

Planning for Growth

- » Sewers and Drainage
- » Schools Tool
- » Transit Bonus

Q&A



Meeting Format

6 - 8 pm: Presentation followed by Q&A

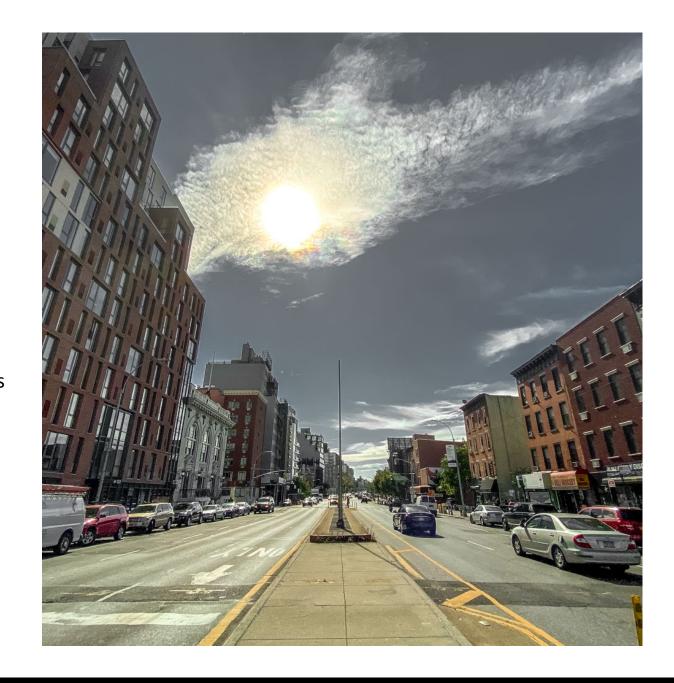
During the presentation, all microphones will be muted. You will be able to ask questions during the presentation in two ways:

- **1. Q&A** using the <u>Q&A feature</u> on ZOOM
- **2. EMAIL** we are monitoring our email address during the event: gowanus@planning.nyc.gov

During the Q&A following the presentation, we will take questions in three ways:

- **1. Q&A** using the <u>Q&A feature</u> on ZOOM
- 2. EMAIL gowanus@planning.nyc.gov
- **3. ASK** using <u>raise your hand feature</u> on ZOOM (two-minute time limit to ask question)

If you are dialing in, press *9 to raise your hand. You can unmute yourself when you are called on by the moderator.



Meeting Format

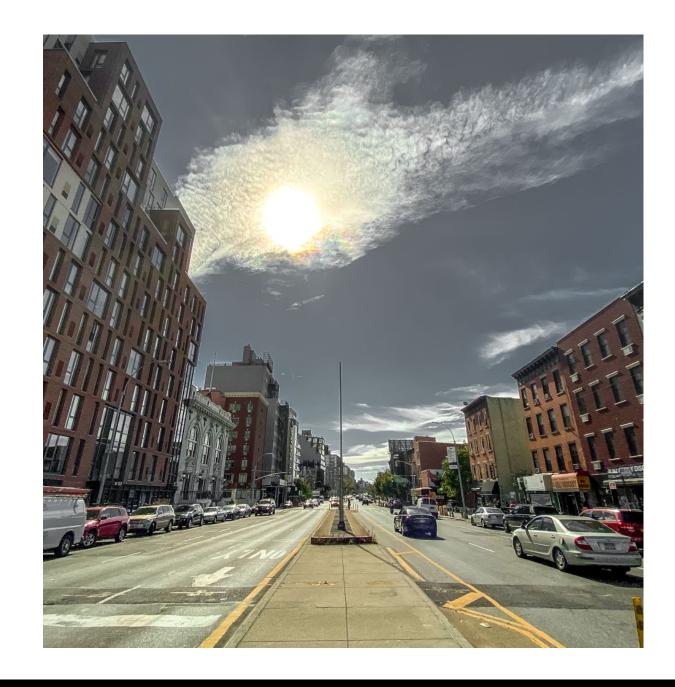
We want to ensure that this conversation is a pleasant experience for all.

All participants will remain muted unless called on by the moderator during the Q&A Session.

Please be respectful of the two-minute time limit on questions if raising your hand so that we may be able to get to as many as possible.

Please take advantage of the Q&A feature and email during the presentation. We will be monitoring these live and will provide responses during the Q&A Session.

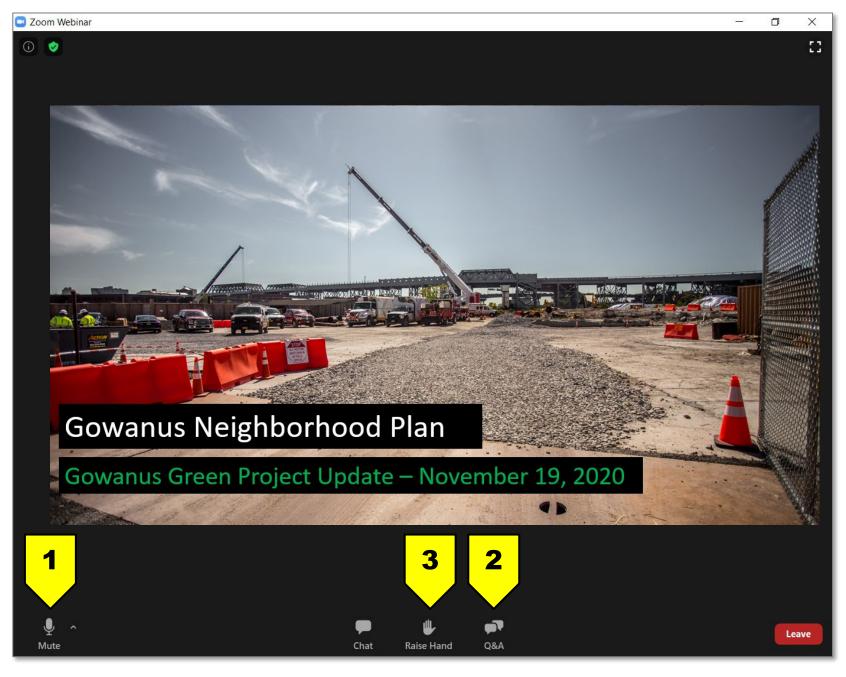
If you feel your question was not answered during the event, you can always email **gowanus@planning.nyc.gov** for more information.



