Executive Summary NYCHA's Final Agency Plan for FY 2023

Federal law requires the New York City Housing Authority (NYCHA) to develop – with input from public housing residents, Section 8 participants, elected officials, and the public – a plan outlining its major initiatives for the coming year.

The Final Agency Plan for Fiscal Year 2023 will be available for public review on NYCHA's website: http://www1.nyc.gov/site/nycha/about/annual-plan-financial-information.page. NYCHA will also provide a copy of the Final Agency Plan to each development's Resident Association President. The Final Plan will also be made available at the management office of every NYCHA public housing development during regular business hours.

NYCHA held a hybrid in person and virtual public hearing on August 31, 2022 and accepted written comments on the Draft Agency Plan through September 2, 2022. Please see the Notice on page 8. NYCHA met with the Resident Advisory Board members for their comments in six meetings from March to September 2022.

NYCHA's Final Agency Plan will be submitted to the U.S. Department of Housing and Urban Development (HUD) by October 18, 2022. Following NYCHA's submission, HUD has 75 days to review and approve the plan.

NYCHA's priorities for the coming year are outlined on pages 19 through 31. NYCHA aims to strengthen its business model through its Transformation Plan and raise much-needed capital funding for its developments through the recently authorized NYC Public Housing Preservation Trust, Permanent Affordability Commitment Together (PACT) initiative, and other preservation programs. In January 2019, NYCHA and the City of New York signed an Agreement with the U.S. Department of Housing and Urban Development (HUD), which outlined specific deadlines and objective compliance standards for making significant improvements in several high-priority areas, including lead-based paint, mold, heat, elevators, annual inspections, pests, and waste management. NYCHA is committed to achieving these deadlines, and updates for each of these high-priority areas are highlighted below. With NYCHA's capital projects work, the Authority is investing in projects outlined in its City Capital Action Plan, initiatives that are already underway, and projects focused on environmental resiliency and sustainability. Finally, NYCHA continues to pursue other initiatives that fund vital building and apartment upgrades.

NYCHA's Transformation Plan and the NYC Public Housing Preservation Trust

NYCHA's **Transformation Plan** is a top-to-bottom reorganization of NYCHA, with proposed strategies for restructuring NYCHA's business model and operations to improve the delivery of services to residents. The NYC Public Housing Preservation Trust, recently authorized by the State, can completely rehabilitate an initial 25,000 apartments while keeping them fully and permanently public and affordable – investments that will also generate job and job training opportunities for residents.

Transformation Plan and NYCHA's Monitoring Agreement

On January 31, 2019, NYCHA and the City of New York signed an Agreement with HUD. The Agreement's overarching goal is to remedy the deficient physical conditions in NYCHA properties to benefit residents across the city. It establishes a foundation to continue strengthening the Authority and improving residents' quality of life. The Agreement sets objectives to significantly improve in seven high-priority areas: lead-based paint, mold, heat, elevators, inspections, pests, and waste management.

The work undertaken as part of the Agreement is overseen by a third-party federal Monitor. The efforts include, for instance, conducting visual assessments and completing interim controls for lead-based paint each calendar year, improving the response times for heat and elevator outages, completing capital improvements to replace aging boilers and elevators, remediating mold conditions and preventing mold recurrence, and utilizing Integrated Pest Management practices. To achieve these objectives, NYCHA is making a variety of operational improvements and capital investments, as described below.

The Transformation Plan was conceived as part of the 2019 HUD Agreement and includes a set of strategies that will improve the resident experience and set the agency on a path to a stronger future.

On March 8, 2021, HUD and the United States Attorney's Office for the Southern District of New York (SDNY) concurred to NYCHA's Transformation Plan, a vision for significant yet sustainable change to NYCHA's governance and leadership structure, property management systems, and central support functions. The release of the Transformation Plan marks the beginning of a multi-year implementation process. In partnership with residents and stakeholders, NYCHA now will turn to the challenging task of reviewing, testing, and implementing these structural and process changes in a resource-constrained environment.

