City Council Oversight Hearing:
On City and MTA Resiliency Efforts and Preparation for Storms
September 14, 2021
MTA TESTIMONY

Opening

Hello and thank you for having us today. My name is Demetrius Crichlow. I am the Senior Vice President for the Department of Subways at New York City Transit. I'm joined today by Matt Best, Chief Engineer for MTA Construction and Development, and Steven Loehr, Recovery and Resiliency Director within MTA C&D.

Before I begin, I'd like to thank Speaker Johnson, Chairs Rodriguez, Gennaro, and Brannan for the invitation and for their continued advocacy on behalf of our system and all New Yorkers

Hurricane Ida Preps / Impact

We're here today to talk about Hurricane Ida: how New York City Transit prepared for it, how it affected our customers and infrastructure and what we're doing to make the system resilient against future storms – which, make no mistake, lie ahead due the ongoing threat of global warming and climate change. Mass transit is itself an antidote to climate change It should be emphasized at the outset that our mass transit services allow New Yorkers to combat climate change each and every day by simply forgoing a longer, congested commute in personal vehicles, helping us all to lead more carbon efficient lives. It also allows the City to have extremely dense development – one key to economic success– which also allows us to have one of the lowest rates of greenhouse gas emissions per capita in the nation.

On September 1, the subway system was challenged by a historic weather emergency that impacted not just mass transit, but the entire city and region. The storm dropped a record 3.5 inches of rain in just one hour. The resulting flash floods overwhelmed the city's storm sewer systems, flooding streets and roads and train tracks not just across the city, but the region. Naturally, they also flooded many areas of the subways - which led to a disruption of service on almost all lines.

Out of the roughly 200 subway trains that were operating at the peak of the storm, less than 20 got stranded outside of stations. Transit supervisors, including many off-duty personnel who answered the call that evening, evacuated around 1,000 passengers with the assistance of the FDNY and NYPD. Many more, of course, were delayed and/or had to use alternate routes. Fortunately, no one was injured, and the overwhelming majority of our customers made it home safely

I want to take a moment to thank our incredible frontline transit workers for their heroic efforts in keeping people safe and making sure the system was safe to restart. In addition to the personnel in the field, our employees were corresponding with customers

every step of the way – by phone, email, social media. Our partners in Buses also came through in a major way.

We had been planning for this storm for two days before it hit. Understanding the potential for flash flooding, we pre-deployed pumps, pump trains and engineering/maintenance crews across the system and installed flood mitigation barriers at many locations known for historical flooding from heavy rain to mitigate effects.

Because of these preparations, NYC Transit was able to run sustained bus service throughout the storm and rapidly recover subway service. Within three hours of the end of the storm, NYCT delivered the majority of subway service in addition to continuous full bus service. Within 32 hours, service was restored on all lines except a segment of the 6 in the Bronx.

This took a herculean effort – our crews worked around the clock to pump out 75 million gallons of water from the system. All that water has to go somewhere. You've heard Janno Lieber say the subway system is not a submarine: it can't be made impervious to water. It's also not a sponge; we can't absorb water either. Neither, as you've heard, can the sewer system, which was overwhelmed by the intense rainfall.

Improving Resiliency

This isn't a new issue. Weeks before Henri and Ida, upon being named acting Chair and CEO, Janno made dealing with non-coastal flooding of our system a top priority and reactivated our special Task Force on flash flooding with city partners at DEP, OEM, and DOT .

The task force will be determining ways to improve our emergency response coordination. The group will also be help identify subway stations most vulnerable to flooding and develop joint strategies for flash flood mitigation investments. The focus will be on keeping storm water out of our system through improved drainage along the streets and in the sewers and where necessary installing water interdiction infrastructure at targeted locations to protect the Subway. We recognize that this is an incredibly challenging issue that will only continue to grow in importance and we look forward to collaborating with the City and all of you to deliver a more resilient subway for New Yorkers.

