PUBLIC ASSETS

City-Owned and Leased Properties

The Municipal Art Society of New York
MASNYC

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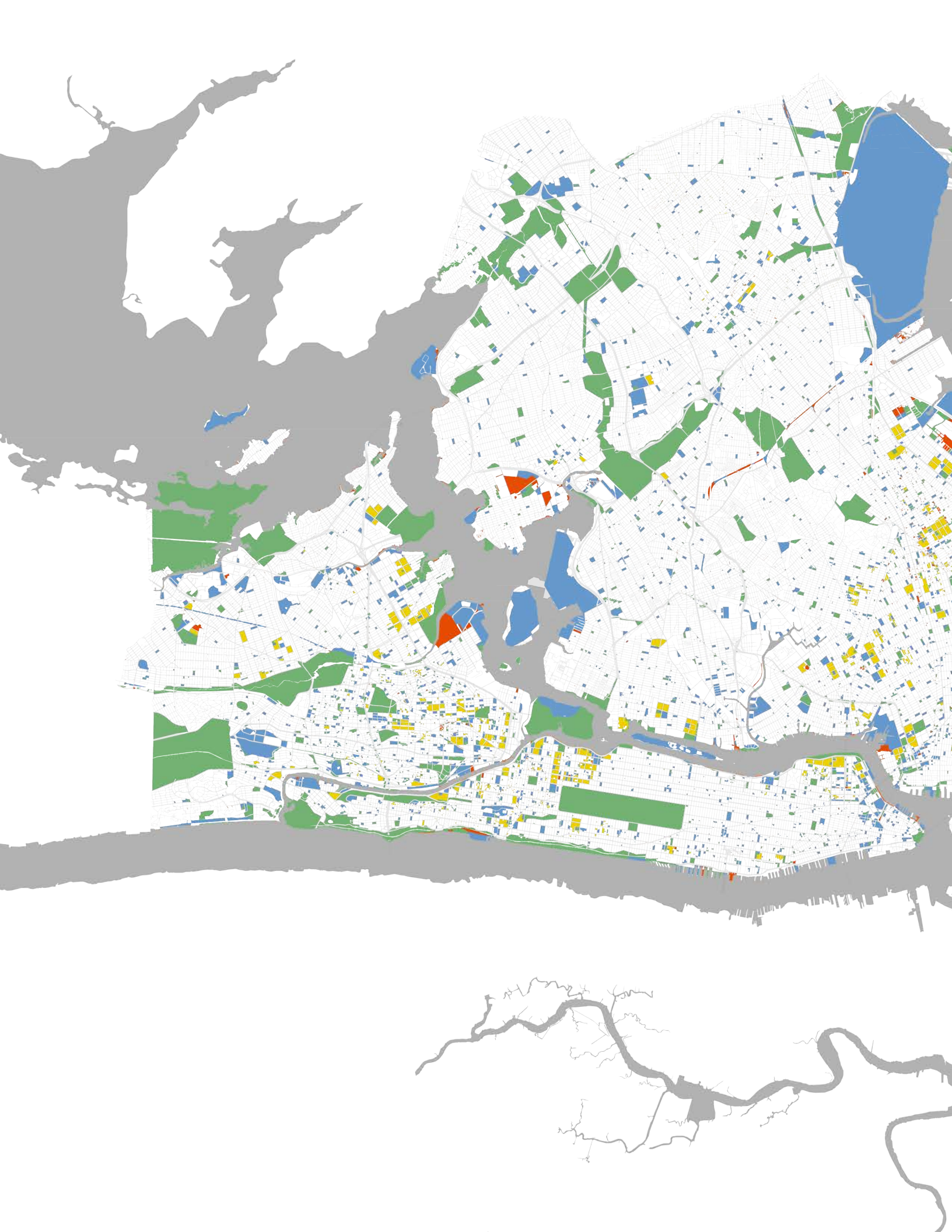

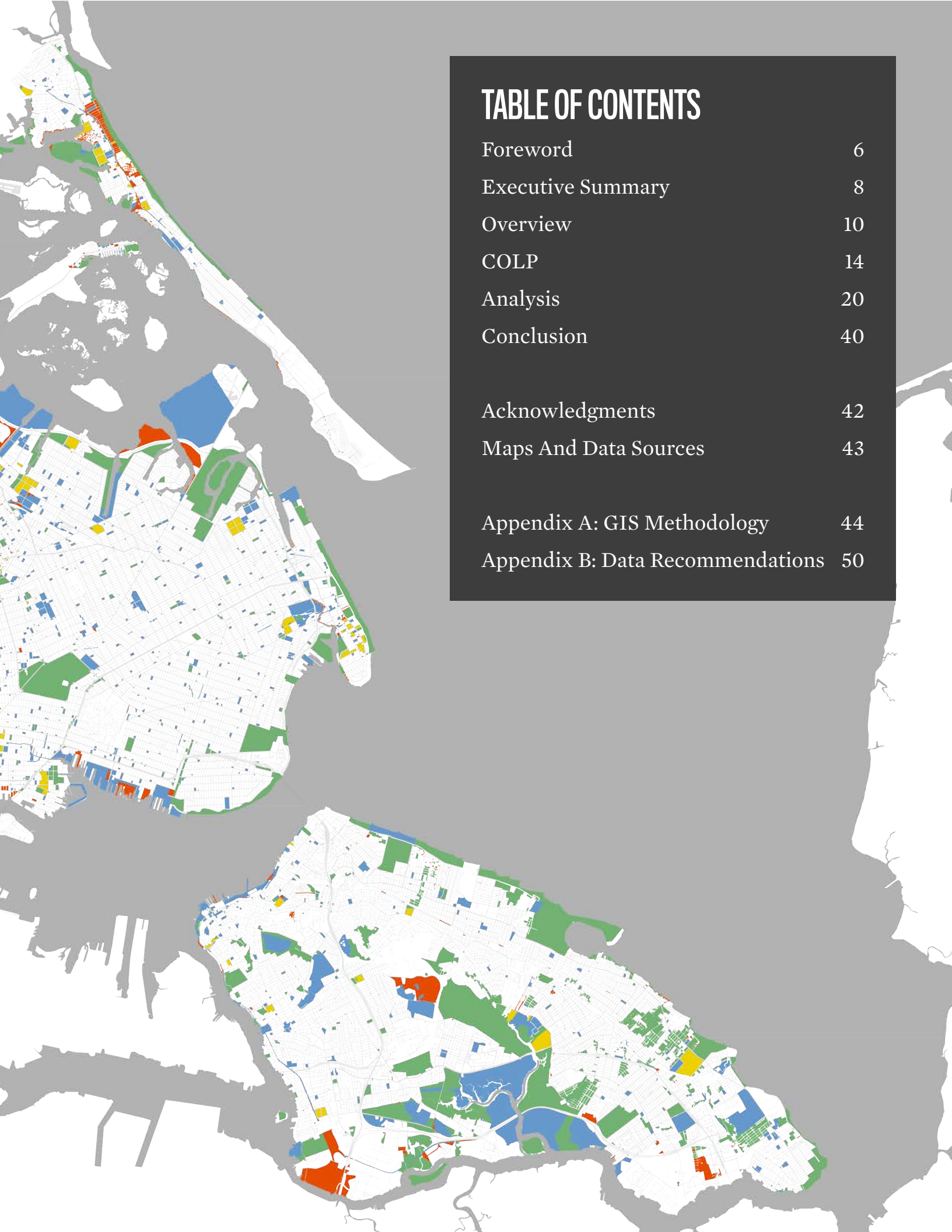

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FOREWORD

The Municipal Art Society of New York (MAS) is pleased to present this report, *Public Assets: City-Owned and Leased Properties (Public Assets)*, and its accompanying online mapping tool on the MAS website (www.mas.org/colp).

Why is this important?

Public Assets provides easily accessible information about 14,000 city-owned properties across the five boroughs. Totaling approximately 43,000 acres, they comprise an area comparable to the size of Brooklyn (which, if an independent city, would be the fourth largest in the United States!). These properties range from large to small and are located in the center of neighborhoods as well as along the city's waterfronts and borders. They are part of New York City's residential, commercial, and industrial fabric and are integral to the character, development, and sustainability of the city today and in the future.

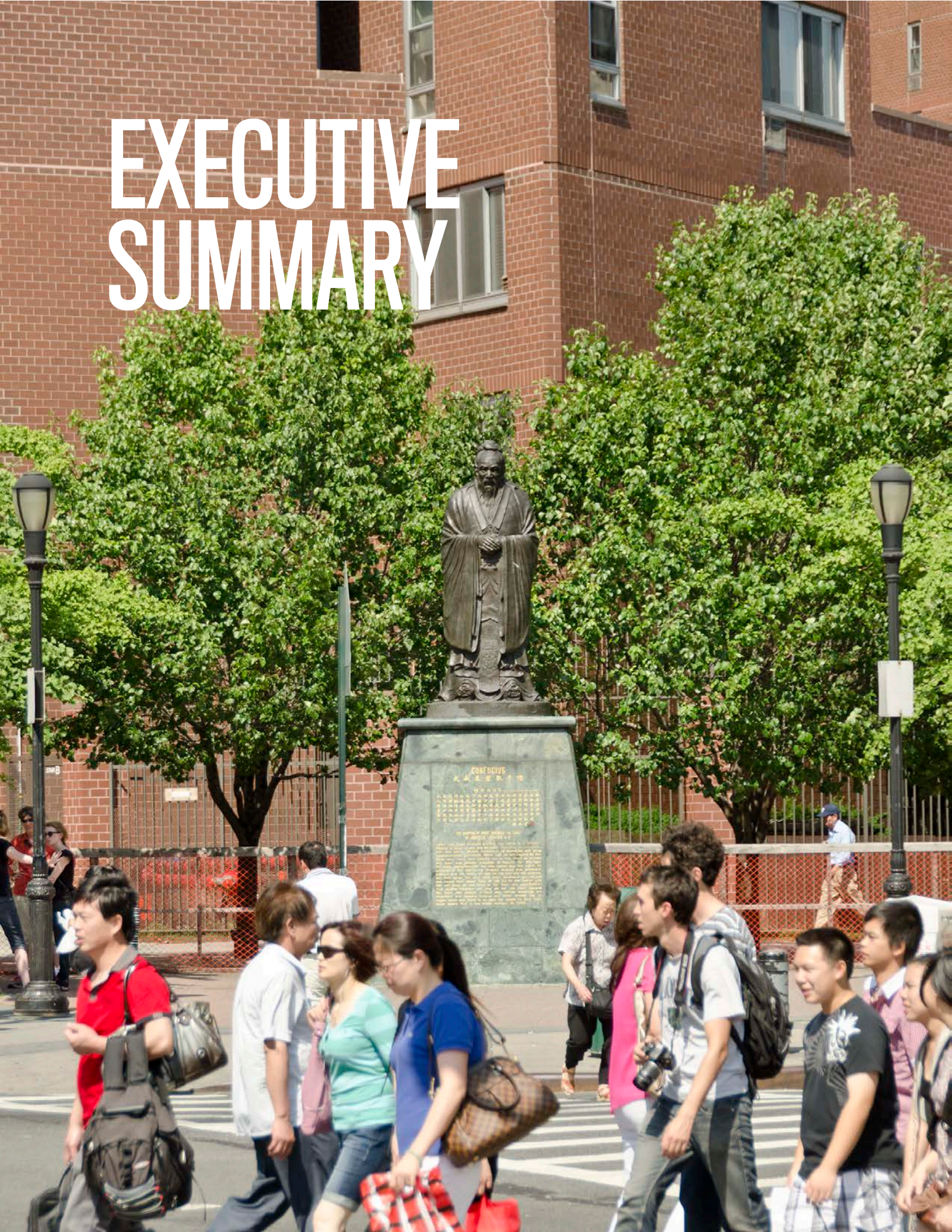
Who should use this information?