ZOOM tips

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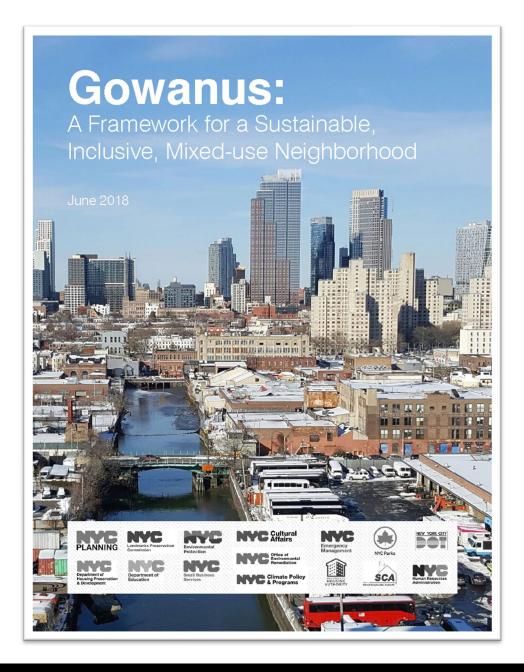
Public Engagement Public Meetings NYCHA & Targeted **Working Groups** plangowanus.com **CB6 Meetings** & Workshops Outreach Develop Framework Sustainability Community and Land Use **Economic Environmental** Cultural Housing and Job Transportation and and Remediation Resiliency Development **Urban Form** Resources

Gowanus: A Framework for a Sustainable, Inclusive, Mixed-Use Neighborhood

Gowanus Framework

Framework "at a glance"

- Structured around community priorities
- Includes some elements of a neighborhood plan based on what was heard
 - 1. Sustainability & Resiliency
 - 2. Environmental Remediation
 - 3. Community and Cultural Resources
 - 4. Housing
 - 5. Economic and Job Development
 - 6. Transportation
 - 7. Land Use and Urban Form
- Organized by goals and strategies





Neighborhood Plan

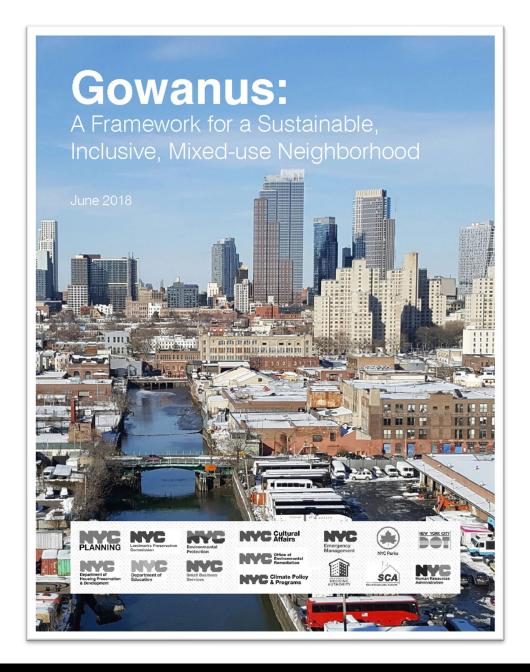
Resiliency and Sustainability: Goals & Strategies

Support existing and future sustainability efforts to make Gowanus a model green neighborhood, and encourage flood-resilient buildings and community preparedness

Improve capacity of infrastructure to meet increased demand







Neighborhood Plan

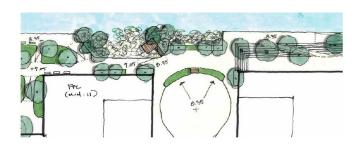
Resiliency and Sustainability: Progress

Completed first phase of installing high-level storm sewers along 3rd Avenue, and progressed sewer and water main upgrades in the Gowanus IBZ





Incorporated sustainability and resiliency guiding principles in the Special District and Waterfront Access Plan



Progressed planning, design, and property acquisition for CSO reduction infrastructure and new public open space at Gowanus Canal head end



Agenda



- Background Angela Licata
- Unified Stormwater Rule Melissa Enoch
- Analysis summary Angela Licata



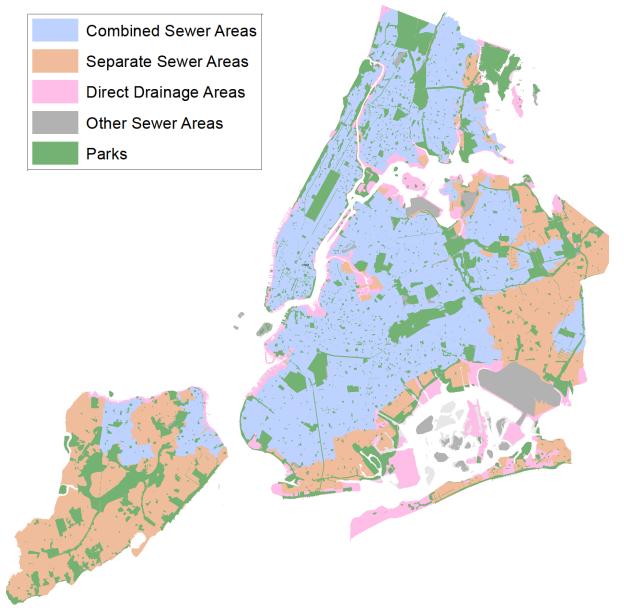
NYC Drainage Areas



NYCDEP is responsible for the Combined Sewer and Separate Sewer Areas of the City.

All **new construction** in these areas will be **affected** by the forthcoming Unified **Stormwater Rule** (USWR).

NYSDEC is responsible for the Direct Drainage Areas of the City.



Existing vs. Proposed Stormwater Rule Summary



2012 Rule (Existing)

Applies to sites that require Site Connection Proposal (SCP) / Housing Connection Proposal (HCP) only

No retention requirements

Total stormwater volume requirements based on 10-yr rainfall intensities

5-year peak intensity used for maximum release rate criteria

2-in minimum orifice

Compliance is primarily detention-based

2021 Unified Stormwater Rule (Proposed)

Requires Stormwater Management Plans (SMPs) that <u>retain</u> Water Quality Volume (WQv) (1.5") for sites ≥ 20,000 SF soil disturbance or increase impervious area

S/HCP stormwater volume requirements have been increased to capture greater than 10-yr rainfall for all sites

Release rates for volume that is not/cannot be infiltrated have been reduced for all sites

1-inch minimum orifice

Will lead to more retention and slow release detention practices that have a greater benefit on CSO reductions and sewer operation goals



Unified SW Rule – Overview



*Affects all new and redevelopment sites that drain to a city sewer

Component I: Site/House Connection Permit Requirements (Chapter 31)

- Why: maintain optimal stormwater quantity and flow rates
- When: all new construction, additions/alterations, agency projects
- How: manage Total Storm Water Volume (Vv) on-site by detention or retention systems

Component II: Stormwater Construction Permit Requirements (Chapter 19.1)

- Why: water quality requirements
- When: sites that disturb ≥ 20,000 SF of soil or create 5,000 SF or more impervious area
- How: manage Water Quality Volume (WQv) volume on-site by retention systems
- Note: WQv is zero for sites that do not meet threshold or replace/create impervious area