These efforts include evaluating the costs and benefits of each possible change and beginning to make difficult choices that are necessary to better serve residents. These results, based on modelling and analysis, will be submitted in an Implementation Plan as a supplement to the Transformation Plan. The first part of the Implementation Plan was released in February 2022. The second part is expected to be released in the fall of 2022. Together, the Transformation Plan and the Implementation Plan will result in the Organizational Plan required under the HUD Agreement.

As of spring 2022, NYCHA has begun implementing key changes to NYCHA's operating model, as well as numerous business process improvements that focus on service delivery pain points identified by residents and employees.

Resident-facing business process changes include: a full revamping of our repair and work order management process, changes to our approach to janitorial work and cleanliness, and a new approach to lease enforcement issues at developments. In addition, NYCHA is also pursuing a set of central office reforms, including a comprehensive asset management strategy and a focus on human resources to ensure staffing at all sites and prevent vacancies that disrupt service delivery to residents.

NYC Public Housing Preservation Trust

In June 2022, the State legislature passed a bill establishing the New York City Public Housing Preservation Trust (the Trust), and it was signed into law by Governor Kathy Hochul.

To dramatically improve residents' quality of life through comprehensive building renovations while preserving all their rights and protections (including permanently affordable rent) and providing economic opportunities, NYCHA will transfer an initial 25,000 apartments to the Trust. NYCHA will continue to own and manage the properties, entering into a long-term ground lease with the Trust to secure Tenant Protection Vouchers, a subsidy worth double NYCHA's current federal subsidy. Similar to how other government entities raise revenue for capital improvements, the Trust will issue bonds that fund comprehensive building renovations (with input and partnership from residents at the development), including the latest sustainable technologies. And the Trust can hire better vendors who can complete high-quality work, faster.

The Trust bill went into effect 60 days after the date that Governor Hochul signed it into law. NYCHA must now meet certain obligations, such as publishing the draft resident opt-in voting procedures for public comment and incorporating appropriate feedback from residents into the final version of the voting procedures. The board members must also be appointed to conduct the Trust's business (which will include NYCHA residents). Transfers to the Trust will not happen without extensive resident engagement, including a vote by residents at properties proposed for transfer on whether they want the transfer to occur.

Future Annual Plans and Significant Amendments will include more detailed information on the Trust and on proposed leasehold transfers to the Trust.

A Culture of Compliance

As required under the Agreement with HUD, NYCHA established new departments and units – a Compliance Department, an Environmental Health and Safety Department, and a Quality Assurance Unit – which have established programs for monitoring NYCHA's work at its developments, making recommendations for improvements and then providing technical assistance to development staff to improve performance. In the coming year, NYCHA will continue to scale up these departments and units while using data-centered risk assessments, sampling, and field monitoring to ensure Operations complies with all local, state, and federal regulations and internal policies and procedures.

Compliance Pillar Areas

The Agreement requires NYCHA to remediate living conditions at its properties by specific deadlines and to meet strict, objective compliance standards regarding the aforementioned high-priority areas of lead-based paint, mold, heat, elevators, inspections, pests, and waste management. NYCHA is setting up systems and has established a dedicated unit, Strategy & Innovation, to track its progress on all the deadlines outlined in the Agreement. NYCHA is also building dashboards and other analytical reporting tools for each pillar area to show progress towards meeting these metrics. If any

managing jurisdiction is not meeting the clearly defined data-driven benchmarks, they will need to design a plan – in partnership with their colleagues in other departments – to solve the problem.

As part of the Agreement, the City is providing \$1 billion for capital improvements over the first four years and \$200 million per year in capital funding for at least the six years following – for a total of at least \$2.2 billion in capital funding. These funds, described in detail in the City Capital Action Plan approved by the Federal Monitor, will be invested in lead abatement, comprehensive lead- and mold-related capital projects, elevator and heat system replacements, and improvements to NYCHA's waste management equipment across the portfolio.

The Agreement goals, as well as other priority areas, are outlined in the Goals Section of the Draft Agency Plan (pages 175 to 198). The following text includes examples of progress in Compliance Pillar Areas to date, as well as anticipated future progress.