But to make it clear, we have been aggressively doing our part to improve our system's resiliency in low-lying areas, especially over the last decade. Since Superstorm Sandy, we've invested over $2.5 billion to protect the subway system against flooding from major coastal storms. We've installed flood protection measures at over 3,500 vulnerable subway openings at 33 stations – stairways, vents, elevator shafts,

emergency exits, hatches, and manholes. As we rebuilt our under-river tubes after Sandy, we've upgraded emergency pumps, elevated critical equipment, and installed redundant cabling to ensure key systems remain operational in the event of flooding. And we're in the midst of constructing massive flood walls around three of our most critical subway yards, as well as St. George Terminal on Staten Island

However, it's important to understand that coastal flooding and flash flooding present two very different challenges and require different strategies. Coastal storms like Sandy push massive amounts of corrosive salt water over land. These storms are generally slow-moving, forecast well in advance, and impact defined coastal areas. Thus, we can target our coastal storm investments to these known vulnerable locations, and we can prepare and deploy to these areas in a predictable manner, days in advance of an approaching storm.

Flash floods like Ida on the other hand, are fast-moving, less predictable, and can affect any part of the subway system at any time. And while Ida had impacts all across the city, flash flood impacts are typically more localized – and as we've seen in many previous storms, it only takes a single clogged drain or blocked vent at street level to send stormwater cascading into the subway. While fresh water from heavy rains is far less devastating to our equipment and infrastructure than salt water, it does have the potential to affect subway service and to pose safety risks for our customers and employees, and we take this concern very seriously.

Following major flash flooding in 2007, the MTA – working collaboratively with NYC DOT and DEP – invested over $60 million in flash flood mitigation measures at 25 subway stations that had a history of flooding during heavy rain storms. These improvements included sealing vents, installing raised vent gratings, adding a top landing at station stairways, regrading sidewalks, and adding check valves at subway drains. Prior to Ida's historic rainfall, these efforts had proven to be quite successful – with significantly fewer annual train delays due to heavy rain since 2008.

More recently, the Subway Action Plan included a systemwide expansion of drain repairs and vent cleaning to maximize the efficiency of our pumping system. But while our network of pumps is robust and extensive – 786 pumps that remove 14 million gallons of water on a dry day – they are primarily designed to pump away ground water and are not designed to be a substitute for the City's sewer system, which they pump directly into. Therefore, they require sufficient sewer capacity in order to be effective – and as we experienced during Ida, the city sewer system is simply not equipped to handle such massive volumes of stormwater.

We have made billions of dollars of investments in our system and the results of the Subway Action Plan and other efforts by NYC Transit's heroic workforce have led to

much-improved on-time performance, but we must continue to adapt to the reality of the impacts of climate change. We are encouraged by the collaborative response from many of the city agencies that were testifying before us today and we stand ready to partner with them and the City Council to increase our system's resiliency to best serve your constituents and our customers.

Conclusion

With that, we're happy to take your questions.

TESTIMONY
Cortney, Worrall, CEO and President, Waterfront Alliance
(presented at hearing by Tyler Taba, Fellow, Waterfront Alliance)
September 14, 2021
Oversight Hearing: City and MTA Resiliency Efforts and Preparation for Storms

Thank you. My name is Tyler Taba, Fellow at Waterfront Alliance, the leader in waterfront revitalization, climate resilience, and advocacy for the New York-New Jersey Harbor region.

The Waterfront Alliance is committed to sustainability and to mitigating the effects of climate change across the region's hundreds of miles of waterfront. We've spearheaded the Rise to Resilience coalition of 100+ groups advocating for policy related to climate resilience and we run the Waterfront Edge Design Guidelines program for promoting innovation in climate design.

Superstorm Sandy exposed New York City's coastal vulnerability as catastrophic flooding flowed deep into waterfront neighborhoods across all five boroughs. Hurricanes Ida and Henri were different. Their destructive power came not from the sea but from torrential, devastating, unprecedented rainfall. That rainfall went beyond submerging homes, streets, and vehicles. It overwhelmed our 20th century stormwater infrastructure, sending water and sewage shooting out through drains and fixtures.

Recent storms, particularly Ida, demonstrated the importance of resilience across the boroughs. We urge the next Mayor to expedite the forthcoming **Climate Adaptation Roadmap**, a new initiative being developed by the Mayor's Office of Climate Resiliency (MOCR) that will consider citywide climate risks through 2100 and provide a framework for NYC's next generation of climate adaptation efforts.