New Yorkers, municipal agencies, developers, researchers, students, planners, designers, preservationists, environmentalists, and city visitors – in other words, anyone interested in the city of today and tomorrow.

Forty-three thousand acres is an extraordinary amount of land, for New York City or any other city. As we confront the challenges of rising population and density, climate change, infrastructure development, and social equity, *Public Assets* provides a detailed view of city-owned land – a key to understanding the city and achieving its potential.

Gina Pollara
President

EXECUTIVE SUMMARY



The City of New York owns or leases over 14,000 properties, encompassing an area approximately the size of Brooklyn. Given the extent of these holdings, planning practitioners, decision makers, and citizens need the means to understand how to maximize their public benefit and equitable potential.

The Municipal Art Society of New York (MAS) presents *Public Assets: City-Owned and Leased Properties (Public Assets),* a report and online mapping tool, to provide comprehensive land use, zoning, and geographic information derived from two city datasets, MapPLUTO™ and City Owned and Leased Properties 2014 (COLP). MAS envisions the release of *Public Assets* as the first step in an ongoing process designed to improve our public assets and contribute to a healthier, more dynamic, and inclusive New York City.

Public Assets presents a snapshot of how city-owned and leased properties relate to several key issues: the environment, infrastructure, landmarks, population, and neighborhood rezonings.

City-owned and leased properties are underutilized.

22% are classified as having no current use, accounting for approximately 1,800 acres, an area more than double the size of Central Park.

City-owned and leased properties are at a high risk for flood events now and in the future.

64% or 26,786 acres, are either completely or partially located within the 100-year floodplain. Sixty-six percent of the surface area will face high risk of coastal flooding hazards by 2050. Seventy-five percent are within the city and state-regulated coastal zone.

City-owned and leased properties protect wildlife.

~5% are either themselves designated tidal wetlands or partially within a tidal wetland.

City-owned and leased properties are toxic and cause pollution.

247 are fully or partially designated as New York State environmental remediation sites, 87 of which are enrolled in a NYSDEC State Superfund or Brownfield Cleanup program. Sixty percent are located within combined sewer areas.

City-owned and leased properties are accessible.

64% are within one-half mile of a subway station and 90 percent are within one-fourth mile of a bus stop.

City-owned and leased properties are historic.

665 fall under the purview of the Landmarks Preservation Commission, 47 of which are characterized as having no current use.

City-owned and leased properties are located in low density, low income areas.

71% are located in census tracts less dense than the citywide average. 6,969 (totaling 15,511 acres) are located within census tracts with low median household incomes.

City-owned properties provide opportunities for redevelopment.

~8% Approximately eight percent are located in rezoning areas, including 1,864 individual parcels consisting of 2,500 acres. Twenty-two percent do not have a current use.

The extent of New York's 14,000 city-owned and leased properties is a veritable "sixth borough." Examining these holdings and evaluating opportunities for their protection, enhancement, and development should be a priority of this and any future administration.

MAS believes that true equity in the city's planning and land-use decisions can only be achieved through an informed and engaged public. *Public Assets* is a measurable step toward achieving that goal.

OVERVIEW

As residents and taxpayers of New York City, we depend on the effective management, protection, and enhancement of what is collectively ours—parks, open space, libraries, museums, streetscapes, infrastructure, views, and other intangible resources.

In an effort to facilitate informed civic engagement, decision-making, and planning regarding New York City's public land, The Municipal Art Society of New York (MAS) presents *Public Assets: City-Owned and Leased Properties (Public Assets),* a report and accompanying online tool on the MAS website (www.mas.org/colp). This report and online tool highlight key data integrated into 15 interactive maps concerning public property including typology, agency jurisdiction, zoning regulations, environmental conditions, municipal infrastructure, historic landmarks, population, income, and neighborhood rezoning plans applicable to these sites.

The City of New York manages over 14,000 properties covering approximately 43,000 acres across the five boroughs. Collectively, these properties encompass an area comparable to the size of Brooklyn. Given the extent of these public holdings, the information included in this report and the online tool is designed to provide decision makers, planning practitioners, and the public with the necessary means to identify opportunities for improving, protecting, and utilizing city-owned and leased property. Ultimately, these resources can help realize the maximum public benefit and full equitable potential of these properties.

The *Public Assets* report and online tool are the first steps toward what MAS envisions as an ongoing, collaborative process that will improve stewardship of our public assets and contribute to a healthier, more dynamic, and inclusive New York City.

Approach

The information included herein is derived from two data sources provided by New York City: MapPLUTO™ V15.1. and City Owned and Leased Properties 2014 (COLP dataset).

MapPLUTO™

MapPLUTO™ is available through the Department of City Planning (DCP) and provides comprehensive land use and geographic data at a tax lot level in ESRI ArcGIS shape and database table formats. MapPLUTO™ merges the city's PLUTO tax lot data with tax lot features from the Department of Finance's Digital Tax Map (DTM).[1]

COLP Dataset

The COLP dataset is required under the City Charter[2] and is produced in conjunction with the *Citywide Statement of Needs*,[3] as well as a map of uses on city-

1 http://www1.nyc.gov/site/planning/data-maps/open-data.page

2 New York City Charter Section 204

3 *Citywide Statement of Needs* (SON) is used by the City Administration to align its particular policies, for example, reducing inequalities, providing affordable housing, leveraging investments in neighborhood infrastructure. Along with the Criteria for the Location of City Facilities (the Fair Share Criteria) also available on the Department's website, the SON is part of a

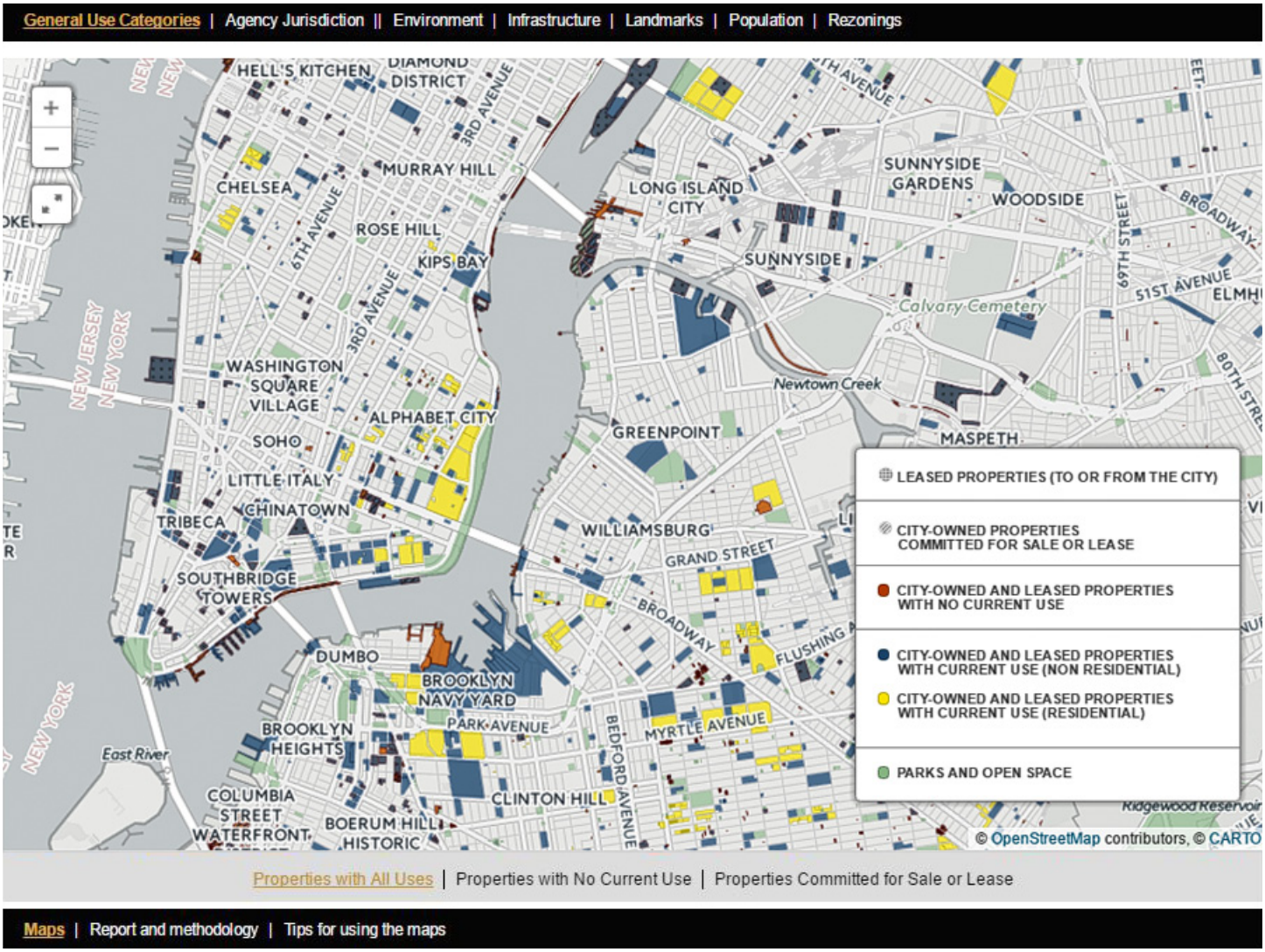


Figure 1. The online tool (mas.org/colp)

owned and leased properties presented in Zoning and Land Use (ZoLa), DCP's public zoning and land use mapping application.[4]