Lead-Based Paint:

In April 2019, NYCHA kicked off an unprecedented effort to test approximately 135,000 apartments for the presence of lead-based paint using x-ray fluorescence (XRF) analyzer. The XRF testing initiative was based on the standard of 1.0 mg/cm2, on December 1, 2021, the New York City Department of Housing Preservation and Development (HPD) issued a regulation changing the definition of lead-based paint from paint with lead content measured at 1.0 mg/cm² to paint with lead content measured at 0.5 mg/cm² for purposes of New York City's Local Law 1. The XRF testing initiative to test 134,084 units was based on the 1.0 mg/cm² testing initiative. NYCHA attempted to test 118,634 units and completed tests in 107,783 units. When the City changed its standard, NYCHA suspended its program to test units at 1.0 mg/cm2 and pivoted to retest the child under 6 units at the new, lowered threshold of 0.5 mg/cm2. As of September 30, 2022, LHCD has attempted 25,386 units and completed an inspection in 23,511 child under 6 units. NYCHA will also continue its door-knocking campaign to identify units where a child under 6 years old either resides or regularly visits the unit for more than 10 hours a week.

In 2021, NYCHA completed its lead-based paint biennial risk assessment and is beginning reevaluation activities. NYCHA has also been scaling up efforts to abate or rapidly remediate lead in units with a positive or presumed positive lead-based paint component where a child under 6 either resides or regularly visits the unit for more than 10 hours a week. Per its Lead Action Plan, NYCHA developed a Team for Enhanced Management, Planning, and Outreach (TEMPO) for apartments with a child younger than 6 years old with known or presumed lead-based paint.

NYCHA commenced abatement in TEMPO apartments and has been deploying the team to conduct repair work orders while utilizing enhanced assessment, clearance, interim controls and oversight protocols in TEMPO apartments with three or more positive components. NYCHA is also now scaling up its abatement effort to comply with the City's change in standard. To ensure there are no lead-based paint hazards, NYCHA is retesting the child under 6 units at the new, lowered threshold. Following re-testing, NYCHA creates abatement work orders for positive units and offers to abate units in an expedited fashion if a resident relocates temporarily.

NYCHA began performing abatement of CU6 units at Bronx River in March 2022 and completed abatements in 31 units, including temporary resident relocation, as of September 2022 moving to

Wagner and will continue this effort at additional developments throughout 2022. In addition, NYCHA is conducting two rounds of visual assessments in TEMPO units.

Mold:

NYCHA has engaged in many initiatives in recent years to address mold, leak and ventilation issues authority-wide. From January through September of 2019, NYCHA completed the roll out of the *Mold/ Mildew Control in NYCHA Residential Buildings Standard Procedure*. NYCHA began working on its new leak standard procedure in April 2020 and has since completed one pilot test of the new procedure and is currently working through its second pilot test. In 2020, NYCHA began implementing its roof fan replacement and in-unit vent cleaning. Additionally in 2021, NYCHA published the Roof Fan Inspections at NYCHA Residential Buildings Standard Procedure in July which provided staff guidance on how to conduct monthly roof fan inspections to ensure they are operatable. As of September 2022, the vent cleaning initiative is 76% complete (66,145 vents cleaned and 100% were attempted) and is estimated to conclude in April of 2023. The Roof Fan SP introduced a standard process for performing monthly preventative maintenance roof fan inspections (and thereby addressing ventilation issues) authority-wide.

As of May 2022, NYCHA reached its noteworthy milestone to replace or retain 8,436 roof fans and began labeling the fans with their Maximo assets to tie the monthly inspections on the handheld devices to Maximo assets in the system. Also as of September 2022, NYCHA is engaging engineers to kick off its replacement and balancing of 90,000 in-unit and 10,000 public space fire dampers portfolio-wide. In May 2022, NYCHA additionally introduced the Enhanced Oversight Program (EOP) and the Mold and Leaks Performance Scorecard and Dashboard to identify and assist NYCHA consolidations requiring additional support to improve compliance with court-ordered mold and leak performance parameters. EOP is being utilized along with other projects (Operation Mold Cleanup, Mold Inspection Initiative, Mold Cleaning Initiative, Maintenance Workers Performing Mold Inspections) executed by the Office of Mold Assessment and Remediation (OMAR) on a parallel track to improve compliance. The initiatives are described in the sections below. Also in 2022, NYCHA added vendor capacity to address mold and leak work orders, and continued to train existing and new staff on the Mold Busters SP.