Ch. 31:
Stormwater
Quantity and
Flow Rates

Ch. 19.1:
Water Quality
Requirements

Projects that trigger both requirements receive credit towards total on-site volume requirements (Vv) by using green infrastructure

WQv = Water Quality Volume Vv = Total Stormwater Volume



Benefits of the USWR



Resiliency and Sustainability

- Requires **more on-site** stormwater management
 - improved water quality
 - reduced urban flooding
 - lower burden on public infrastructure
 - reduced energy demands
- Provides CSO reductions (362 Million Gallons per Year (MGY) CSO volume reduction by 2030) while helping the City to achieve GI Program goal of 1.67 Billions Gallons per year (BGY) CSO volume reduction
- Increases green space and supports 2019 Climate Mobilization Act

Process and Permitting

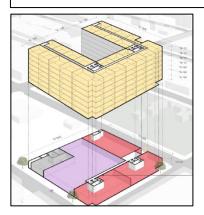
- Allows more flexibility in design options than those previously permitted
- Establishes a new Stormwater Design Manual
- Simpler and more streamlined Site Connection Proposal (SCP) / Housing Connection Proposal (HCP) permit application, design and review processes
- Easier to calculate stormwater formulas
- Provides more consistency between the sewer areas (making it easier for applicants to plan)
- Offers clear credit for infiltration practices and reuse systems



Gowanus Implementation – Case Scenario



Constrained Site: Green Roof + Blue Roof + Detention Tank



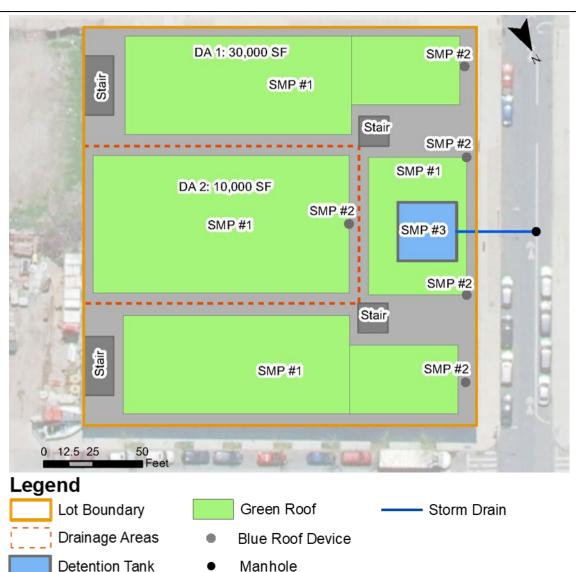
SITE INFORMATION

General:

Lot Area: 40,000 SF Sewer Type: CSS Constraints: Space

Site Characteristics:

Rooftop: 40,000 SF Pavement: 0 SF Green: 0 SF



2012 STORMWATER RULE (EXISTING) WATER QUALITY VOLUME (WQv) REQUIREMENT

None

SEWER OPERATIONS (VV) REQUIREMENT

- Vv = 39,500 gallons (detention tank)
- Release rate = 0.25 cubic feet per second (cfs)

2021 UNIFIED STORMWATER RULE (PROPOSED) RESULT

- 51% increase in total SMP volume
- Detained volume released at a rate 63% slower

WATER QUALITY VOLUME (WQv) REQUIREMENT

- WQv = 35,500 gallons
- Required to use green infrastructure
- Green and blue roofs would be typical SMPs for constrained sites

TOTAL STORMWATER VOLUME REQUIREMENT (Vv)

- Vv = 43,800 gallons
- Credit for green and blue roof = 18,300 gallons
- Release rate = 0.092 cfs

SMP – Stormwater Management Practice



Unified Stormwater Rule - Next Steps



March 2020: Interagency Technical Workshops Completed

August 2020: City Council Hearing and Passage of Intro No. 1851

October 2020 – January 2021: (1) Finalize Draft Rule for Interagency Review
 (2) Industry & Community Stakeholder Outreach

• February/March 2021: Draft Rule and Draft Manual Available for Public Review and Comment through the Citywide Administrative Procedure Act (CAPA) Process



DEP evaluated effects of the rezoning on DEP's infrastructure

CSO Discharge Analyses



Unified Stormwater Rule and Rezoning Analysis



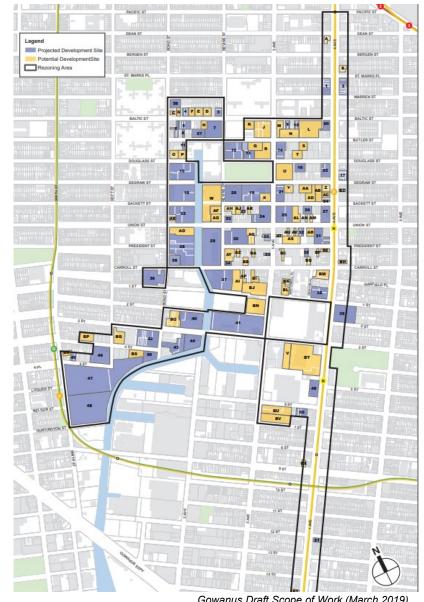
Modeling Assumptions

DEP evaluated the effect of the rezoning on DEP wastewater infrastructure.

- The condition in 2035 without the rezoning (with the Unified Stormwater Rule)
- The condition in 2035 with the rezoning (with the Unified) Stormwater Rule)

Unified Stormwater Rule Assumptions

- Conservatively assumed all lots connect to combined sewer system in the modeling
- 16% of lots (projected development sites) assumed to trigger new SCP/HCP volume and flow rate requirements (Ch. 31) and volume and infiltration practice requirements (Ch. 19.1)
- 84% of lots (projected development sites) assumed to trigger only SCP/HCP volume and flow rate requirements (Ch. 31)





Analysis Summary



CSO volumes to the Canal decrease - with the Unified Stormwater Rule (USWR) in place, stormwater controls offset the increase in sanitary flow

- Rezoning is anticipated to add approximately 18,000 new residents to the rezoning area on projected development sites, generating additional sanitary flow of 1.253 Million Gallons per Day (MGD).
- Vast majority of this additional flow is conveyed to the Water Resource Recovery Facility (WRRF) for treatment with exception of during wet weather events
- The anticipated USWR is projected to reduce stormwater runoff to more than offset the increase in sanitary flows and result in approximately 5 MGY CSO reduction to Gowanus Canal
 - Example: large storm event during typical year (2008) 1.66" over 5 hours:
 - Additional sanitary flow during the event 0.3 MG
 - Stormwater runoff reduction due to USWR 0.9 MG
 - Overall net wet weather flow decrease of 0.6 MG