This Roadmap will identify the greatest climate-related threats facing New York City, and recommend a prioritized sequence of climate adaptation measures for the short,

medium, and long-term, with a particular focus on climate justice and the most vulnerable residents and neighborhoods.

While large-scale government-led infrastructure upgrades are in dire need, the city also requires a network of smaller-scale solutions at the building and neighborhood-level.

New York City has options for small-scale interventions to retrofit buildings and properties for higher resiliency. At an individual building level, critical mechanical and electrical systems can be moved to higher floors and potential penetration points for water like utility hook ups can be sealed. Investments in green infrastructure, at the building scale, can reduce the burden on the stormwater system. Green roofs, holding tanks, porous surfaces and landscaping, as well as filtration systems can reduce or eliminate runoff that would otherwise flow into traditional stormwater infrastructure.

There is substantial value in a city-wide **climate resilience retrofit incentive program** to facilitate meaningful change at-scale. The city and state's climate responses must include incentives, grants, and loans that support resilience retrofitting by property owners. This would enable individual building owners to enact changes that benefit not only their property, but their neighborhood more broadly. This adaptation policy would also provide new green construction jobs and workforce opportunities, along with critical flood protection.

The incentive program has precedent. With the recent enacting of Local Law 97, the City created loan programs and technical assistance to incentive property owners to install solar panels and other energy efficient adaptations. NYSERDA's Commercial Property Assessed Clean Energy (PACE) program provides financing for renewable energy upgrades for commercial properties and the NYC Accelerator provides guidance to building owners for compliance with Local Law 97. Expanding programs like these to include flood resilience and residential properties creates a toolkit that will increase tactical uptake of resilience projects. Addressing environmental injustices and past disinvestment should be central to any program's funding structure to ensure protection in the most vulnerable communities.

The Waterfront Edge Design Guidelines (WEDG) developed by the Waterfront Alliance are a powerful tool for communities and landowners alike to build resilience into projects. While designed for the waterfront, WEDG's strategies for reducing stormwater quantity, improving stormwater discharge quality, establishing preparedness plans, and reducing the risks brought on by climate change are applicable across the city. **Credits in WEDG reward designs that use green infrastructure to manage the additional stormwater runoff expected with increased and more intense episodes of precipitation**. For example, high on-site precipitation capture in the form of backflow prevention devices or retention basins for stormwater capture and infiltration or re-use. WEDG offers best practice design solutions that go beyond municipal code to protect neighborhoods. The guidelines offer a blueprint for resilience solutions that can apply across a broad swath of the city.

We also call for the Mayor to immediately commit resources to New York City Department of Environmental Protection (DEP) and the Office of Emergency Management (OEM) to ensure not one more New Yorker is caught and killed by floodwaters in their own home. Prioritize funding for a **comprehensive citywide initiative to expand drain capacity throughout the city to prevent flooding, starting with building out stormwater sewers or retention tanks in vulnerable areas with limited drainage systems.** Further, more immediate actions on implementing city infrastructure for greener and more sustainable solutions, such as Bluebelt systems, are essential. Ensure that DEP and OEM are funded in the FY23 budget with resources and staffing, including more robust systems that communicate directly with residents who are at greatest risk in advance of large storms.

Finally, we call on the Mayor to create a public information campaign for homeowners on **flood insurance enrollment** and expand communications to New Yorkers about flood insurance through advertising on subway, bus and ferry routes qs insurance rates are likely to go up once FEMA updates their currently out-of-date flood maps. Also, as they update the maps, they are likely to include more homes in high-risk areas, meaning that an increased number of New Yorkers will be facing these higher costs for flood insurance.

Recent storms brought the city's vulnerabilities to the forefront. The technical solutions, whether they are capacity upgrades to the City's stormwater system or resilience retrofits for buildings, exist. The challenge is not about technology, but about policy and priorities.