Over the next year, NYCHA will continue to execute the initiatives listed above to achieve the following goals:

- Decreasing mold incidence and recurrence
- Improving compliance related to key performance parameters including time to complete initial inspections, mold removal, remediation, and related repairs
- Ensuring that key staff are trained in mold inspections and remediation
- Rolling out the leak standard procedure and beginning to train staff on the enhanced leak inspection process

Despite these efforts, NYCHA recognizes that fully addressing the root causes of mold will require significant, comprehensive capital investments. It is important to note, though, that addressing mold and leaks in NYCHA's developments in the long-term requires sustained investments of capital and comprehensive upgrades in addition to the more immediate operational and

maintenance work currently undertaken. Many of NYCHA's buildings are in a general state of disrepair with years, if not decades, of deferred maintenance needs. Many persistent mold and moisture issues within NYCHA buildings are capital issues that are symptomatic of buildings that have not received the regular reinvestment that all buildings require. The majority of NYCHA's buildings are more than a half century old and have not received needed capital improvements vital to their infrastructure. NYCHA's decades-old buildings require \$40 billion to bring them to a state of good repair – a figure that increases by approximately \$1 billion with each passing a year. To address each of the factors that have led to mold growth, leaks, and moisture complaints, NYCHA needs to invest in the comprehensive modernization of all its properties with chronic mold and leak problems across its entire portfolio.

Heat:

In the 2021-2022 heat season, NYCHA resolved its heat outages on average in 8.3 hours. 97.8% of outages were resolved within 24 hours. One outage lasted over 48 hours. NYCHA continues to utilize a heating team dedicated to resolving service interruptions 24/7, the activation of a "Situation Room" during periods of extreme cold to coordinate the response to interruptions and mobilization of resources in real time, and the constant monitoring of outage data through the use of dashboards and reports to identify issues proactively. NYCHA also reviews the causes of outages to identify system components that may require extensive repair and or replacement. We then use this data to develop an operational investment strategy where we use operating dollars to make the identified repairs.

Each year, the Authority also develops a list of critical heat and hot water equipment and systems needing replacement or extensive repair. For the 2022-2023 heating season, the Authority identified \$35 million of investments in to three different areas including: Distribution, Equipment Replacements and Boiler Plant Upgrades. This is a significant increase in investment over the prior years. For the 2021-22 heating season, the Authority allocated approximately \$7.8 Million in funding, and during the 2019-20 heating season, the Authority allocated approximately \$21.4 million.

NYCHA completed its installation of heat sensors at 44 developments. NYCHA will work to make additional year-over-year improvements to its heat outage response times in the coming heat season.

Since the HUD Agreement was signed in 2019, NYCHA has replaced 82 boilers at 22 developments. NYCHA projects 3 additional boiler replacements for completion in 2022 and 36 boiler replacements in 2023, with a total of at least 346 boilers replaced through capital projects by the end of 2026. In addition, NYCHA has addressed 200 boilers through the Permanent Affordability Commitment Together (PACT) housing preservation initiative, and an additional 159 other boilers at 26 developments are now being addressed through the initiative. These investments will make heat more reliable for hundreds of thousands of residents.

Elevators:

NYCHA continues to strive to make improvements to its elevator operations. NYCHA is continuing to hire and train additional elevator mechanic teams while also investing in air conditioners in motor rooms, door lock monitors, and other equipment that will help improve elevator service. As of

September 2022, construction work for two elevators at Boston Road Plaza have been completed and both cars are in service. Construction phase activities have started for 201 elevators at eleven 11 developments. Ninety-five elevators are currently in design or procurement, the construction of which are slated to start in the last quarter of 2022 or first quarter of 2023. Construction is planned to start in 2023 at an additional one development to replace 30 elevators. Through NYCHA's capital plan, 298 elevators are now scheduled to be replaced by the end of 2024. Additional updates include:

- The implementation of NYCHA's Elevator Motor Room Air Conditioner Installation Initiative. As of September 2022, 99% of the installations are complete with 27 pending.
- As of September 2022, NYCHA's elevator in-house staff and vendors have completed the DLM installation work.
- ESRD has also successfully submitted and awarded a contract to install Remote Elevator Management Systems (REMS) at 200 elevators. The REMS contract was approved at the May 26, 2021, Board Meeting.
- Work began in fall 2021, and, as of September 2022, 161 (80%) elevators out of 200 have been completed.