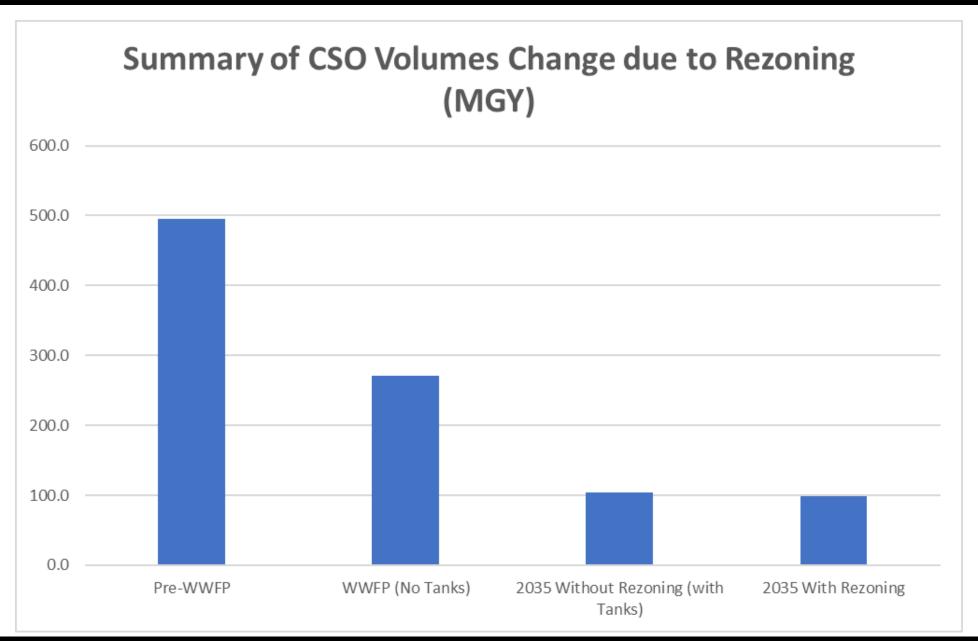
The **rezoning does not affect** the City's ability to meet the requirements of the ROD

Rezoning will result in less street flooding due to development sites' stormwater controls required under Unified Stormwater Rule