STATEMENT OF THE NATURAL RESOURCES DEFENSE COUNCIL

BEFORE THE NEW YORK CITY COUNCIL

COMMITTEE ON TRANSPORTATION,

COMMITTEE ON ENVIRONMENTAL PROTECTION,

COMMITTEE ON RESILIENCY AND WATERFRONTS

RE: CITY AND MTA RESILIENCY EFFORTS AND WHAT MUST BE DONE NOW

September 14, 2021

Thank you, Chair Rodriguez, Chair Gennaro, Chair Brennan for the opportunity to present written testimony as a follow-up to today's hearing. I am Eric A. Goldstein, New York City Environment Director at the Natural Resources Defense Council ("NRDC"). As you know, NRDC is a non-profit legal and scientific organization that has been active on a wide range of environmental health, natural resource protection and quality-of-life issues across the country, around the world and here in New York City where our main office has been located since the organization's founding in 1970.

What was missing in this morning's testimony from government witnesses was a sense of urgency. To be sure, officials are mostly saying the right things about climate change and they and their agencies have been worked with dedication. But overall, as you and other Councilmembers noted, there have not yet been actions of sufficient depth and commitment to turn the corner on the enormous climate challenge New York City is facing. One of the officials who spoke, I believe from the MTA, remarked that the transit system experienced "unprecedented flooding" that we never had before. "Either its random chance," he said, "or something has changed." The answer is clear. Something HAS changed. And city and state officials need to take deep and rapid actions to deal with the challenges.

Climate change and its inevitable impacts pose existential threats to life as we know it. The facts, by now well-known, have been compiled most recently by over 200 scientific experts from around the world who prepared the United Nation's Sixth Assessment Report of the Intergovernmental Panel on Climate Change (2021). This report, based upon an assessment of over 14,000 studies, confirms an average temperature increase of 2 degrees Fahrenheit over the last century, that the warming since 1970 is faster than at any period in at least the last 2,000 years, and that rapid and sustained reductions in carbon dioxide and methane are necessary to limit a continuing rise in global temperatures.

These findings reaffirm the urgency noted by New York's own scientific experts who make up the New York City Panel on Climate Change and who warned in their most recent (2019) report that the city and the region were already facing increased risks from climate change. The lost lives, property damage and other destruction from 2012's Superstorm Sandy

and from Hurricane Ida earlier this month are just the most vivid examples of why implementation of significant and comprehensive resiliency measures can no longer be delayed.

In this statement, we focus on measures relating to climate resiliency and adaptation. We leave the critical issues of implementation of Local Law 97 and other measures to slash New York City's global warming emissions for another day.

Here are ten strategies that officials should advance over the next six months:

1) Enact Legislation Creating a Five-Borough Climate Resilience Plan

Nine years ago, Hurricane Sandy walloped New York City. A nine-foot storm surge flooded coastal neighborhoods across the city. It destroyed hundreds of homes, damaged tens of thousands of residential units, disrupted the lives of hundreds of thousands of residents, led to 44 deaths and caused an estimated 19 billion dollars in economic losses. Climate change experts agree that New York City's coastline remains at risk and intense storm events are certain to return. But nearly a decade later, New York City still does not have an ambitious, comprehensive plan to safeguard city residents across all five boroughs. Intro 1620, spearheaded by Chair Brannan and co-sponsored by 39 other councilmembers, would address this problem by requiring the city to adopt a five-borough resiliency plan to protect the entire 520-mile city shoreline, after evaluating both hard and soft shoreline-shielding measures in each affected community district. Ideally, the scope of the analysis would be expanded to cover other climate risks to the five boroughs, including extreme heat and precipitation. The development of this plan should involve significant community input. And Speaker Corey Johnson should bring this legislation up for a vote without delay.

2) Protect, Don't Just Talk About Protecting, the City's Remaining Wetlands

Although their value has been under-appreciated throughout most of the city's history, New York City's wetlands are productive and diverse ecosystems that play a vital role in keeping city residents and their property safe in an era of raging storms and rising seas. Wetlands act as giant sponges to absorb and store water -- reducing flash-flooding risks and protecting infrastructure and residences. New York City has lost more than 85% of its coastal wetlands and well over 90% of its freshwater marshes to development and other in-filling over the past century. And the lack of protection for the city's dwindling wetlands continues to this day. While every sustainability plan produced since 2007 has talked about the importance of preserving those wetlands that remain, city zoning and other city and state policies are in practice working against that goal. The proposed BJ's shopping center development on Staten Island's north shore -- which would destroy much of the Graniteville wetlands to make way for a gasoline station, a big box store and a giant parking lot -- is just the latest example of City and State officials pledging to do one thing while approving plans that do another. Even at this late date, the Council should direct its legal staff to identify any vehicle for rescuing the Graniteville wetlands or at least further minimizing the loss of this valuable natural resource. More broadly, the State Legislature should advance legislation -- S5116C/A7850 (Harkham/Englebirght) -- that would expand the definition of freshwater wetlands to include wetlands that are less than 12.4