The dataset has been produced from the *Integrated Property Information System* (IPIS), a real estate database maintained by the Department of Citywide Administrative Services (DCAS) and can be downloaded as a spreadsheet through the New York City Open Data website. This dataset is also available through DCP's BYTES of the BIG APPLE webpage.[5] Although both versions contain the same data, the DCP COLP dataset classifies attribute information by individual cells that allow easier sorting and analysis. Therefore, the information in this report and online tool is derived from the DCP COLP dataset (COLP 2014 v2 042315).

According to the COLP dataset, the city and its related authorities currently own or lease a diverse inventory of over 14,000 properties with more than 220 specific uses.[6] The dataset lists city properties according to types of use, location, and other information. The inventory continually changes as the government acquires property for new and expanding facilities and disposes of surplus properties. The use of a property indicated in the dataset may also change as needs within an agency shift or as one agency replaces another in the management of a given site.

planning process in which communities are informed at the earliest possible stage of the City's needs for facilities and the specific criteria for selecting the locations of those facilities.

4 https://www1.nyc.gov/site/planning/about/publications/colp.page

5 NYC DCP Bytes of the Big Apple http://www1.nyc.gov/site/planning/data-maps/open-data.page

6 Although DCP's website (https://www1.nyc.gov/site/planning/about/publications/colp.page) refers to 17,000 properties, this report references 14,003 properties based on information included in the downloadable dataset COLP 2014 v2 042315 (DCP).

Online Tool Capability

Merging the MapPLUTO™ and COLP datasets enables the online tool to provide a broad range of data within one source. The combined dataset can provide comprehensive information about city-owned and leased properties on an array of topics, including site utilization (i.e., current use, underutilized, or vacant), city agency jurisdiction, properties committed for sale or lease, and zoning regulations and development restrictions applicable to each property.

COLP Analysis Datasets

Information on city-owned and leased properties is presented in conjunction with five primary categories, listed below and described in further detail in Part 2, and 12 dataset layers from city, state and federal sources.

Environment

- 2007 FIRMs 100-Year Floodplain - Federal Emergency Management Administration (FEMA)
- 2050 Projected Sea Level Rise 100-year Floodplain - New York City Panel on Climate Change (NPCC)
- Designated Freshwater and Tidal Wetlands - New York State Department of Environmental Conservation (NYS DEC)
- Remediation Sites - New York State Department of Environmental Conservation (NYS DEC)
- Coastal Zone Boundary - Department of City Planning and New York State Department of State (DCP and NYS DOS)

Infrastructure

- Sewer Infrastructure - Open Sewer Atlas NYC (OSA NYC)
- Subway Access - New York City Department of Information Technology & Telecommunications (DOITT)

Landmarks

- Landmarks and Historic Districts - New York City Landmarks Preservation Commission (LPC)

Population

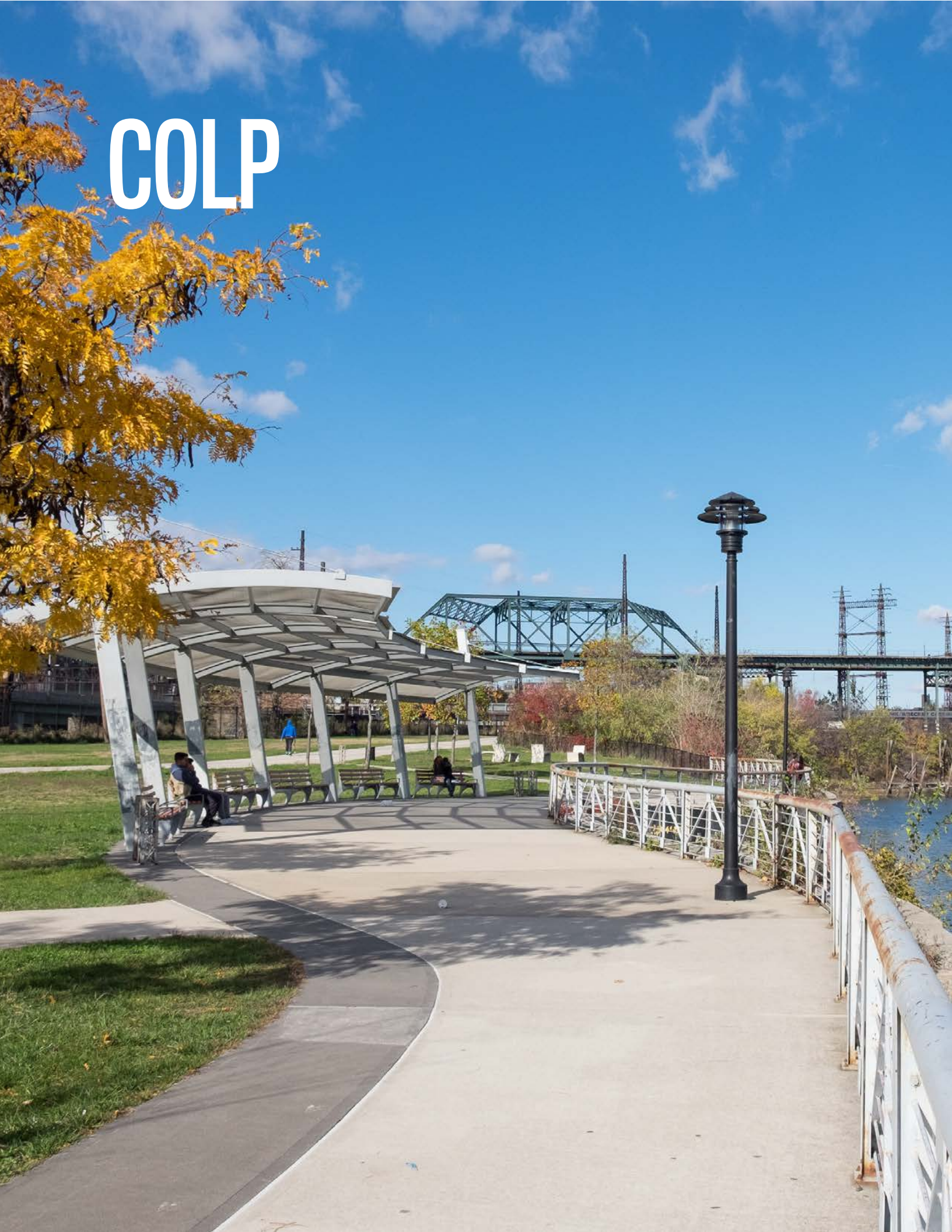
- Median Household Income by Census Tracts - U.S. Census American Community Survey 5-year Estimates for 2010 and 2014 (ACS)
- Number of Residents by Census Tracts - (ACS)

Neighborhood Rezonings

- Planning for Livability, Affordability, Community, Economic Opportunity and Sustainability Initiative - (DCP)
- Neighborhood Studies - New York City Economic Development Corporation (NYC EDC)

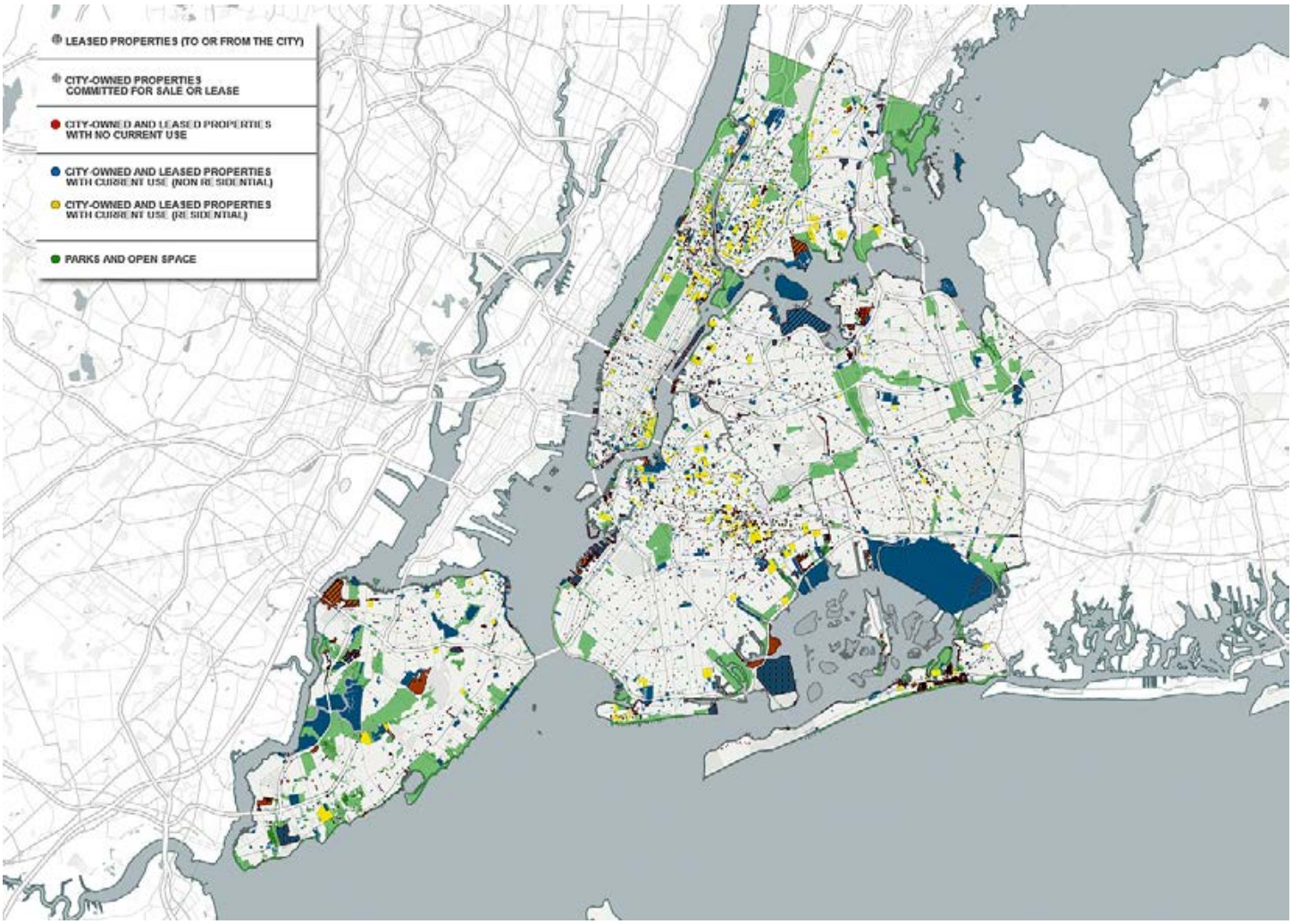
See the methodology section in Appendix A for additional technical information regarding geographical information systems (GIS) indexed in this report and the utilization of datasets described herein. Appendix B includes recommendations for improvements to city datasets.