Pests and Waste Management:

In January 2021, NYCHA launched a new Integrated Pest Management (IPM) standard procedure across its portfolio that sets new standards for pest management. NYCHA will continue training its workforce on proper pest control methods for exterminators. Training will also be provided to non-pest control staff since IPM requires that grounds staff and skilled trades fix issues causing pests such as a lack of exclusion and good waste management practices.

In connection with its goal to reduce the rat population, in February 2022, NYCHA met its goal of installing 8,000 door sweeps on basement doors with gaps. NYCHA also hired 26 exterminators to focus on rats on grounds and basements in the Rat Mitigation Zone, which is a group of developments identified through a partnership with DOHMH as having the highest rat population within NYCHA's portfolio. Additionally, NYCHA continues to work towards meeting response times laid out in the agreement: (a) respond to 75% of all rat complaints within 2 business days and to all rat complaints within 5 days and (b) respond to 75% of all other pest complaints within 7 days and to all other pest complaints within 10 days. Currently for resident complaints the average response time for rats is 6.56 days and 7.19 for all other pests.

To advance NYCHA's Waste Management Plan, Design Build Requests for Proposals (RFP) were released in 2021 for seven waste yard redesigns and a new pneumatic waste collection system for Polo Grounds Towers. The contracts have been awarded, with construction expected to start by 2023. By 2028, waste yards will be completely overhauled at 194 developments.

Public Housing Assessment System (PHAS) and Annual Inspections:

As of August 2021, NYCHA completed the following key activities

• Completion of the first phase of PHAS/Uniform Physical Condition Standards (UPCS) standards training (three-day class) for Maintenance Workers and supervisors) with a training that reached 1,672 as of the end of December 2020; Launch of a two-day version of the training for Caretakers with a training that reached 2,766 staff as of the end of

- December 2021; Launch of the online refresher course in 2022; and Launch of the three-day class for new staff or recently promoted staff in 2022.
- Completion of the pilot program for supervisory inspections of buildings and grounds; and launch to all applicable users in 2021.
- Completion and roll-out of a new standard procedure for Annual Apartment Inspections; and building a comprehensive dashboard to track progress.

In FY 2021 – FY 2022, NYCHA focused on the following initiatives:

- Completing PHAS/UPCS standards training for Caretakers and completing a three-hour refresher course for existing staff, as well as an ongoing bi-annual course for new employees;
- Monitoring completion of the supervisory inspection for buildings and grounds to proactively identify potential deficiencies and prevent against deceptive practices; and
- Completing the second phase of the PHAS dashboard and monitoring the completed Annual Apartment Inspection dashboard to identify anomalies and track progress.

Other Capital Projects

In addition to the capital funding outlined in the City Capital Action Plan, NYCHA also continues to invest additional federal and City capital funds in other high-priority initiatives.

Community Partnership: Basketball Courts:

As part of an initiative to build trust and community relationships, the NYPD is investing in NYCHA neighborhoods by building and/or upgrading basketball courts at 14 locations. With \$4.4M in funding made possible through the District Attorney of New York asset forfeiture process, NYCHA has designed and completed all the basketball courts in 2021. This placemaking approach builds on NYCHA's Connected Communities program, which uses participatory design to activate and improve open space connections at NYCHA developments.

Additionally, since 2020 NYCHA has completed basketball court installations at 3 developments totaling \$1.1M through Federal and City funding. At present, basketball court installations are being undertaken at 4 locations totaling \$2.0M utilizing funds from Federal, City and inclusive of a small Grant of \$500K from DANY. Finally, a budget of \$500K from State funding has been earmarked for basketball court renovation at 1 development to start within the next 2 years.

Recovery & Resilience:

As of the end of Q2 2022, NYCHA had invested over \$2.64 billion in funding from FEMA, CDBG-DR, and insurance proceeds at the 35 developments most severely impacted by Superstorm Sandy. Completed work includes 72 new boilers providing heat and hot water to almost 3,415 units in 43 buildings, 185 roofs replaced, 96 full-power backup generators operational serving approximately 9,846 apartments in over 100 buildings, and storm surge protection installation at 18 developments protecting 107 buildings, ready for the 2022 hurricane season.