acres in size where such wetlands are of "unusual importance" for community flood control. And the City Council, for its part, should advance legislation to ensure that all city agencies more effectively protect remaining wetlands in the five boroughs and to facilitate the purchase of endangered wetland parcels, preserving them in perpetuity as natural flood protection areas.

3) Invest More in Green Infrastructure Construction and Maintenance

Green infrastructure is the term for mechanisms that filter and absorb stormwater where it falls, usually by employing less capital-intensive processes than traditional (or "gray") infrastructure such as pipes, tunnels and holding tanks. These measures not only greatly benefit water quality, but can also help infiltrate stormwater, keeping it out of our already over-burdened sewers and helping mitigate the risk of widespread flooding that we saw with Hurricane Ida. In addition to often costing less than traditional water infrastructure, green infrastructure offers other advantages, such as neighborhood beautification, heat island mitigation and carbon sequestration. Examples of green infrastructure include sidewalk rain gardens and infiltration basins, green roofs and "blue" roofs (non-vegetated roofs with control devices and drainage basins to temporarily retain stormwater), and the city's Greenstreets program (which converts on-street paved surfaces and traffic islands into small, water-retaining gardens). The City's Department of Environmental Protection has made significant long-term commitments to green infrastructure. But half-way into a 20-year plan, it is far behind in meeting its targets. Much more is needed, in terms of both additional construction and improved maintenance. Green infrastructure requires a whole-of-government approach, where all city agencies with a role in managing or regulating the public right-of-way, public facilities, and private property work in concert and leverage funding streams to build and maintain these green water-collecting systems. The Council should consider legislation that sets ambitious binding mandates for the Department's green infrastructure program, especially targeted to areas of the city with frequent flooding problems.

4) Build Out Sewage Infrastructure More Rapidly to Control CSO & Flooding

As Hurricane Ida painfully demonstrated, the City's sewage infrastructure needs continuing modernization to handle increasingly severe storm events. It also needs to be designed and constructed with future storms and climate impacts in mind, to ensure that these assets function as needed over their entire design life. Decades from now, when these same systems will be relied upon, they will operate under very different conditions. We must anticipate those needs now. Moreover, in parts of the city, including southeast Queens, flooding occurs on a regular basis, even without massive rainstorms. The Department of Environmental Protection's long-term capital plan calls for two billion dollars in additional sewage infrastructure funding by 2025, but it is unclear how quickly these projects are moving forward. In the year ahead, the southern Queens neighborhoods that have long suffered from regular flooding must be given an even greater priority in sewage infrastructure investments. Almost two-thirds of the city's sewage network relies on combined sewers that carry both household wastewaters and street runoff in a single pipe. In even moderate rainstorms, the capacity of this single sewer network is overwhelmed, and the system funnels the combined sewage and

rainwater into local waterways. While past investments have reduced overflows from their historic peak, the Department's current plans do not fully consider how climate change will exacerbate the problem and, even under historical rainfall conditions, would leave about 20 billion gallons of raw sewage overflowing annually in all five boroughs. The Council should take steps to ensure that long-term sewage overflow control plans account for increased rainfall due to climate change, rather than designing CSO projects based upon historical rainfall patterns.