COLP



New York City government manages over 14,000 properties. These properties account for approximately 43,000 acres, an area comparable to the size of Brooklyn, excluding roads, bridges, and highways. As a conceptual "sixth borough," city-owned and leased properties account for almost one-third of New York City's land area.

Figure 2. General Uses of City-Owned and Leased Properties



General Use

As shown in Table 1 and Figure 2, the COLP dataset categorizes properties into four general groups: (i) properties with no current use, (ii) properties with a residential use, (iii) properties with a current use that is not residential and (iv) property used for parks and open space.

As shown in Figure 9, the general use categories are divided into 19 use types, which are further divided into 223 individual use codes.

Properties Classified as Having No Current Use

According to the COLP dataset, approximately 22 percent of city-owned and leased properties are classified as having no current use. Properties under this classification account for approximately 1,800 acres, an area more than double the size of Central Park. Approximately one-third of these properties have an area of less than 1,000 square feet, which greatly restricts their development potential as individual lots.

Properties with no current use are further classified into four categories: (i) non-residential structure with no use, (ii) vacant land with no use, (iii) land under water with no use, and (iv) not determined. With a total of 2,726 lots, the majority of properties with no current use are classified as "vacant land with no use."

The COLP dataset classifies 78 properties as a nonresidential structure with no use. Figure 3 shows a property in this classification, the former Rockaway Court House in Queens. This property is currently managed by DCAS. 2,726 properties are vacant land with no use. Figure 4 is an example of a property in this classification in the Brownsville neighborhood of Brooklyn, also managed by DCAS. 76 properties are classified as land under water with no use. Figure 5 shows a property in this classification, adjacent to FDR Drive in Lower Manhattan. This property is managed by the Department of Small Business Services (SBS). The COLP dataset classifies 282 properties having no current use as "not determined." Figure 6 shows a property, highlighted in red, with this classification in East New York, Brooklyn. It is currently managed by the Department of Housing Preservation and Development (HPD).

Properties Committed for Sale or Long-Term Lease

The COLP dataset includes information on properties that are committed for sale or long-term lease (defined by DCAS as any lease with a term of one or more years). 1,727 properties totaling approximately 1,700 acres are committed for sale or long-term lease. 1,256, or 70 percent, of these properties are classified as having no current use. 253 properties, approximately 15 percent, have a residential use, and 218, approximately 13 percent, are categorized as a current use other than residential.

Properties committed for sale or long-term lease with no use are distributed throughout the city. However, some areas contain disproportionate concentrations, a scenario that could affect future development in certain neighborhoods. As an example, Figure 7 shows a high concentration these properties in Harlem, Manhattan. Figure 8 shows these types of properties in the Brooklyn neighborhoods of Brownsville and East New York.

Table 1. City-Owned and Leased Properties by General Use Categories

General Use Category	Number of Properties	Area in Square Feet	Area in Acres
Properties with no current use	3,162	79,784,531	1,832
Properties with current use (non residential)	4,030	724,791,642	16,639
Properties with current use (residential)	1,371	102,746,371	2,359
Parks and open space	5,440	947,679,998	21,756
Total**	**14,003**	**1,855,002,543**	**42,585**

Source: COLP 2014 v2 042315 NYC Department of City Planning

*With the exception of Residential, No Use, Final Commitment-Disposition, Lease Out, all properties with a current use are included in the general use types from the list below. The City's dataset further divides the general use types into 223 use codes, the majority of which are also classified under properties with a current use.

**Totals have been rounded to the nearest whole number.

Figure 3. Non Residential Structure with No Use. Abandoned courthouse. Rockaway, Queens (Source: Google Street View)

Figure 4. Vacant Land with No Use. Brownsville, Brooklyn (Source: Google Street View)

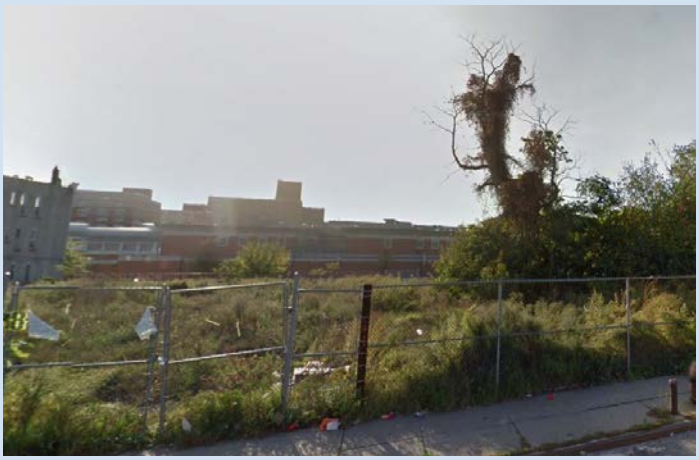


Figure 5. Land Under Water with No Use (highlighted in yellow). Two Bridges, Lower Manhattan (Source: Google Maps)

Figure 6. Not determined (highlighted in red). Vandalia Avenue, East New York, Brooklyn (Source: Google Maps)

Figure 7. Properties with No Use and Committed for Sale or Lease. Harlem, Manhattan

Figure 8. Properties with No Use and Committed for Sale or Lease. Brownsville and East New York, Brooklyn

Figure 9. Uses of City-Owned and Leased Properties

4 General Use Categories

- PROPERTIES WITH NO CURRENT USE
- PROPERTIES WITH CURRENT USE (NON RESIDENTIAL)
- PROPERTIES WITH CURRENT USE (RESIDENTIAL)
- PARKS AND OPEN SPACE

19 Use Types

- OFFICE
- EDUCATIONAL FACILITY
- CULTURAL FACILITY
- RECREATIONAL FACILITY
- PUBLIC SAFETY FACILITY
- HEALTH FACILITY
- SOCIAL SERVICE FACILITY
- TRANSPORTATION / PUBLIC PARKING FACILITY
- INDOOR MAINTENANCE / STORAGE FACILITY
- OUTDOOR MAINTENANCE / STORAGE FACILITY
- MATERIAL PROCESSING FACILITY
- CRIMINAL JUSTICE FACILITY
- MISCELLANEOUS USE
- RESIDENTIAL
- NO USE
- FINAL COMMITMENT - DISPOSITION
- LEASE OUT

223 Use Codes

OFFICE
Agency Executive Office
Field Office
Field Office - For Agency Personnel
Field Office - For Public
Computer Facility
Telecommunications Facility
Office - Education
Other Office

EDUCATIONAL FACILITY
Public School
Elementary School
Intermediate School
Academic High School
Vocational High School
Alternate High School
Special Education School
Early Childhood Center
Educational Skills Center
Higher Education
Community College
Senior College
Graduate/Professional School
Other College/University
Other School

CULTURAL FACILITY
Museum/Gallery
Theater
Library
Main Library
Branch Library
Specialized Library
Other Library
Zoo/Aquarium
Botanical Garden
Other Cultural Facility

PUBLIC SAFETY FACILITY
Police Station
Firehouse
Emergency Medical Station
Ambulance Station
Other Public Safety Facility

RESIDENTIAL
Residential Structure - Occupied
Residential Structure - Unoccupied

NO USE
Non-Residential Structure - No Use
Vacant Land - No Use
Water Condition - Not Usable
Not Determined

RECREATIONAL FACILITY
Sitting Area
Neighborhood Sitting Area
Public Place/Plaza
Mall/Triangle/Highway Strip/Park Strip
Playground/Sports Area
Playground
Playing Field
Court (Sports)
Accessory Play Area
Other Playground/Sports Area
Park
Neighborhood Park
Community Park
Regional Park
Special Recreational Facility - Indoor
Recreational Center/Gymnasium
Indoor Pool
Indoor Skating Rink
Public Bath
Other Special Recreational Facility - Indoor
Special Recreational Facility - Outdoor
Outdoor Pool
Beach
Marina
Golf Course
Outdoor Skating Rink
Amusement Area
Stadium
Other Special Recreational Facility - Outdoor
Open Space
Natural Area/Wetland/Wildlife Refuge
Community Garden
Inactive Landfill
Undeveloped Open Space
Other Open Space
Other Recreational Facility