CSO Analyses

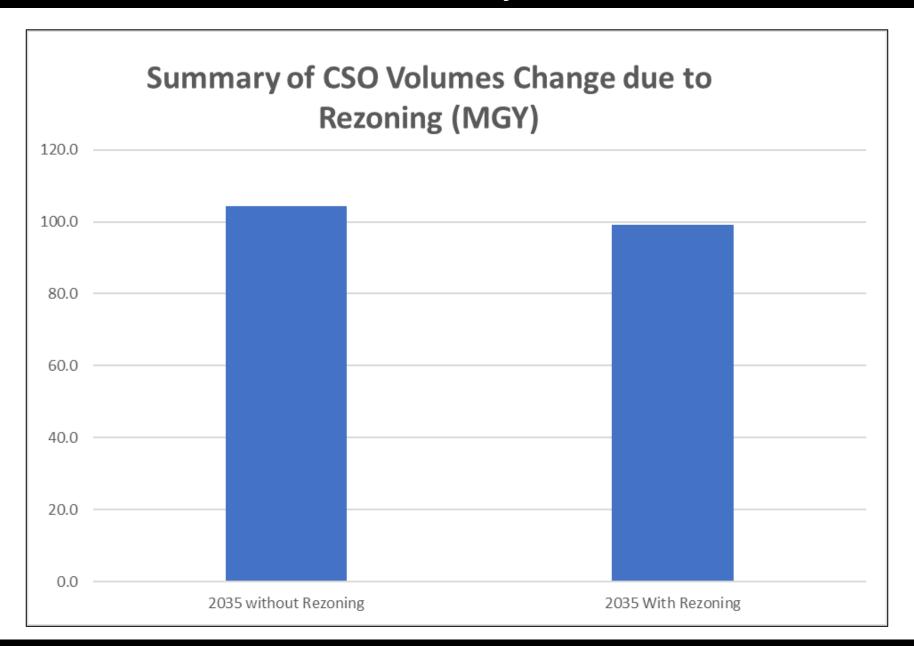






CSO Analyses

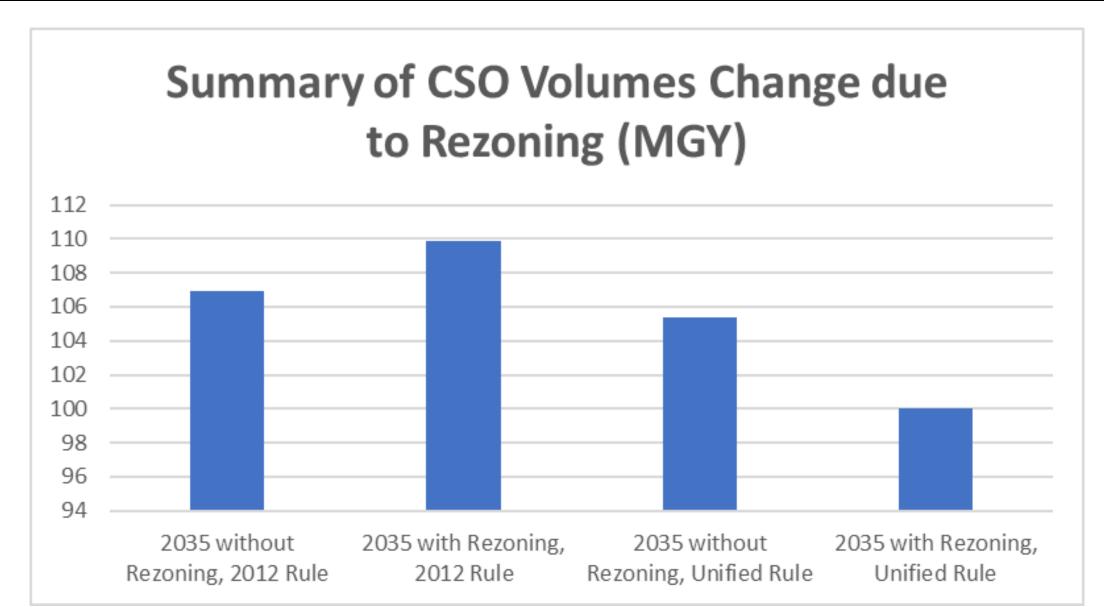




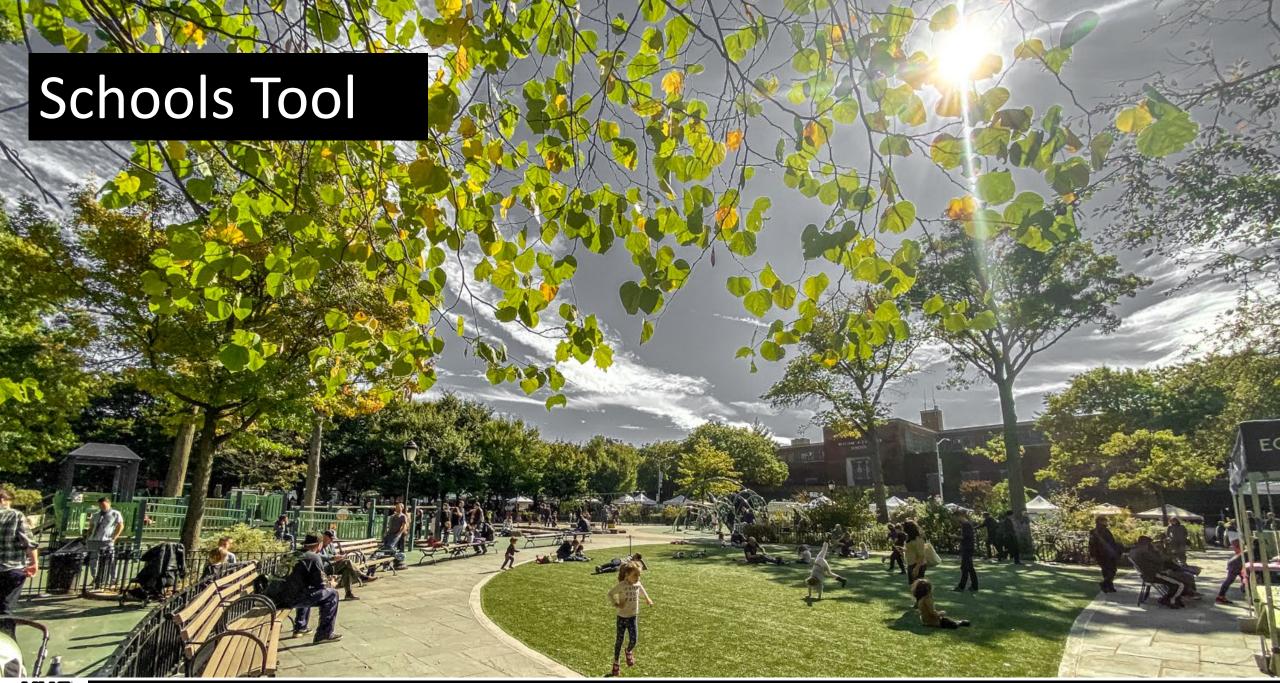


CSO Analyses









Neighborhood Plan

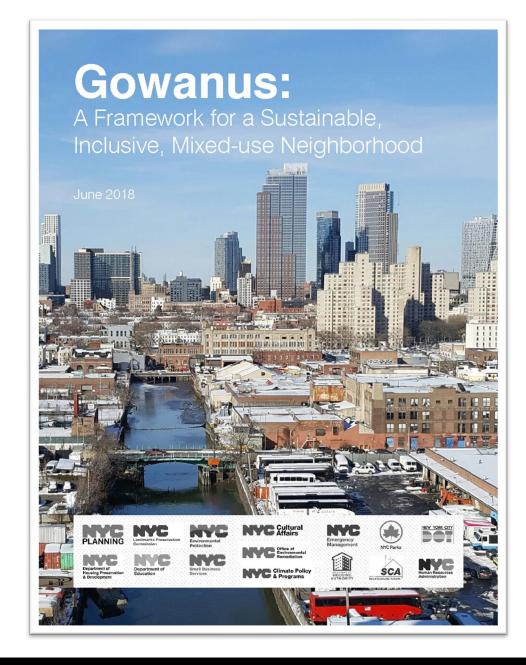
Community and Cultural Resources: *Goals & Strategies*

Support the growth and maintenance of parks and open space, promote arts and cultural uses for all community members and develop strategies to recognize, interpret and celebrate the neighborhood's history.

 Assess existing school capacity and identify opportunities to meet future needs







Schools and Education across rezoning area

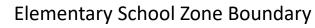
- Rezoning area is located across three subdistricts
 - Community School District 15 of Subdistrict 3
 - Community School District 15 of Subdistrict 2
 - Community School District 13 of Subdistrict 1
- Schools capacity analyses typically focus on elementary schools.



Gowanus study area



NYC School District/Subdistrict boundary

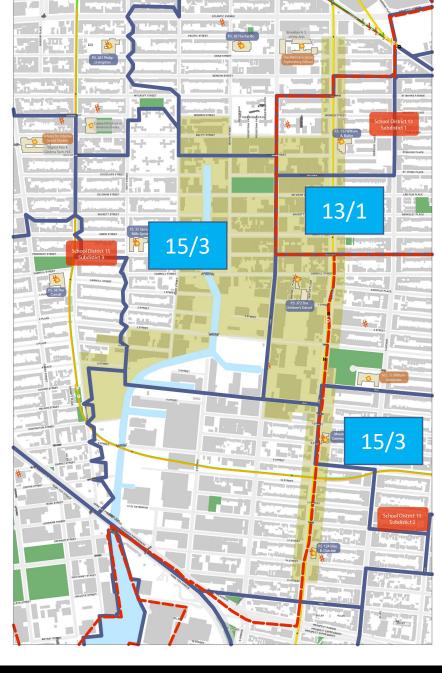




Public School Facility



Pre-K





Schools and Education in CB6

District 15 Diversity Plan

- D15 Plan put forward diversity and inclusion recommendations
- Among most socio-economically and racially segregated school districts in the City
- D15 middle school student residential housing data by race reflects patterns of housing segregation in D15
- New schools in Gowanus would be part of the D15 Diversity Plan

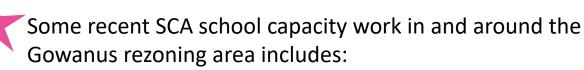


Source: D15 Diversity Plan

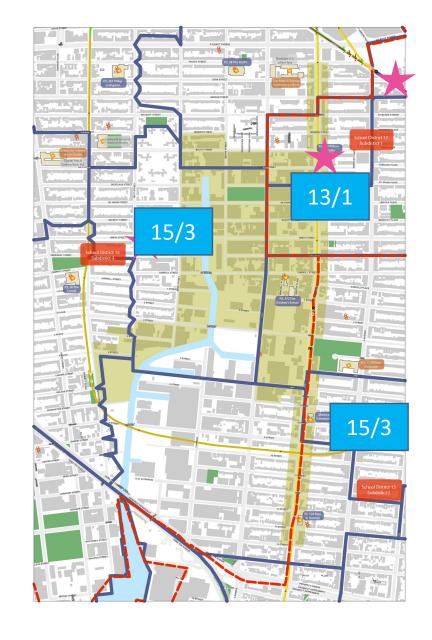


How are schools planned for?