In October 2021, NYCHA released its Climate Adaptation Plan focused on preparing NYCHA facilities for the changed climate conditions New York City will experience in the coming decades. The plan focuses on the three major hazards identified by the New York City Panel on Climate Change (NPCC) as being the greatest threats to New York City residents: extreme heat, coastal flooding, and rainwater-driven flooding. NYCHA's plan focuses on identifying risks and building resilience into the

large pipeline of capital work that the authority will be completing in coming years, as well as on developing stand-alone resiliency projects to address particularly vulnerable developments.

In October 2021, NYCHA also released "NYCHA's Urban Forest: A Vital Resource for New York City" presenting analysis of the value of NYCHA's trees and what the Authority must do to preserve the benefits trees bring to residents. This report was produced in collaboration with several partner organizations: Green City Force (GCF), the US Forest Service's New York City Urban Field Station, and The Nature Conservancy (TNC), with support from the Mayor's Office of Climate and Environmental Justice (MOCEJ) and the New York City Department of Health and Mental Hygiene (NYCDOHMH). NYCHA and GCF are currently conducting an inventory of all trees, with funding and support from TNC, and pursuing funding to expand the in-house expertise on tree preservation and replacement. In 2021, NYCHA surveyed 13,776 trees in total, with 155 diverse species. Between 2019-2021, 34% of NYCHA's total acreage has been inventoried. In 2022, NYCHA is planning to inventory over 165 acres at 34 developments.

NYCHA is continuing to pursue funding for the damage related to the remnants of Hurricane Ida, which took place in September 2021. NYCHA has identified major damage at 12 developments and minor damage at other developments. NYCHA is working with FEMA to align on the cost of repairs and potential mitigation opportunities to protect NYCHA developments against future storms. To supplement the anticipated FEMA funds, NYCHA has secured \$30M of CDBG-DR funds to cover the estimated local match and an additional \$30M for unfunded mitigation measures.

NYCHA is pursuing all available funding sources for resiliency, including via the newly expanded FEMA Building Resilient Infrastructure and Communities funding program and the Hazard Mitigation Grant Program, by developing compelling resiliency plans that maximize co-benefits to residents. In 2021/2022, NYCHA submitted two applications for the initial scoping of resilience hubs at developments and another for conceptual design studies for flood damage mitigation measures at four developments. A third application was submitted for Breukelen Houses to fund a stormwater management system to mitigate against extreme rain and flooding. In addition, NYCHA collaborated with DEP to submit an application to install cloudburst infrastructure at Clinton Houses. All four of those applications were selected for award, providing NYCHA with a total of \$500,000 in scoping funds and \$30 million in project funds from last year's application cycle. Another application was submitted for St. Nicholas Houses to fund a heat mitigating retrofit; that application was not selected; however, it has been entered into another hazard mitigation funding application cycle and there is still a chance it will be selected, with results of that application expected in Q1 of 2023. Lastly, with MOCEJ, NYCHA pursued FEMA funding of \$150k for signage and communication with residents about resiliency measures, and was notified that those funds have been awarded as well. In 2023, NYCHA is submitting an application to FEMA's BRIC program for stormwater protection measures at Nostrand Houses and Sheepshead Bay Houses. New York State's environmental bond act will also be on the ballot this November and is expected to provide another potential source of resiliency funding.

Energy & Sustainability:

In 2021, NYCHA released new Sustainability Agenda which outlines its commitment to healthy and comfortable homes that showcase environmental stewardship and sustainable design.

NYCHA is committing to host 30 megawatts of renewable energy on public housing and PACT roofs by 2026. Between NYCHA's installations at five developments and PACT developers' installations at seven developments, a total of 5.2MW has been completed with an additional 1.4MW in construction at PACT sites and up to 8MW planned at NYCHA sites.

NYCHA and the NYC Department of Environmental Protection continue to develop their green infrastructure partnership to mitigate combined sewer overflows and improve the lives of public housing residents through the construction of nature-based stormwater management solutions. In 2022, 17 projects reached construction completion and 18 more finalized design with expected construction kickoff in 2024. The next round of construction will be managed by NYCHA and will include NYCHA resident hiring requirements.

