts to low-income customers and do charitable work to help bridge the digital divide. During the COVID-19 pandemic they have ensured customers stay connected even when facing economic hardship and donated equipment such as tablets. They are also working with the Administration to bring service to homeless shelters.

The Partnership recommends that the city designate one senior official, such as the Commissioner of the Department of Information Technology and Telecommunications, to have end-to-end responsibility for negotiating and implementing telecom infrastructure approvals and installation. This would accelerate approvals and streamline communications between government and industry providers.

We further recommend that the city focus government resources on addressing affordability issues that have been found to be the most serious obstacle to universal adoption by low-income households and nonprofit organizations. Funding will soon be available for this purpose through the federal Emergency Broadband Benefit. The city should work with providers to ensure that all eligible customers are prepared to take full advantage of this program.

Thank you.



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**STATEMENT OF
CAROLINE MAGEE
SURVEILLANCE TECHNOLOGY OVERSIGHT PROJECT (“S.T.O.P.”)**

**BEFORE THE
COMMITTEE ON TECHNOLOGY
NEW YORK CITY COUCNIL**

**FOR AN OVERSIGHT HEARING CONCERNING
THE INTERNET MASTER PLAN**

**PRESENTED
April 14, 2021**

Good afternoon, my name is Caroline Magee, and I am on the legal team of the Surveillance Technology Oversight Project (“S.T.O.P.”), a New York-based privacy and civil rights group. Thank you for the opportunity to testify today about New York City’s Internet Master Plan.

On January 7, 2020, New York City released its Internet Master Plan. The document identified how many New Yorkers lacked access to broadband and what the city intended to do about it. The numbers were staggering: 46% of New York households in poverty lack a home broadband subscription.¹

But what had been a problem evolved into a crisis when the COVID-19 pandemic descended on New York City in March 2020. For the first time, the city that never sleeps had to take a nap: as New York’s 1.1 million public school students logged into Zoom for the first time, and their parents tried to take phone meetings in the same rooms, it became clear that the internet, once a luxury, was now a necessity.

As the prospect of education children online loomed, the de Blasio administration tried to close the gap in July 2020, investing \$157 million for providing low-or-no-cost internet to 600,000 New Yorkers, one third of whom live in New York City Housing Authority housing.² The City is scrambling. In this light, a plan to expand Internet access for residents of New York City is much needed and reflects the modern reality of reliable, affordable Internet access as a barrier for reaching public services and economic opportunities. What is missing from the city’s Internet Master Plan, however, is necessary privacy and cybersecurity protections details. Until the City shows how it will turn privacy promises into a reality, New Yorkers will suffer.

The Threat We Face

New Yorkers face two discrete private threats: hackers and criminals who want to break into our networks and computers and government agencies that are legally entitled to do so. It is a mistake to overidentify the former at the expense of the latter. Municipal collection by private actors may happen as a result of public-private partnerships, like the ones entertained in the Internet Master Plan. Such deals may bargain away users’ right to privacy for free or low-cost access through short-sighted decisions by the municipality. The private entities may then be entitled to collect data about you.

The Internet Master Plan dodges this threat by talking about strengthening “public Wi-Fi networks with Quad9 DNS-based cybersecurity.”³ This seeming solution, fails to stand up to scrutiny. Quad9 is a recursive resolver, only providing the “first stop” in a DNS query that ultimately takes you to a website.⁴ Quad9 claims they are not retaining specific IP addresses and what

¹ Page 11 of the Internet Master Plan

² <https://www.pix11.com/news/local-news/nyc-invests-157-million-to-provide-high-speed-internet-for-low-income-communities>; <https://www.reuters.com/article/us-new-york-internet/new-york-city-to-see-assessment-on-internet-providers-to-fund-low-income-service-idUSKBN2482NA>; The City also seemingly re-announced this program just a few days ago: <https://patch.com/new-york/new-york-city/nyc-invests-5g-157m-going-toward-expanded-internet-access>; <https://youtu.be/mC0Iq-X-Dd8?t=321>; https://twitter.com/NYC_CTO/status/1366551966181122050

³ Internet master plan

⁴ <https://www.cloudflare.com/learning/dns/dns-server-types/#:~:text=What%20is%20a%20DNS%20recursive,client%20and%20a%20DNS%20nameserver.>

aggregated data they do retain is formatted in such a way that is impossible to reverse engineer identities out of that data.⁵ But, claims by any entity that data collected “anonymously” cannot be “re-identified” are largely wrong.⁶ With enough time and money, there is very little data that cannot be re-identified.