- When conditions require new construction to meet capacity needs the School Construction Authority can add school seats in multiple ways:
 - purchasing property to construct stand-alone schools,
 - leasing and renovating properties,
 - constructing additions to already-existing schools, or
 - working with developers to build schools in mixed-use buildings



- Addition at PS 32 (school rezoning process underway)
- IS 653 new 640 seat school in mixed-use building at 491 Dean Street
- PS 133 935 seat new school at 610 Baltic (2013)



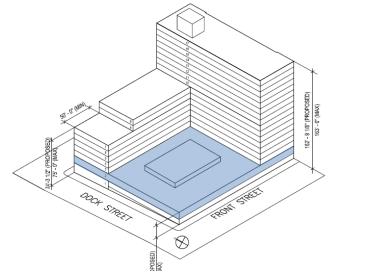


How can the zoning proposal help facilitate new schools?

- When conditions require new construction to meet capacity needs the School Construction Authority can add school seats in multiple ways:
 - purchasing property to construct stand-alone schools,
 - leasing and renovating properties,
 - constructing additions to already-existing schools, or
 - working with developers to build schools in mixed-use buildings
- Some recent SCA school capacity work in and around the Gowanus rezoning area includes:
 - Addition at PS 32
 - IS 653 new 640 seat school in mixed-use building at 491 Dean Street
 - PS 133 935 seat new school at 610 Baltic (2013)



Dock Street School



Proposal Overview

Special District: *Incentivizing Schools*

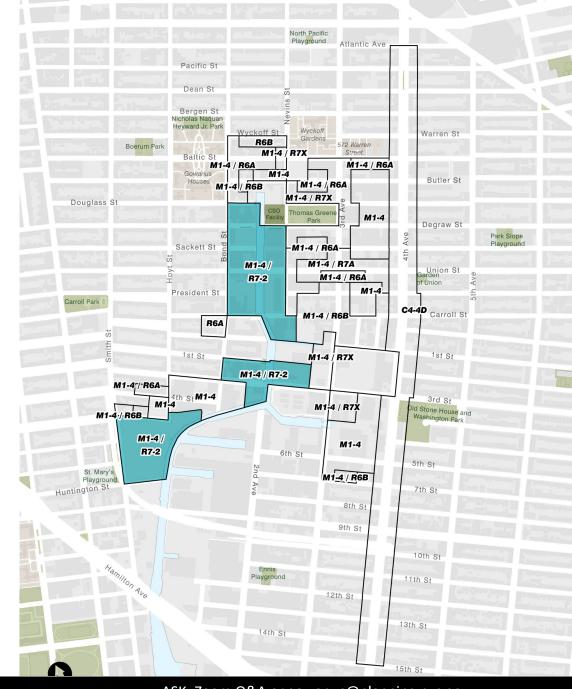
Purpose: To support the creation of new neighborhood schools as the neighborhood grows

As-of-right within Special District

- Floor Area Exemption
 - Applicable to zoning lots > 30,000 square feet
 - Floor area exempted up to 60K square feet

Applicable to <u>Canal Sites only</u>

 Height increase up to 4 floors to accommodate School use (As-of-right)



Proposal Overview

Special District: *Incentivizing Schools*

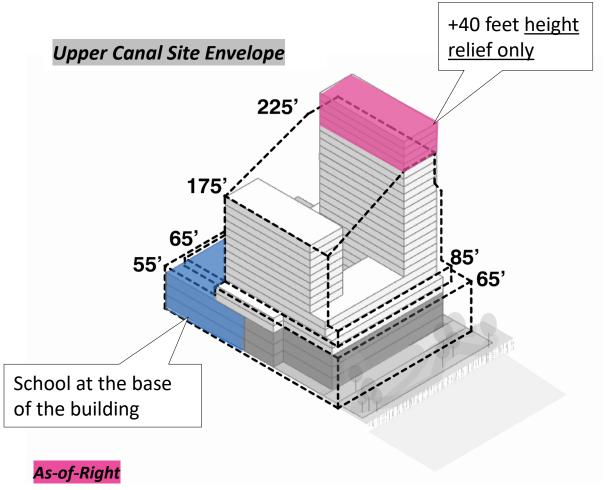
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Applicable to <u>Canal Sites only</u>

 Height increase up to 4 floors to accommodate School use (As-of-right)



(Applicable to Canal Sites: Height relief only)



Proposal Overview

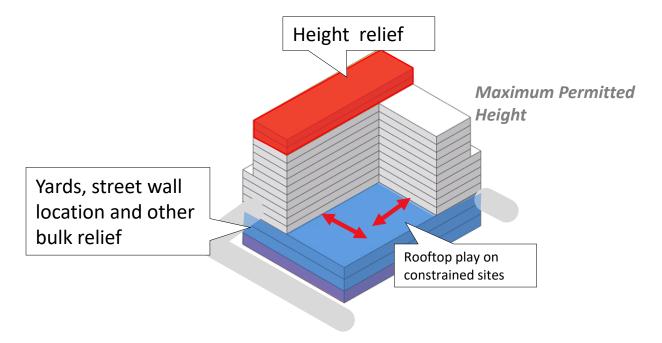
Special District: *Incentivizing Schools*

Purpose: To support the creation of new neighborhood schools as the neighborhood grows

Discretionary City Planning Commission Authorization (Special District-wide)

- Special District-wide
- Allow school floor area to be exempt
- Modify bulk regulations to accommodate

Prototypical Upland Lot



Authorization

(Applicable to all sites and to obtain additional bulk relief beyond height)





History

A Mixed-Use Community

Fourth Avenue from Baltic Street (1933)



Old Stone House (1946)



History

Construction of the Subway System

Fourth Avenue Line during construction (1909)



FOURTH AVENUE NEAR 22ND STREET DURING CONSTRUCTION,
FOURTH AVENUE (BROOKLYN) SURWAY

Culver Line structure during construction (1917)



Fourth Avenue -9th Street (1931)



Transit Accessibility

Well-served by public transit

Transit access in project area or within one quarter of a mile:

- **Subway stations**
 - Atlantic Terminal transit Hub (9 lines/LIRR)
 - Union St (R)
 - 4th Ave and 9th St (R/F/G)
 - Carroll St (F)
 - Smith/9th St (F/G)
- **Bus lines**
 - B37, B57, B61, B63, and B103
- **Major corridors**
 - North/south: 4th Ave
 - East/west: Union St, 3rd St, and 9th St