Additionally, NYC is investing in cloudburst infrastructure at NYCHA developments to manage extreme rain events like Hurricane Ida. NYCHA and DEP received \$84M of mayoral funding to expand such installations to 7 sites in the Bronx, Brooklyn, Queens, and Manhattan. Design is complete at South Jamaica Houses while design is underway at Clinton Houses. On top of the NYC funding, NYCHA was awarded \$28.5M in FEMA BRIC grants to construct the cloudburst project at Clinton Houses and a similar project at the flood prone Breukelen development.

There are currently \$310M active Energy Performance Contracts, and \$17M in weatherization upgrades are completed or in construction. In August 2022, NYCHA, in collaboration with New York Power Authority and New York State Energy Research and Development Authority, selected two vendors, Midea America and Gradient, to develop affordable cold-climate window packaged heat pumps. An initial 30,000 will be produced to help NYCHA reach its 80% reduction of greenhouse gas emissions by 2050. NYCHA continues the implementation of the demonstration project to fully electrify 1471 Watson Avenue with heat pumps, induction stoves, and point-of-use water heaters in each apartment. This location will also receive a full plumbing upgrade through secured CDBG-DR funding.

NYCHA has awarded 2 Design-Build contracts for the design and construction of a pneumatic waste collection system at Polo Grounds Towers and the redesign of 7 waste yards. These 7 sites kick off \$463M in City Capital Action Plan upgrades of waste yards across the portfolio. The City Capital Action Plan also outlines \$116M for replacement of interior compactors. To expand NYCHA's sustainable waste collection, in September 2022, NYCHA released a Clean Curbs for All RFP to test mechanical collection at curbside collected sites. This initial pilot will employ sealed containers for waste and recyclables at sites where material is currently collected in loose bags on the curb and could provide more convenient disposal access for residents. NYCHA has also been awarded a grant to build and staff compost systems at 2 developments with Green City Force and Compost Power as partners.

Comprehensive Modernization

As highlighted in the earlier sections, NYCHA initiated significant capital repairs in many developments that will be completed over the next few years. These and previous capital projects have been predominantly component-level replacements and upgrades. Moving forward, NYCHA aims to transition to more integrated and comprehensive renovations spanning multiple building systems, interiors and exteriors, and grounds improvements, wherever feasible. This will allow

developments to be comprehensively renovated more quickly, at a higher quality, and with better value for money. A comprehensive modernization approach will also holistically address the HUD Agreement pillar areas and the broader needs of residents and reduce NYCHA's comparatively high operations and maintenance costs. NYCHA intends to pursue this approach for any new influxes of funding, whether through the Trust, additional federal capital funding, or sources of capital funds from other levels of government. As outlined in the Transformation Plan, all capital investment fall under the purview of one department and position: the Chief Asset and Capital Management Officer (CACMO).

Leveraging new sources of revenue to preserve homes and renovate buildings

Considering the multibillion-dollar decline in federal Section 9 funding and massive repair needs across its portfolio, NYCHA must pursue innovative ways to fund the building and apartment upgrades that residents deserve. This includes the following programs:

PACT to Preserve

As part of its Permanent Affordability Commitment Together (PACT) initiative, NYCHA is addressing \$12.8 billion in overdue repairs in 62,000 apartments — a third of its units and home to approximately 140,000 New Yorkers. PACT relies on partnerships with private and non-profit development partners and converts developments to a more stable, federally funded program called Project-Based Section 8.

All 62,000 apartments converted to Section 8 funding will remain permanently affordable. The Project-Based Section 8 program provides a more stable flow of federal subsidy and allows NYCHA and its development partners to raise external financing to address a development's capital repair needs. Once developments are converted, quality private managers, including non-profit partners, will maintain and operate the buildings. The PACT program provides residents with important rights and protections. Residents will only pay 30 percent of their household income towards rent, will not have their applications re-screened, and will have the right to remain in their homes during the renovations.