MISCELLANEOUS USE
Training Facility
Training Facility - Indoor/Classroom
Training Facility - Outdoor
Training Facility - Indoor/Outdoor
Testing Facility
Testing Laboratory
Hazardous Materials Testing
Other Testing Facility
Cemetery
Commercial Market
Wholesale Food Market
Other Commercial Market
Antenna

SOCIAL SERVICE FACILITY
Temporary Housing for Individuals
Temporary Housing - Adult
Temporary Housing - Adult Men
Temporary Housing - Adult Women
Temporary Housing - Youth
Temporary Housing - Special Population
Other Temporary Housing For Individuals
Temporary Housing For Families
Temporary Housing - Family Shelter Tier I
Temporary Housing - Family Center Tier II
Other Temporary Housing For Families
Transitional Housing
Transitional Housing - Adult
Transitional Housing - Adult Men
Transitional Housing - Adult Women
Transitional Housing - Special Population
Transitional Housing - Youth
Transitional Housing - Family
Other Transitional Housing
Residential Facility For Children
Agency Operated Boarding Home
Agency Operated Group Home
Group Residence For Children
Other Residential Facility For Children
Non-Residential Social Service Facility
Day Care Center
Senior Citizen Center
Community Center
Other Non-Residential Social Service Facility
Social Service Field Operation
Income Maintenance Center
Family Service Center
Food Stamp Office
Medical Services Office
Child Welfare Office
Other Social Service Field Operation
Other Social Service Facility

CRIMINAL JUSTICE FACILITY
Courthouse
Correctional Facility
Prison
Jail
Other Secure Detention Facility
Post-Detention Facility
Other Detention Facility
Probation Facility
Other Criminal Justice Facility

LEASE OUT
Long Term Lease Out
Long Term Lease Out - Commercial/Office
Long Term Lease Out - Industrial
Long Term Lease Out - Commu

TRANSPORTATION / PUBLIC PARKING FACILITY
Waterfront Transportation Facility
Ferry Terminal
Pier - Maritime Use
Pier -No Use
Other Waterfront Transportation Facility
Airport
Heliport
Bus Station
Rail Facility - Intra-city/Freight
Rail Terminal
Rail Line
Other Rail Facility
Transit Facility
Transit Way
Transit Substation
Transit Yard
Other Transit Facility
Municipal Parking
Municipal Parking - Indoor
Municipal Parking - Outdoor
Road/Highway
Other Transportation Facility

INDOOR MAINTENANCE / STORAGE FACILITY
Maintenance
Vehicle Maintenance
Facilities Maintenance
Trade Shops
Other Maintenance
Indoor Agency Parking
Indoor Storage
Indoor Storage - Bulk Material
Indoor Storage - Equipment
Indoor Storage - Supplies
Indoor Storage - Printed Material/Supplies
Other Indoor Storage
Combined Maintenance/Storage Facility
Other Indoor Maintenance/Storage Facility

OUTDOOR MAINTENANCE / STORAGE FACILITY
Outdoor Storage
Outdoor Storage - Bulk Material
Outdoor Storage - Equipment
Other Outdoor Storage
Outdoor Parking - Agency Use
Outdoor Parking - Agency Vehicles
Outdoor Parking - Employees
Outdoor Parking - Clients
Outdoor Parking - Tow Pound
Fueling Facility
Other Outdoor Maintenance/Storage Facility

Jurisdiction: Who Manages What?

City-owned and leased properties are managed by several city agencies. As shown in Table 2, 75 percent of these properties are managed by the Department of Parks and Recreation (DPR), Department of Citywide Administrative Services (DCAS), Department of Education (DOE), Department of Housing Preservation and Development (HPD), and the New York City Housing Authority (NYCHA). The remaining 25 percent are managed by the Department of Environmental Protection (DEP), Department of Small Business Services (SBS), Metropolitan Transportation Authority (MTA), New York Police Department (NYPD), and the Fire Department of New York City (FDNY), among others.

Department of Citywide Administrative Services (DCAS)

DCAS oversees the purchase, sale, and lease of properties and the transfer of land to other city agencies or the private sector. DCAS manages 14 percent of city-owned and leased properties. More than 80 percent of these properties are classified as no use with a non-residential structure.

Department of Education (DOE)

DOE is the largest school district in the United States, serving 1.1 million students in over 1,800 schools. DOE manages approximately 1,500 city-owned properties totaling 3,600 acres. Ten percent of city-owned and leased properties are managed by DOE. With the exception of two parcels, which do not have a current use, all properties under DOE management are classified as academic, office, or recreational uses.

Department of Housing Preservation and Development (HPD)

HPD is responsible for promoting and preserving affordable housing. The agency manages 10 percent of city-owned and leased properties. Almost 70 percent of property managed by HPD is classified as having no current use. Seventeen percent is used for residential purposes. Over 95 percent of properties under HPD's jurisdiction are committed for sale or long-term lease.

New York City Housing Authority (NYCHA)

NYCHA manages almost 9 percent of the city's owned and leased properties, over 85 percent of which are used for residential purposes (i.e., contain an in-use residential structure). The remaining properties are classified as open space, outdoor parking, or recreation centers.

Department of Parks and Recreation (DPR)

Over 30 percent of the city's owned and leased properties are managed by the DPR. The agency manages approximately 15,700 acres of parks, playgrounds, and open space, an area equivalent in size to Manhattan. Many large parcels, including Central Park in Manhattan, Van Cortlandt Park and Pelham Bay in the Bronx, Flushing Meadows Corona Park in Queens, and others are co-managed by a second agency, usually the Department of Cultural Affairs (DCLA), or in some cases the Department of Sanitation (DSNY) and FDNY.

Other Agencies

The remaining 25 percent of city-owned and leased properties, accounting for approximately 14,500 acres, are managed by DEP, SBS, MTA, and FDNY, among many others.

Table 2. City-Owned and Leased Properties by Agency Jurisdiction and General Use Categories

Agencies	All Properties	No Current Use	In Use (Non-Residential)	In Use (Residential)	Acres
Department of Citywide Administrative Services	1,966	1,679	287	0	5,729
Department of Education	1,499	2	1,497	0	3,590
Department of Housing Preservation and Development	1,487	1,050	177	260	702
New York City Housing Authority	1,297	4	188	1,105	2,345
Department of Parks and Recreation	4,374	1	4,373	0	15,758
Other Agencies	3,380	426	2,948	6	14,460
Total	14,003	3,162	9,470	1,371	42,585

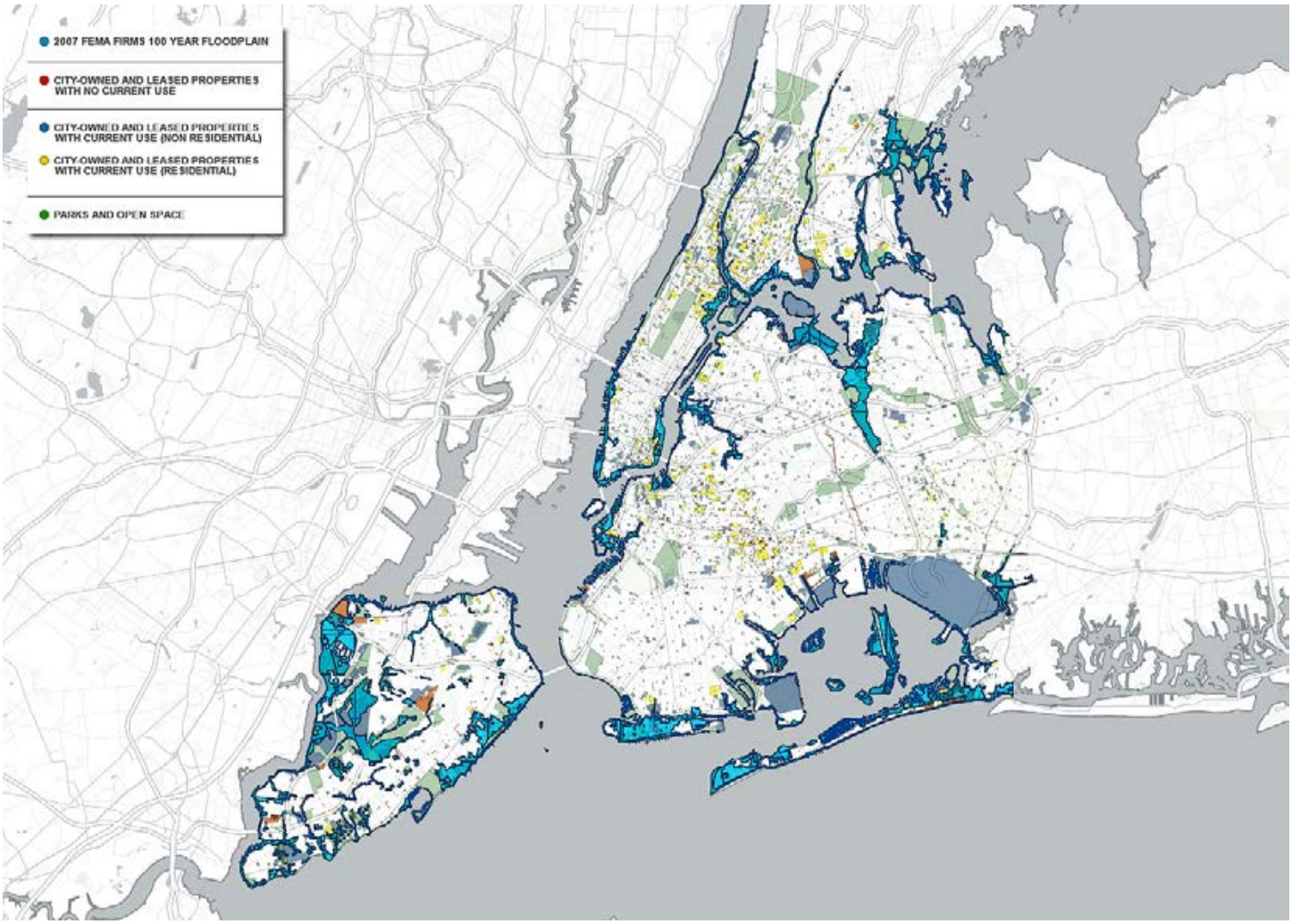
Source: COLP 2014 v2 042315 NYC Department of City Planning

ANALYSIS


ENTRANCE
SUBWAY ENTRAN
Chambers Street Station
J Z 4 5 6
Elevator to 4 5 6 at
Centre St & Chambers St
Enter with or buy MetroCard at all
times at the agent across Centre St

Merging the COLP and MapPLUTO™ datasets enables the online tool to provide a broad range of data within one source. The following analysis demonstrates how it can be used to evaluate site-specific land uses and development scenarios, identifies development trends, or recognizes potential development opportunities and restrictions for city-owned and leased property.