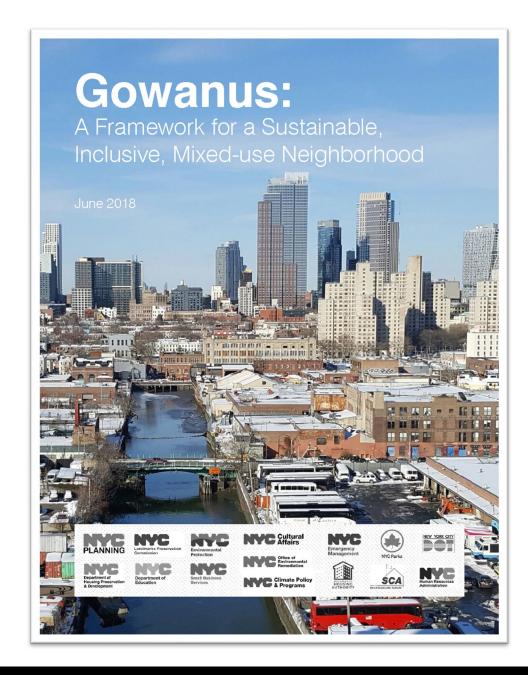
Neighborhood Plan

Transportation

Support addressing transportation issues and opportunities that can enhance safety, mobility, circulation and safety for pedestrians, cyclists and motorists.

Improve access to public transit





Zoning Proposal

Fourth Avenue

Current Zoning: M1-2, R8A/C2-4, C8-2

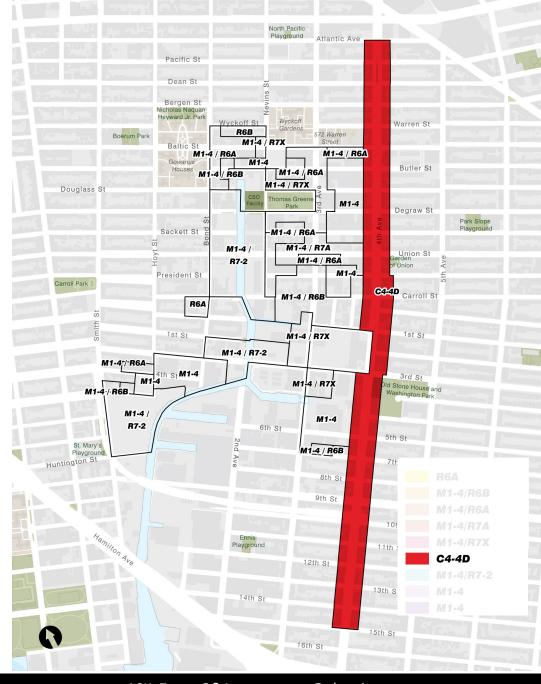
Proposed Zoning: C4-4D/R9A*

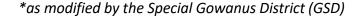
Goals:

- New mixed income housing, market-rate and affordable
- Allow existing parking to be replaced by active uses
- Facilitate better connectivity and accessibility to subways stops along the corridor

Context:

- Rezoned in 2003 & 2011 no affordable housing required
- Widest major corridor with a mix of uses
- Local R subway stops at Union Street & 4th Avenue/9th St.



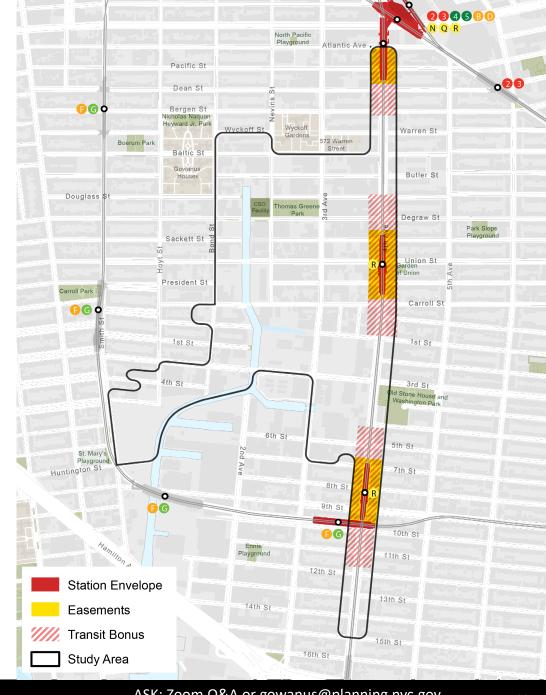




Special District: *Transit Improvements*

Purpose: To ensure coordination and encourage development to support major transit improvements for a growing neighborhood

- **Transit Easement Zones**
- **Transit Bonus City Planning Commission Authorization**





Special District: *Transit Easement Requirements*

Purpose: **To ensure coordination** and encourage development to support major transit improvements for a growing neighborhood

Transit Easement Zones

- Requirements for all redevelopment within 50 feet of a subway station
- 4th Avenue subway stations
- Determine if easement is needed
- Before Department of Building permits can be issued





Special District: *Transit Improvements*

What does this look like in practice?

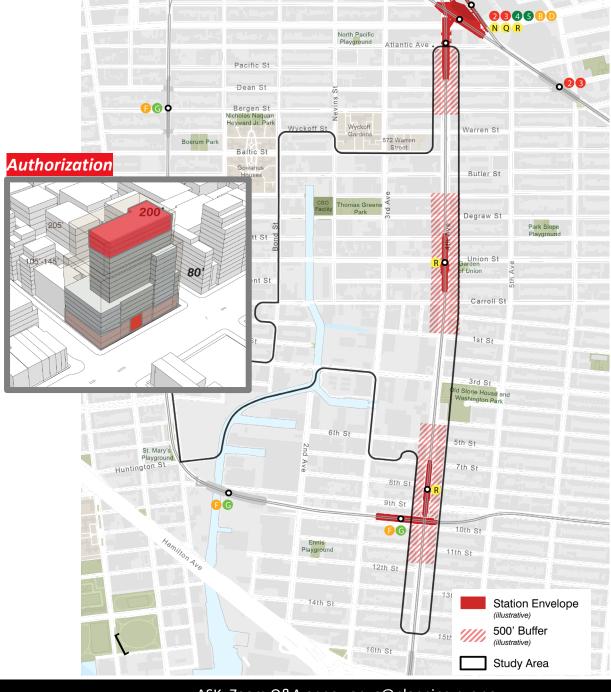
- Proposed Development includes MTA easement
- Future improvement has planned, dedicated space
- Legally enforceable instrument runs with the land



Special District: *Transit Bonus for Improvements*

Purpose: To ensure coordination **and encourage development to support major transit improvements** for a growing neighborhood