5) Incentivize Property Owners to Capture of Stormwater On-Site

New York City's water and sewer rates are set by the City's Water Board, which calculates a property's sewer charges as a percentage of its water use, rather than basing such charges on a more rational assessment of how much sewage and stormwater runoff the property generates. But the city's sewer rate-making authority provides it with the opportunity to incentivize owners to retain stormwater on their properties, while generating an equitable, sustainable source of dedicated revenue for public investment in stormwater infrastructure. Specifically, the Water Board could separate the current wastewater charge into two components – one for sanitary sewage and one for stormwater – with stormwater rates set in a way that provides discounts to owners who utilize mechanisms that capture rainwater (e.g., porous pavements, roof gardens, cistern systems, etc.). Such changes have been recommended by my NRDC colleague Larry Levine at Water Board rate hearings in recent years. And the Department is considering such incentive programs as part of its ongoing rate study. The time for these kinds of reform of city sewer rates has arrived and these changes should be advanced in 2022. This rate reform would work in tandem with the Department of Environmental Protection's current efforts to update stormwater rules for development project to require greater capture of runoff when existing impervious areas are redeveloped. Finally, we are very excited about the potential for construction of a modern sewage plant on Rikers Island, once the jail complex closes in 2027; this presents an enormous opportunity to close older sewage plants around the city and provide major new capacity for much-needed stormwater capture.

6) Establish a Ready-To-Go Buy-Back Program Ahead of the Next Coastal Storm

Hurricane Sandy caused widespread damage across the city. But perhaps no impact caused more anguish that Sandy's stormwater surge on Staten Island, which destroyed or severely damaged hundreds of homes. Property owners were forced to find other accommodations and received slow, conflicting advice from government officials as to what kind of financial assistance would be made available. Ultimately, the State created a voluntary flood buy-out program that acquired several hundred homes in Oakwood Beach and Ocean Breeze. The buy-out operation offered homeowners the pre-storm fair market value and, in certain cases, slightly higher amounts. This program enabled the state to take down the damaged structures, return these floodplains to their natural purpose, and ensure that these areas will be preserved in a natural state to serve as a buffer to protect homes and other property further upland. But the months of delay in implementing this program caused untold distress to

homeowners and reflected a lack of preparation at all levels of government. Other jurisdictions, including the State of New Jersey, have established permanent, ongoing buy-out programs; they are prepared for the inevitable future destructive storms and can provide timely assistance. New York City should also look at programs like those established by Charlotte-Mecklenburg County, where they have a locally financed program that assists with voluntary floodplain buyouts and provide help relatively quickly to homeowners after a flood. It would be nice to think that every single house in New York City will be able to withstand the more intense storms coming our way in the years ahead. But that's not reality. Creating a permanent, voluntary buyout program is one necessary action to ensure that New York City is prepared for the climate crisis that has arrived. New York City has the capacity and expertise to create a permanent program to assist those residents who need to move, in order to escape hazards like chronic flooding. We should be among those communities that are showing others how this assistance can be provided in a timely, fair, and equitable way.

7) Protect NYC and the Most Vulnerable New Yorkers from Urban Heat

As climate change leads to in higher summertime temperatures and more frequent and dangerous heat waves, it is New York City's less affluent residents who will suffer the most. They are less likely to own air conditioners; less likely to use them, even if they have them, due to high energy costs; more likely to live on streets with fewer mature shade trees and near green oases, and less likely to escape the city's heat on travel vacations or to second homes. Making matters worse, a July 2021 nationwide study conducted by Climate Central concluded that New York City is among five cities in the nation with the highest urban heat island intensity, an indicator of the city's relative lack of surfaces to reflect incoming sunlight. In other words, New York City's dark tar roofs, pavement, asphalt and other heat-retaining surfaces re-radiate incoming solar rays -- making the city an urban heat island with temperatures hotter than surrounding suburbs and rural areas. And, as a recent WE ACT-NRDC report, "Summer In The City," makes clear, vulnerability to this phenomenon is especially high in NYCHA public housing. Among the necessary remedial steps city officials should take, many of which are described in more detail in the WE ACT-NRDC report and for which my NRDC colleague Kim Knowlton can provide additional information, are: expanding tree coverage, especially in heat vulnerable neighborhoods, via legislation requiring a new program to plant and maintain one million street trees by 2030; codifying the city's cooling center program, as set forth in Intro 1563; implementing the findings of NYCHA's Extreme Heat study; and directing the development of an emergency NYCHA management plan for extreme heat.