Figure 10. City-Owned and Leased Properties within 100-Year Floodplain (2007 FEMA FIRMs)



Environment

This section provides descriptions of the various data available in the MAS online tool covering a wide range of environmental factors, including FEMA's 100-year floodplain, the projected 2050 floodplain, State-regulated wetlands, remediation sites, and the coastal zone boundary.

100-Year Floodplain

FEMA provides Flood Insurance Rate Maps (FIRMs) that delineate areas at high risk for flood events. FEMA creates FIRMs through an extensive mapping process that considers topography and the types and strength of storms that have affected the region historically. Property owners with federally backed mortgages on buildings identified on FIRMs in the high-risk areas are required to purchase flood insurance.[7]

Flood hazard areas identified on the FIRMs are known as a Special Flood Hazard Area (SFHA). A SFHA is defined as the area that will be inundated by the flood event having a 1 percent chance of being equaled or exceeded in any given year. The 1 percent annual chance flood is also referred to as the base flood or 100-year flood. FIRMs also identify areas with moderate flood risk, defined as having a 0.2 percent annual chance of flood. Areas with moderate flood risk are also referred as the 500-year floodplain.

Flood insurance rates are currently based on the 2007 Effective FIRMs. However, these FIRMs have not been significantly updated since 1983. After the devastating effects of hurricanes Irene in 2011 and Sandy in 2012, FEMA issued updated Preliminary FIRMs which covered a much larger geography. In June 2015, New York City filed a technical appeal of the Preliminary FIRMs based on scientific and technical questions regarding FEMA's methodology and mapping.

In October 2016, FEMA announced that it agreed with the city's findings and that it would work to revise the Preliminary FIRMs and issue new maps that more accurately reflect current flood risk in the coming years. Until the new flood maps are issued, flood insurance rates in New York City will continue to be based on the 2007 Effective FIRMs.

According to the 2007 FIRMs and the COLP dataset, over 3,500 city-owned and leased properties are within or partially within the 100-year floodplain. These properties amount to 26,786 acres or 64 percent of all city-owned and leased acreage. Table 3 and Figure 10 show city-owned and leased properties within the floodplain by general use category. As shown, 50 percent of these properties are designated parkland, 42 percent are properties with a current use, and residential properties account for 2 percent.

2050 NPCC Projected Floodplain

The NPCC is an independent body that advises the city on climate risks and resiliency. NPCC informs the city's comprehensive climate policies, including its multilayered resiliency plan and sustainability initiatives. The NPCC works in partnership with the city, including the Mayor's Office of Recovery and Resiliency, the Mayor's Office of Sustainability, the Mayor's Office of Operations, and the Department of Health and Mental Hygiene.[8] In 2013, NPCC published the Climate Risk Information Report, which provided climate projections and information for NYC through 2100, including temperature, precipitation, and sea

7 NYC Flood Maps, http://www1.nyc.gov/site/floodmaps/index.page

8 http://www1.nyc.gov/office-of-the-mayor/news/122-15/mayor-de-blasio-releases-npcc-2015-report-providing-climate-projections-2100-the-first

Table 3. City-Owned and Leased Properties in FEMA 100-Year Floodplain by General Use Categories

General Use Category	Properties	Acres
Properties with no current use	941	1,445
Properties with a current use (non residential)	694	11,387
Properties with a current use (residential)	83	578
Parks and open space	1,850	13,377
Total	3,568	26,786

Source: FEMA and COLP 2014 v2 042315 NYC Department of City Planning

Table 4. City-Owned and Leased Properties within the 2050 Projected 100-year Floodplain by General Use Categories

General Use Category	Proeprties	Acres
Properties with no current use	1,189	1,316
Properties with a current use (non residential)	1,067	11,938
Properties with a current use (residential)	199	963
Parks and open space	1,686	13,886
Total	4,141	28,103

Source: NPCC and COLP 2014 v2 042315 NYC Department of City Planning

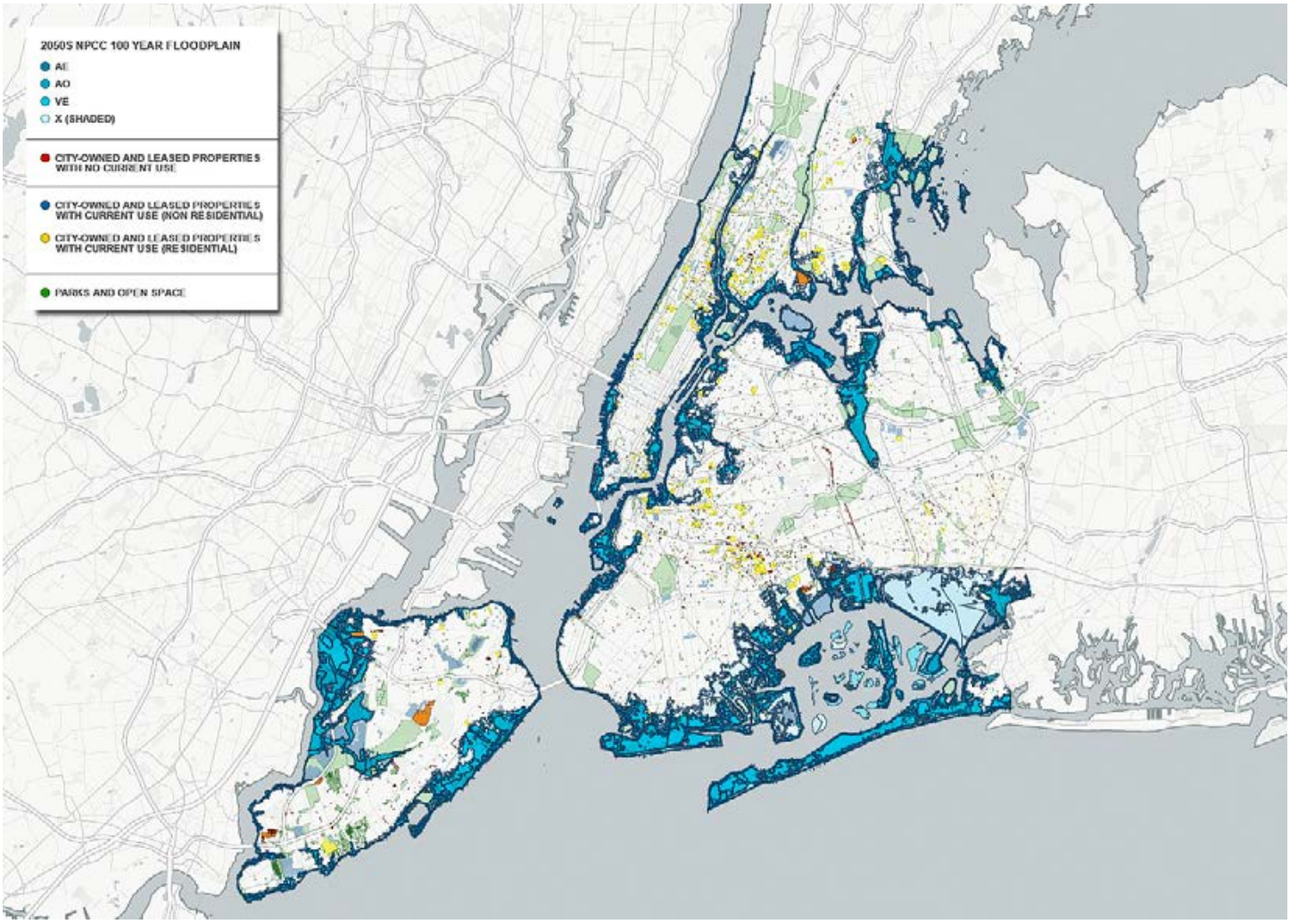


Figure 11. City-Owned and Leased Properties within the 2050 Projected 100-Year Floodplain (NPCC)

level rise.[9] The report also included information on climate change-related topics, such as public health risks in relation to extreme heat events and coastal storms and enhanced dynamic coastal flood modeling, which incorporate the effects of sea level rise.

The latest version of the report, released in 2015, describes the technical approach used to create the maps of projected future flood extents.[10] The maps incorporate the preliminary 2013 FIRMs and projections of sea level rise elevations for New York City for timeframes ranging from 2020 through 2100. Because it matches the period of implementation for most major coastal protection infrastructure, the information presented in this report and online tool uses the 2050 projection as a baseline.

As shown in Table 4, using NPCC's projections, 28,103 acres, or 66 percent, of the surface area of city-owned or leased properties would be within the floodplain by 2050 and would face a high risk of coastal-flooding hazards. Over 13,800 acres, or almost half of this land, would consist of parks or open space, which poses less of a risk to life and property than developed areas. According to NPCC's projections, almost 13,000 acres of land within the 2050 floodplain would consist of non-residential uses (schools, airports, storage facilities, office space, transportation facilities, and water pollution control plants) and residential uses, each of which are considered high-risk land uses.

Over 560 city-owned parcels with no current use located within the projected 100-year floodplain are committed for sale or long-term lease. This indicates that over 800 acres of undeveloped public land with a high future flood risk has undergone some level of planning for new development.