Renovations will provide residents with new kitchens, bathrooms, windows, and common areas while addressing critical repairs to elevators, boilers, roofs, and facades. The PACT program also enhances on-site social services by funding valuable community programming that will be provided by a growing list of non-profit partners. PACT renovations will be completed on a rolling basis – between 7,500 and 10,000 apartments per year – by the year 2028.

Approximately \$579 million in renovations have been completed at more than 3,200 apartments in Queens and the Bronx. An additional 12,200 apartments, home to approximately 33,000 New Yorkers, are under construction in the Bronx and Brooklyn, totaling \$2.8 billion in major upgrades. An additional 19,700 units are part of active development projects in the process of resident engagement or pre-development. In sum, NYCHA has approximately 35,000 units completed, inconstruction, or in a stage of resident engagement or pre-development.

Build to Preserve

With the "Build to Preserve" program, NYCHA will use a mixed-income model to build on its underused land, dedicating 100 percent of the proceeds to make repairs first at the surrounding development (any remaining funds will be invested in repairs at other NYCHA developments in the neighborhood). Build to Preserve is expected to fund approximately \$2 billion in capital repairs. New buildings will be subject to Mandatory Inclusionary Housing levels of affordability and will increase the city's permanently affordable housing supply.

NYCHA released an RFP in April 2021 to implement a community-driven preservation and investment strategy at Fulton, Chelsea, Chelsea Addition, and Elliott Houses in the Chelsea neighborhood of Manhattan. The four developments, which include 2,073 apartments across 24 buildings, have an estimated total of \$366 million in extensive capital need and repair costs ranging from heating infrastructure to building security improvements. In late 2021, NYCHA, together with resident leaders, selected a development team comprised of Essence Development (co-developer), The Related Companies (co-developer and property manager), and Related Construction (general contractor). The development team will work with residents to select a social services provider.

In developing the RFP to select the PACT partners, NYCHA and resident leaders worked to incorporate the recommendations of the Chelsea Working Group — a cohort of residents, elected officials, community representatives, and housing and legal organizations — which convened regularly since late 2019 to evaluate the different options available for modernizing the properties. In February 2021, the Working Group published a set of recommendations to fund comprehensive repairs, while ensuring resident rights are protected and that residents remain deeply engaged in the planning process going forward. Among other strategies to raise revenue for repairs, the Working Group recommended that the Fulton and Elliott-Chelsea developments be included in PACT and identified appropriate locations and design guidelines for mixed-use redevelopment. As part of the RFP process, resident leaders will review proposals, interview respondent teams, and work with NYCHA to ultimately select the partners who will rehabilitate and manage the properties over the long term.

Transfer to Preserve

NYCHA continues to tap into its extensive unused development rights, known as "air rights," to raise revenue for the Authority. By transferring only a portion of the Authority's approximately 80 million square feet of air rights, NYCHA expects to generate \$1 billion in capital repairs for adjacent apartments. In 2020, NYCHA completed two air rights transfers, one at Ingersoll Houses in Brooklyn and another at Hobbs Court in Manhattan, generating approximately \$27 million in proceeds for capital repairs.

Commitments to Build New 100% Affordable Housing

New York City is confronting an affordable housing crisis, and New Yorkers have called for more affordable housing. In support of the City's plan to build or preserve 300,000 affordable apartments by 2026, NYCHA has pledged to provide underused land (such as parking lots and storage spaces) for the creation of 11,000 new, affordable apartments for both families and seniors – more than 3,000 of which are already in the pipeline.

Since 2015, NYCHA has closed on 15 transactions located in the Bronx, Brooklyn, Manhattan, and Queens. To date, 2,120 affordable apartments have been built or are under construction. An additional 72 co-op homeownership units began construction at the end of 2020. NYCHA also has numerous other affordable housing developments in the planning and pre-development phases.

Many of these buildings will include community facilities and neighborhood retail that will serve new and current residents. For instance, the new affordable housing at Ingersoll Houses features a new ground-floor senior center operated by Services and Advocacy for LGBT Elders (SAGE) that provides supportive services for seniors. The development at Mill Brook Houses includes a new senior center with a commercial kitchen, large dining room, community space, and activity rooms for programming for seniors. Other planned features across the 100% affordable housing portfolio include green roofs, upgraded basketball courts, and new community gardens and seating areas.