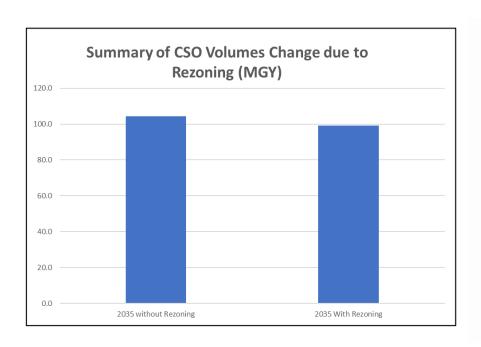
- Transit Bonus City Planning Commission Authorization
 - o 4th Avenue
 - Allows CPC to:
 - Increase density & height up to 20 percent
 - Height up to 3 stories
 - Applicable within 500 feet of a subway station
 - Off-site improvements permitted
 - Referral of application to Community Board
 - Bonus commensurate with improvements
 - Determined by MTA and CPC

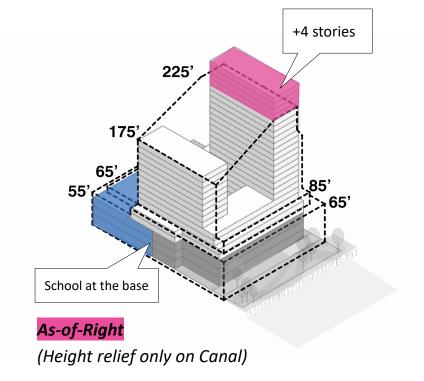


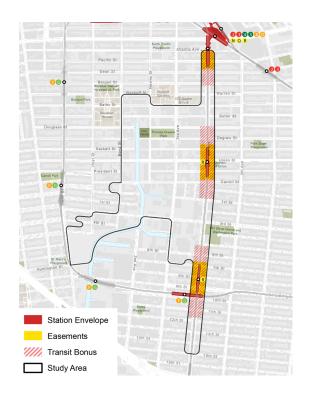


Recap

- CSO volumes to the Canal decrease
- Schools incentivized in new mixed-use buildings (discretionary actions for additional flexibility needs)
- Require transit easements and incentivize transit improvements along 4th Avenue







Next Steps

Gowanus Rezoning Certification January

In January 2021, the Department of City Planning expects to present the Gowanus Neighborhood Plan at a meeting of the City Planning Commission and certify that the application for the Plan is complete and ready for public review

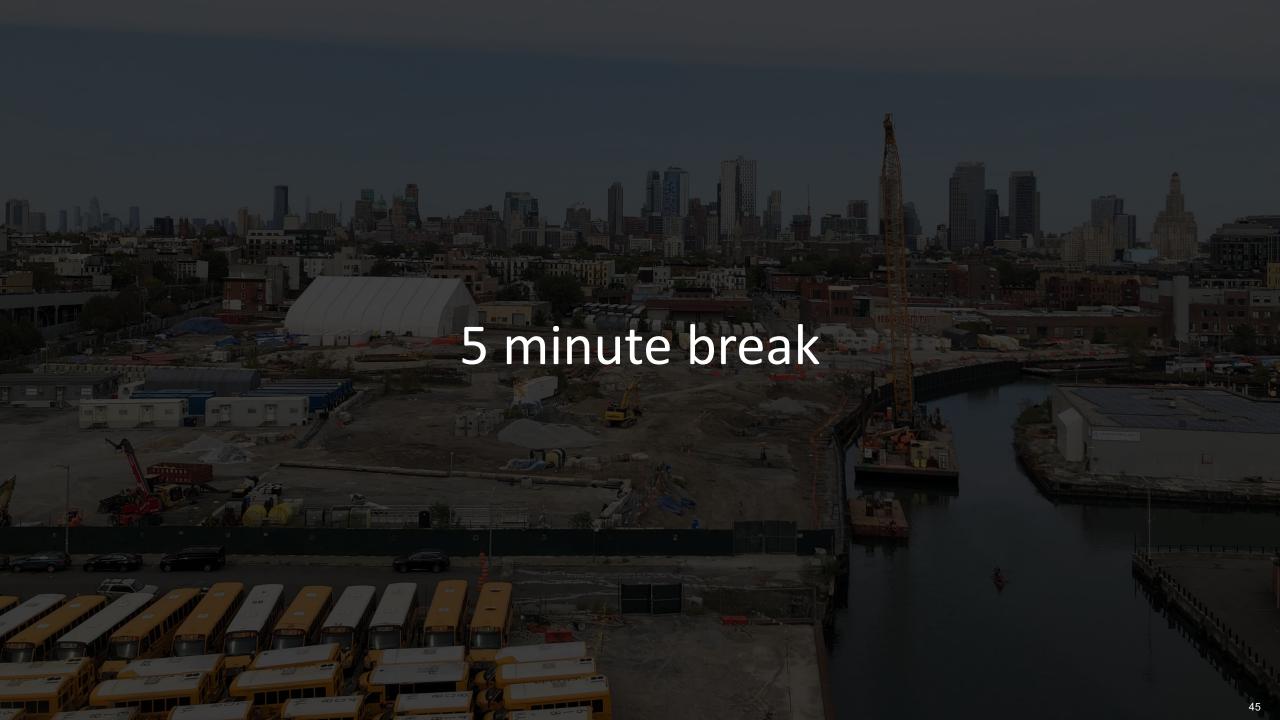


MIH and Affordable Housing TBD

In May 2019, HPD presented and answered questions on MIH and Affordable Housing. HPD will present information and a primer on Mandatory Inclusionary Housing and Affordability in Community Board 6.







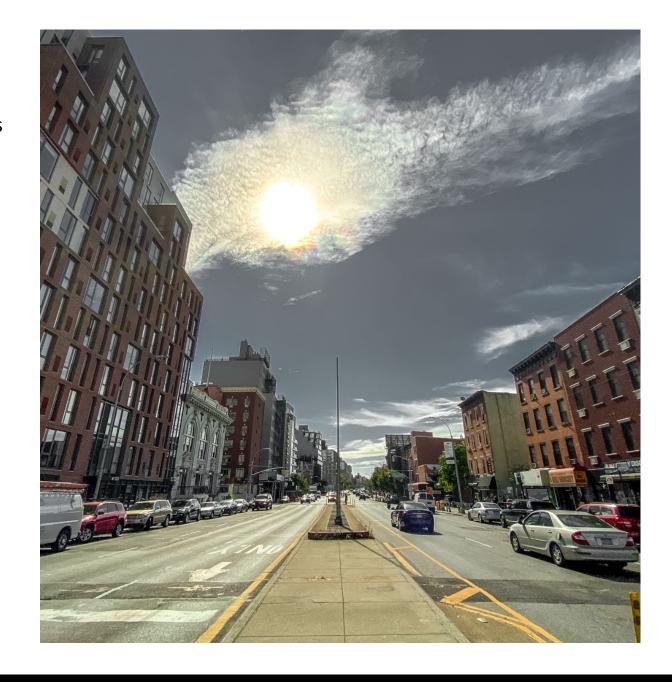


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