Consumer Education

The plan itself claims privacy as one of the principles of the entire project. But that claim rings hollow compared to the actual programming offered. The City’s Plan points to consumer education – through Library Privacy Week⁷ and training of library staff to answer questions⁸ – as among their solutions.

But consumer education is the false flag of internet security because it is often paraded as a solution to insecurity when it is actually a solution to liability, and to do it right requires enormous resource investment by the City. To put it another way: the problem is real, it’s just that the solutions often offered don’t solve it. As one author noted, there is definitely an asymmetric information problem: “The consumer does not know the quality of the cybersecurity that will be provided for their financial information, but the company providing the protection does.”⁹ This problem is not exclusive to financial information. In a Pew survey conducted in 2016, only 1% of those polled answered 13 questions on cybersecurity correctly.¹⁰ Only 11%, for example, correctly answered whether all traffic through a Wi-Fi router was automatically encrypted.¹¹

A potential example of a more useful piece of consumer education than what the city is offering would be a specific guide about the data collection potentially taking place, with the names of every private entity involved at every level included. Importantly, this guide would also need to be in multiple languages.

Another solution often suggested as empowering consumers through disclosure or education: privacy policies and terms of use. These theoretically disclose to users what data is collected, how it is stored, how long it is retained, and how it will be used. But these are the aforementioned preferred way to actually avoid liability while creating the illusion of informed choices. They often are written deliberately in opaque language and legalese so as to confuse consumers.¹² By “informing” the consumer of the use of data, they remove liability on charges involving misuse.¹³ Mary Stone Ross, the activist who led the movement to pass the CCPA, said of privacy policies that “they’re clearly not written to inform a consumer. It’s written to protect the interests of a business.”¹⁴

⁵ <https://www.quad9.net/policy/>

⁶ <https://techcrunch.com/2019/07/24/researchers-spotlight-the-lie-of-anonymous-data/>,
<https://georgetownlawtechreview.org/re-identification-of-anonymized-data/GLTR-04-2017/>

⁷ Internet Master Plan

⁸ Internet Master Plan

⁹ https://digitalscholarship.unlv.edu/cgi/viewcontent.cgi?article=1032&context=brookings_pubs

¹⁰ <https://www.pewresearch.org/internet/2017/03/22/what-the-public-knows-about-cybersecurity/>

¹¹ <https://www.pewresearch.org/internet/2017/03/22/what-the-public-knows-about-cybersecurity/>

¹² <https://www.nytimes.com/interactive/2019/06/12/opinion/facebook-google-privacy-policies.html>

¹³ https://www.termsfeed.com/blog/privacy-policy-small-business/#Protection_From_Liability

¹⁴ <https://open.spotify.com/episode/6x8cszs0GZipIceiWn3X50#login> (4:30)

Given that these privacy policies and terms of use are often difficult for above-college-level readers to meaningfully understand, they are not the answer to consumer education. Instead, to meaningfully claim to have educated consumers, the City must invest in actual consumer education. This will look like outreach, to every community, from trusted messengers, in multiple languages and geared at different age groups. This is why real consumer education is hard to do; there is no one-size-fits-all message, and that is precisely why privacy policies and terms of use do not work.

Legislative & Regulatory Solutions

Even with real, accessible, meaningful consumer education, that would not be enough. New Yorkers also need legislative protection, only available from the people on this Council.

It is the reality of the country we live in that any data collected by an entity is just waiting to be tapped by law enforcement.¹⁵ And it is an inevitability, not a possibility, that any kind of public broadband will result in some data collection. This trove of data will only serve to further put New Yorkers of color and undocumented members of the community at risk of police overreach and abuse.

Legislation could address this and make it so that the NYPD and other law enforcement bodies must obtain a warrant for the information from the internet providers behind public networks. The information collected about us on the internet is some of the most intimate. New Yorkers need novel legislation that will prevent government access to data collected on them. This will prevent some of the more egregious harms practically guaranteed to occur when private actors are permitted to collect this information.

More egregious yet is how the City also promises it has improved its internal governance in recent years by creating the Mayor's Office of Information Privacy. This office publishes quarterly reports on data breaches from within the City government. While this is important, it is equally important to put this into perspective: this is the absolute least the City could do. These reports are just an admission of data already misplaced. So, it isn't a bad thing. But to consider privacy taken care of because this office exists would be a bad mistake. to reconsider the capital budget.

¹⁵ <https://www.propublica.org/article/no-warrant-no-problem-how-the-government-can-still-get-your-digital-data>