8) Assess the Progress of NYC Rebuild-By-Design Projects –

In the wake of Hurricane Sandy, the federal Department of Housing and Urban Development ("HUD") created a Design Competition to solicit creative proposals for resiliency projects in the areas affected by the superstorm. In June 2014, HUD issued grants to seven winning concepts, including three projects in New York City: The Big U along the Lower Manhattan coastline; Living Breakwaters off the Staten Island shore; and Hunts Point Lifelines in the Bronx. What is the status of these three projects seven years later? What has been learned from their

implementation challenges? Are these successful models that the city or the region should seek to replicate elsewhere? We recommend that the City Council take action to ensure that an independent analysis of these projects is undertaken so that New Yorkers can get a clear picture of the challenges and the benefits of this innovative design competition.

9) Provide Funding for M.T.A. Resiliency – Implement Congestion Pricing

The City's transit system was built in a different era and was not designed to withstand the more intense and frequent storms that are among the many new burdens of the climate crisis. The subway station flooding and service disruptions the system recently experienced are likely to become a regular occurrence without significant capital investments. This requires money. There is no more important step that city and state officials can take to protect our transit system from the ravages of climate change than to do everything in their power to implement a strong and equitable congestion pricing plan. This program will cut air pollution, reduce costly congestion and generate funds so that the nation's largest transit network can better prepare for the weather havoc that will increasingly affect us all.

10) Advance the Public Discussion on New Construction in Vulnerable Floodplains

One of the most challenging long-term issues facing government officials on the resiliency front is how to deal with the fact that much of our development has been built on floodplains that scientists say are certain to receive increasing amounts of precipitation and storm waters in the years to come. How much money should government invest in terms of infrastructure in these flood zones – should we keep building in areas that we know face repeated flooding? These questions are difficult and can trigger strong emotional responses. And thus far city officials have largely avoided this politically thorny topic. While some say it made sense to sidestep these questions in the past, that is no longer the case. We must advance that dialogue now. One place to start is with a thoughtfully planned oversight hearing on this topic, which we hope the Council will convene before the end of the year.

The more development we continue to allow in our floodplains, the more vulnerable we become as a city. And the more people we are placing at risk in the future. Knowingly encouraging more people to live in an at-risk area raises some very serious questions. What is the city's future liability for knowingly allowing new development in such areas? What's the financial commitment the City is making to address future flooding by allowing more development in such areas? And what are the people moving into those areas going to be told about those risks? We have not begun to grapple with those questions, but we need to.

One thing that New York City and New York State could do is at least make sure people are told about past flood damages and future flood risks when they buy or rent a home, as my NRDC colleague Rob Moore has long suggested. Right now in New York, sellers of properties not required to inform buyers of past flooding problems. In fact, NRDC and the Columbia Law School gave New York State a failing grade when it ranked states' real estate disclosure laws for flooding because we do not require such information to be disclosed to people. We urge the City

Council to develop legislation that provides home buyers with information regarding flooding risks of perspective properties, so that they can make more informed purchasing decisions based upon the new weather realities brought upon by the climate crisis.

* * * *

Thank you for your attention and for your leadership in convening this important hearing.

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September 14, 2021

AIA New York Testimony on Resiliency to Committee on Resiliency and Waterfronts, Committee on Transportation, and the Committee on Environmental Protection

Thank you, Chairs Brannan, Rodriguez, and Gennaro for holding this hearing. I am Adam Roberts, the Director of Policy for the American Institute of Architects New York, also known as AIA New York. We represent New York City's public and private sector architects.

We know that the MTA and other government agencies are unprepared to deal with the threat of climate change. Our members who work for agencies face a lack of funding for design improvements, and those who work for private clients deal with a lack of willingness from developers and owners to implement design improvements. However, there are clear solutions to our city's failure to adopt resilient design practices: we must increase funding for agencies to make necessary design improvements, improve how that funding is used, and mandate that developers and building owners adopt resilient design practices.

Regarding funding, if congestion pricing were approved, the MTA would have the funding to begin making major station improvements for resiliency. The longer we wait to implement congestion pricing and the more we provide exemptions from tolling, the less funding the MTA will have to mitigate the damage from extreme weather events. While congestion pricing implementation is largely not under the control of our city's elected leaders, they must nonetheless use their bully pulpit to fight for its effective implementation.