9 New York City Panel on Climate Change 2013 Report: http://www.nyc.gov/html/planyc2030/downloads/pdf/npcc_climate_risk_information_2013_report.pdf

10 New York City Panel on Climate Change 2015 Report Chapter 3: Static Coastal Flood Mapping

Table 5. City-Owned and Leased Properties within Tidal Wetlands by General Use Categories

General Use Category	Proeprties	Acres
Properties with no current use	159	716
Properties with a current use (non residential)	108	8,486
Properties with a current use (residential)	5	111
Parks and open space	400	7,742
Total	672	17,055

Source: NYSDEC and COLP 2014 v2 042315 NYC Department of City Planning

State-Regulated Wetlands

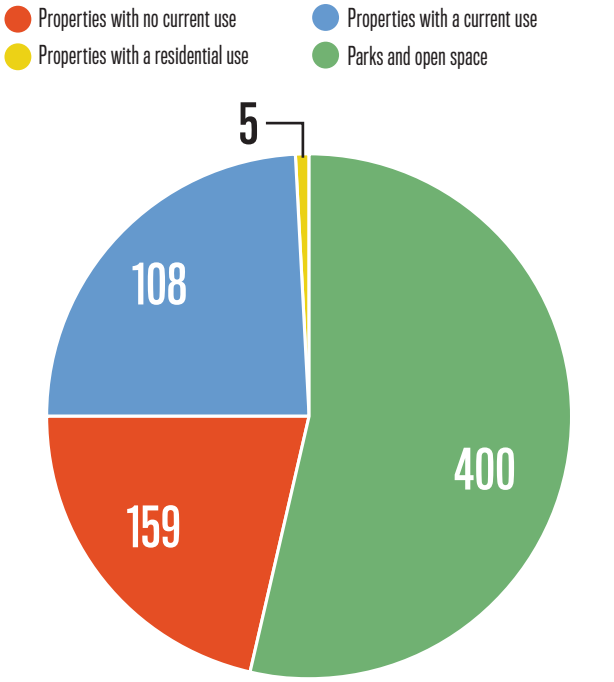
The *Public Assets* online tool provides information on Tidal Wetlands regulated by NYS DEC under its Tidal Wetlands - Land Use Regulations (6 NYCRR Part 661).[11]

Tidal Wetlands

DEC's Bureau of Marine Resources maintains the New York State Official Tidal Wetlands Inventory, a set of maps delineating and classifying all tidal wetlands in New York. These maps are used by DEC and other agencies to control and manage the development, filling, and dredging of areas in and around New York's tidal wetlands.[12]

Tidal wetlands are important ecosystems that provide flood protection, prevent coastal erosion, allow for groundwater recharge/discharge, improve water quality, and provide a habitat for wildlife species.[13] In New York City, most tidal wetlands are in the littoral zone, which includes lands under tidal waters no deeper than six feet at mean low water. The East River and Hudson River are examples of tidal wetlands. Jamaica Bay in Queens is an 18,000-acre wetland estuary and one of New York City's more valuable natural resources. The bay consists of numerous islands, waterways, meadowlands, and two freshwater ponds. The wetlands provide a unique environment for both wildlife preservation and urban recreation.

Figure 12. City-Owned and Leased Properties that Fully or Partially Contain a Tidal Wetland



Jamaica Bay hosts over 325 species of birds, 50 species of butterflies, and 100 species of finfish. The area is a favorite stop for migratory waterfowl and is an integral part of the larger regional ecosystem.[14]

Any disturbance, construction, reconstruction, and/or expansion of structures in tidal wetlands requires a discretionary permit from DEC. The categories of wetlands and the restrictions placed on activities in and around them are defined in detail in the New York State Tidal Wetland Permit Program.[15]

Tidal Wetland Adjacent Area

Within New York City, DEC also regulates activities in a tidal wetland adjacent area (TWAA), an area that extends up to 150 feet landward of the tidal wetland boundary to the seaward edge of a functional man-made structure (e.g., streets, bulkheads, riprap walls) or to an elevation of ten feet. Development in New York City is restricted to 20 percent impervious coverage within TWAAs, and all habitable structures larger than 100 square feet must be setback 30 feet from the wetland boundary.

11 NYSDEC regulates freshwater wetlands under its Freshwater Wetland Permit Requirements Regulations (6 NYCRR Part 663). Freshwater wetlands are distributed throughout the City, such as in Van Courtlandt Park in the Bronx, Flushing Meadow/Corona Park and College Point in Queens, Dyker Beach Park in Brooklyn, and large concentrations in Staten Island and other areas. The MAS online tools provide maps and data regarding freshwater wetlands. However, because they are more prevalent and as such, more likely to affect development of city-owned and leased property, this report concentrates on tidal wetlands.

12 http://www.dec.ny.gov/lands/4940.html

13 EPA Region 5 Wetlands Supplement: Incorporating Wetlands into Watershed Planning

14 https://www.nycgovparks.org/parks/jamaica-bay-park

15 NYS DEC Tidal Wetlands Permit Program: http://www.dec.ny.gov/permits/6359.html

City-Owned and Leased Land and Tidal Wetlands

The MAS online tool shows that almost 5 percent of city-owned and leased properties are either themselves designated tidal wetlands or partially within a tidal wetland[16]. As shown in Figure 12 and listed in Table 5, 400 properties, covering an area of 7,742 acres, are classified as parkland and contain a tidal wetland. 159 parcels, or 716 acres of properties classified as having no current use, are themselves tidal wetlands or partially contain tidal wetlands. 8,482 acres of properties classified as having a current use are within a wetland. These properties primarily include John F. Kennedy International Airport and LaGuardia Airport in Queens, Rikers Island Correction Center in the Bronx, Floyd Bennett Field and the Pennsylvania Ave Landfill in Brooklyn, and the Freshkills Landfill in Staten Island.

Remediation Sites

Environmental remediation regulation is also under DEC's jurisdiction. DEC defines an environmental remediation site or brownfield site as a property that contains a contaminant at levels exceeding state soil cleanup objectives or other health-based or environmental standards, criteria or guidance adopted by DEC based on the use of the site. Remediation sites are regulated by DEC's Division of Environmental Remediation (DER) under its Environmental Cleanup & Brownfields Program. Under this program, DEC promotes and regulates environmental cleanup and safe brownfield redevelopment throughout the city.[17]

State Superfund Program

The State Superfund Program is a system for identifying, investigating, and cleaning up sites where consequential amounts of hazardous waste may

16 Estimate does not include the following categories: Adjacent Area and Littoral Zone

17 NYS DEC Brownfield and State Superfund Programs: http://www.dec.ny.gov/chemical/84286.html

Figure 13. New York State Remediation Sites and City-Owned and Leased Properties

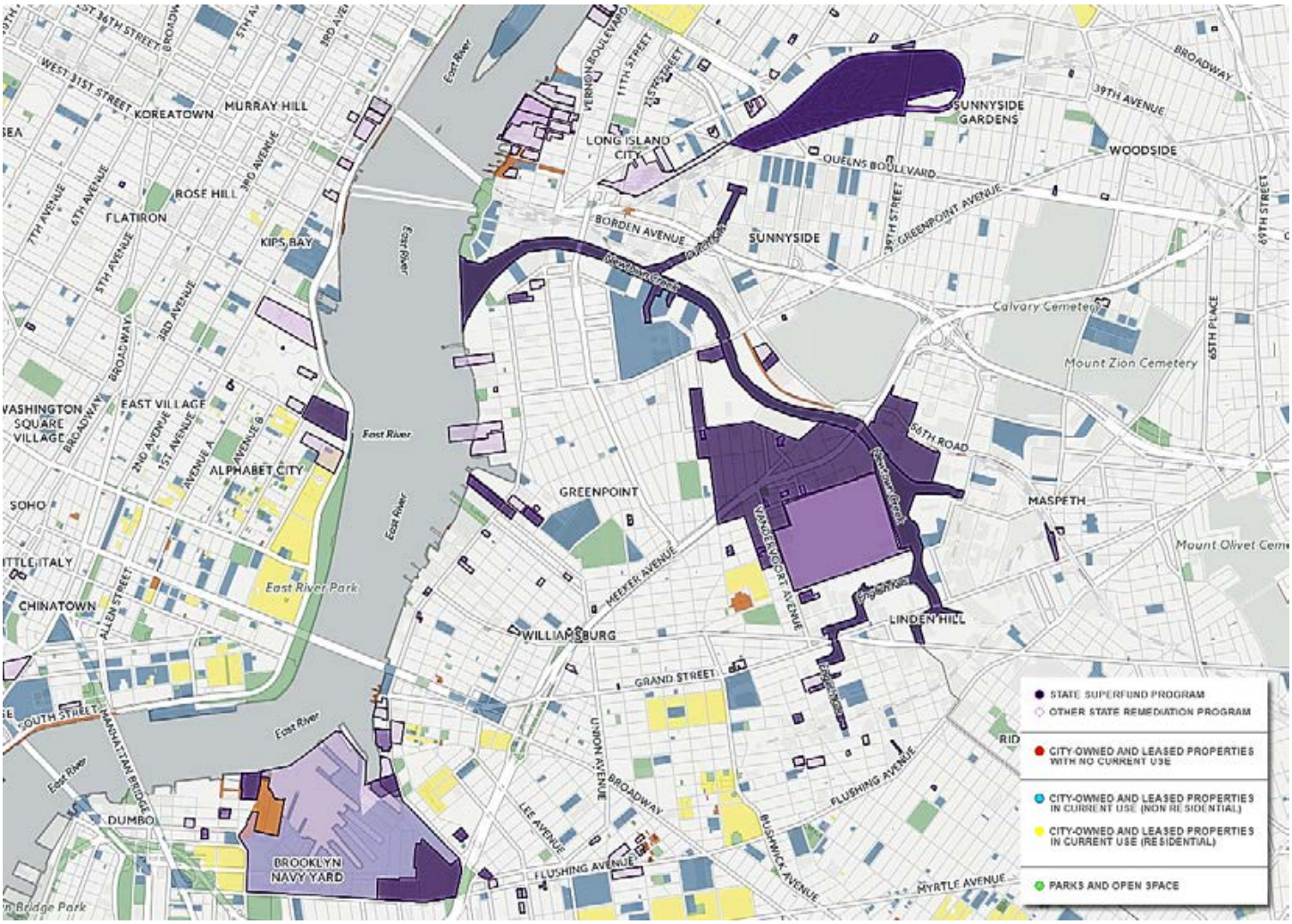
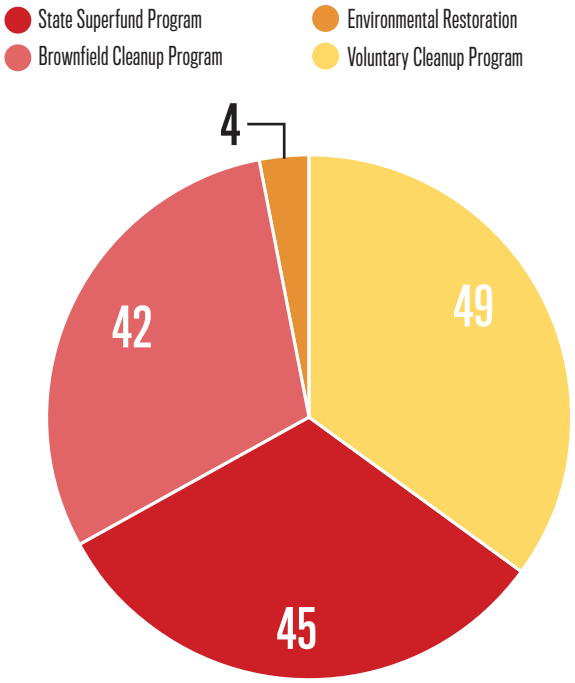