The city must also improve its procurement policies and construction management to ensure that funding for resilient design is used more effectively. Due to funding woes, city agencies lack qualified project managers. They also use procurement techniques like low-bid, in which the lowest bidder, regardless of ability and track record, is selected. These and other issues lead to huge delays and cost increases that we accept as the norm in city projects. We fear these poor practices may jeopardize the city's chance of receiving adequate federal funding to implement resilient design improvements for public buildings.

Lastly, the city must mandate that developers and building owners implement resilient design practices. A bill in the City Council, Int. 2317, would require that new and retrofitted buildings be fossil-fuel free. The passage of this bill is essential to make our buildings safer and address the growing threat of climate change. Gas leaks, fires, and explosions are too common under normal circumstances, but become rampant risks during extreme weather events. As we saw with Hurricane Ida, flooding disrupted gas lines and led to countless fires, causing buildings to explode. No New Yorker should have to worry that their home is unsafe to live in.

Again, we want to thank the City Council for holding this hearing. For the sake of the resiliency of our city, we ask that you fight for congestion pricing, properly fund city agencies, pass legislation to improve our procurement practices, and pass Int. 2317 to ban new fossil-fuel hookups. As architects, we know how to design a safer, more resilient city; now we need the City Council to help us achieve it.

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September 14, 20211

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RE: City and MTA Resiliency Efforts and Preparation for Storms

Dear Chair James F. Gennaro and Committee on Environmental Protection:

Thank you for the opportunity to testify on the matter of the City's resiliency efforts.

WE ACT for Environmental Justice, an organization based in Harlem, has been fighting environmental racism at the city, state, and federal levels for more than 30 years. We recognize and fight to remedy the negative cumulative impacts of unjust policies that have plagued communities of color for decades.

I am Lonnie J. Portis, Environmental Policy and Advocacy Coordinator at WE ACT. I routinely analyze New York City policies and programs for equity and climate justice and co-lead a group of community members mobilized around resiliency efforts in Northern Manhattan.

Immediate, equitable investments in green infrastructure, decarbonization, preparedness and recovery are necessary to reduce the devastating impacts of future tropical storms.

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Tropical Storms Elsa and Ida can no longer be considered once in a lifetime occurrences: Experts predict extreme weather events should be expected much more frequently due to the fossil fuel addiction that has fueled the effects of climate change. A multifaceted approach must be taken to mitigate the structural damage and reduce the number of lives lost to extreme weather events.

According to city records, for a week from the evening Tropical Storm Ida hit New York City: Harlem residents filed 422 complaints to 311 about flooding, water damage, fallen trees and utility outages. That's nearly double the week before, when only 222 complaints came in.

It is well documented and known to many city agencies that East Harlem is vulnerable to flooding from extreme rain, sea level rise, and storm surge. Residents have been consistently vocal about flooded streets during strong rain. Large areas of the neighborhood sit directly in a high-risk flood zone, according to flood maps from the Federal Emergency Management Agency. For more than a decade communities in East Harlem have been promised plans and funds to make the neighborhood more resistant to flooding. Previous funding commitments and promises of repairs to the East Harlem waterfront have failed to materialize. **The revitalization of the East Harlem waterfront needs to start *immediately* and all city agencies involved need to work together and hold each other accountable to rectify this injustice.**

City records show Inwood residents filed 69 complaints to 311 regarding flooding, water damage, fallen trees, and utility outages -- nearly double from the week prior to Tropical Storm Ida. This is the result of years of disinvestment in infrastructure in Northern Manhattan. The most at-risk areas have residents that are majority Black and Latinx and represent some of the poorest in New York City.

Although there is a strong need to recover and prepare for future extreme weather, we must address the root cause. Ensuring proper implementation of Local Law 97 of 2019 and strengthening it by passing legislation like Introduction 2317 will aid in the prevention of deadly extreme weather events.

Decarbonizing existing buildings (Local Law 97) and ending gas use in new buildings (Introduction 2317) reduces climate-heating pollution by many millions of metric tons and creates new jobs in clean-energy design and construction. The City Council and the Mayor's Office must work together and act now to make a healthier, greener, more resilient New York.

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