Figure 14. City-Owned and Leased Properties Fully or Partially Designated as a New York State Remediation Site



exist. Following an environmental investigation (also known as site characterization), properties under the program are classified to determine the required actions for the cleanup. The classifications range from Class 1, which pertains to sites that cause or present an imminent danger, to Class 5, which indicates a site has been properly closed and does not require additional maintenance.

For sites where responsible parties cannot be found or are unable or unwilling to fund an investigation, the state pays for the investigation using money allocated through the Environmental Quality Bond Act of 1986, also known as the "State Superfund."

New York State offers other programs, included below, for brownfield cleanup and redevelopment of previously contaminated sites. These programs provide incentives such technical oversight, tax credits, and liability relief to assist in completing cleanup projects.

- Brownfield Cleanup Program:
  The Brownfield Cleanup Program involves a cooperative approach among New York State, current property owners, lenders, developers and prospective purchasers to investigate and/or remediate contaminated sites and return these sites to productive use.

- Environmental Restoration Program:
  Under this program, New York State provides grants to municipalities for reimbursement of a portion (up to 90 percent on-site and 100 percent off-site) of eligible costs for site investigation and remediation. A municipal cost share is required under this program.

- Brownfield Opportunity Areas Program (BOA):
  This program is the brownfield redevelopment planning arm of the Superfund/Brownfield Law. The BOA program provides municipalities and community-based organizations with financial and technical assistance to complete area-wide revitalization plans for discrete geographic areas or neighborhoods affected by multiple brownfield sites.

Remediation sites, including State Superfunds, Brownfield Cleanups, and Environmental Restoration programs in New York City, are shown in Figure 13. These sites vary in size and location. Some of the largest Superfund Sites, shown in purple, include the following:

- Amtrak Sunnyside Yard (Queens)
- Newtown Creek (Brooklyn and Queens)
- Meeker Avenue Plume Trackdown (Brooklyn)
- Phelps Dodge Refining Corporation (Queens)
- K - Williamsburg Works (Brooklyn)
- Former NuHart Plastic Manufacturing (Brooklyn)
- Gowanus Canal (Brooklyn)

247 city-owned and leased properties are fully or partially designated as New York State remediation sites under a State remediation program. As shown in Figure 14, 87 city-owned and leased properties are enrolled in a State Superfund or Brownfield Cleanup program. The remaining 53 sites are identified as being in an Environmental Restoration or Voluntary Cleanup Program.

Coastal Zone

In accordance to the Waterfront Revitalization of Coastal Areas and Inland Waterways Act,[18] the New York State Department of State (DOS) Office of Planning and Development offers local governments the opportunity to participate in New York State's Coastal Management Program (CMP). The state law encourages local governments to prepare and adopt a Local Waterfront Revitalization Program (LWRP) on a voluntary basis. DOS works in conjunction with local authorities to determine if applicable projects are consistent with the program.

The New York City Waterfront Revitalization Program (WRP) establishes the city's Coastal Zone policies for waterfront planning, preservation, and development projects to ensure consistency over the long term. The goal of the program is to maximize the benefits derived from economic development, environmental conservation, and public use of the waterfront while minimizing any potential conflicts among these objectives. In order to meet these goals, the New York City WRP includes ten geography-based policies[19] that range from supporting water-dependent industrial uses to protecting quality and function of ecological systems.

Projects that require certain city, state, and federal discretionary actions that are located within the Coastal Zone are reviewed by the City Planning Commission (CPC), in its capacity as the City Coastal Commission (CCC), and the DCP's Waterfront and Open Space Planning Division. These governmental bodies are mandated to assess the consistency of a proposed activity or project with the WRP's ten policies.[20] These policies are also applied in conjuction with five special area designations.[21]

18 NYS Office of Planning and Development Local Waterfront Revitalization Program: http://www.dos.ny.gov/opd/programs/lwrp.html

19 NYC WRP's Policies: http://www1.nyc.gov/assets/planning/download/pdf/applicants/wrp/wrp-2016/nyc-wrp-partII.pdf

20 Ibid.

21 NYC WRP Overview: http://www1.nyc.gov/site/planning/applicants/wrp/wrp.page

Figure 15. New York City Coastal Zone and City-Owned and Leased Properties

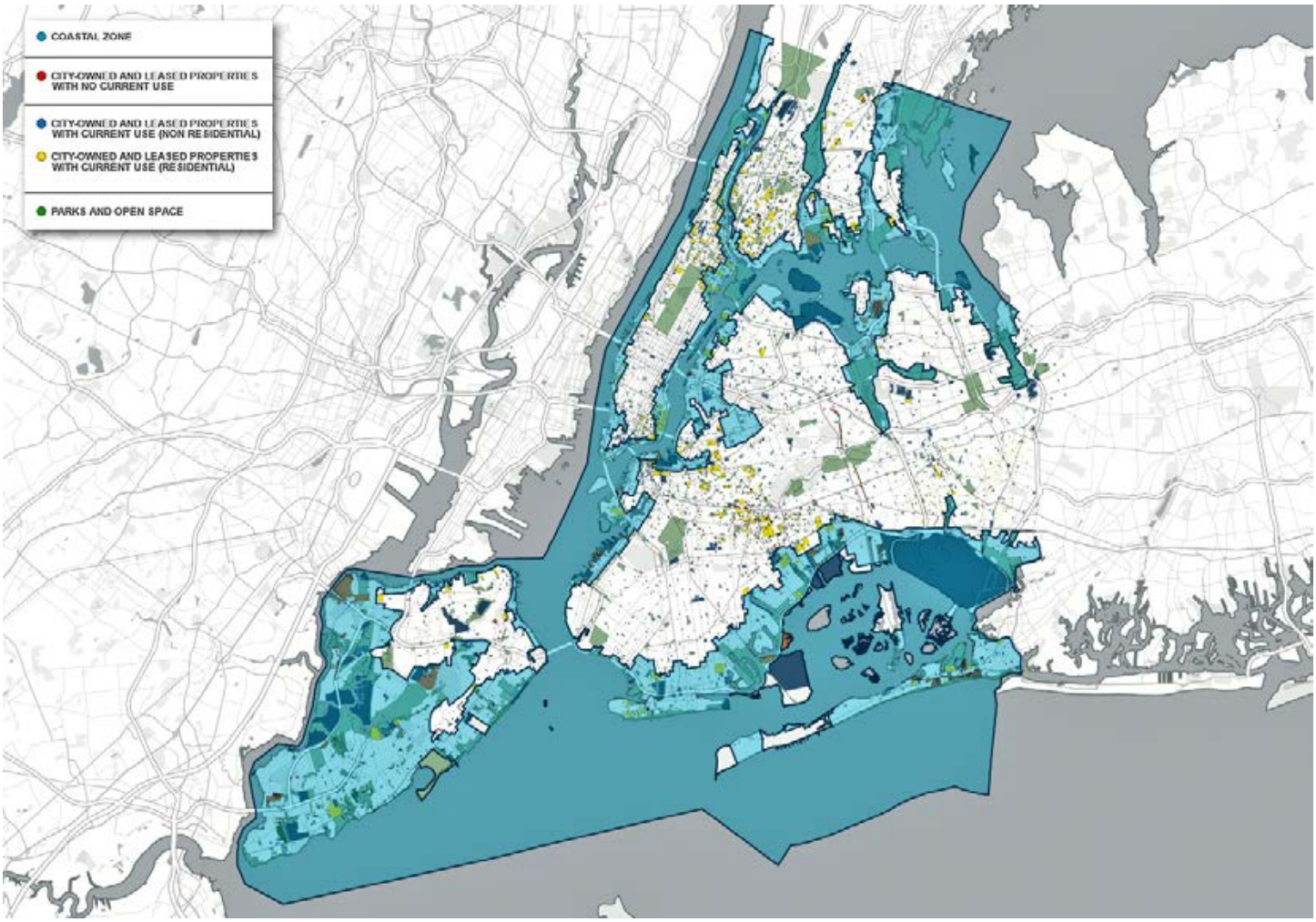


Table 6. City-Owned and Leased Properties and the Coastal Zone by General Use Categories

General Use Category	Properties	Acres
Properties with no current use	1,527	1,670
Properties with a current use (non residential)	1,377	12,684
Properties with a current use (residential)	231	1,091
Parks and open space	3,201	16,261
Total	6,336	31,706

Source: WRP Coastal Zone and COLP 2014 v2 042315 NYC Department of City Planning

- Special Natural Waterfront Areas (SNWAs)
  The SNWAs are large areas with significant open spaces and concentrations of wetlands and habitats. Each SNWA has a combination of important coastal ecosystem features, many of which are recognized and protected in a variety of regulatory state and federal programs.

- Priority Marine Activity Zones (PMAZ)
  Designated PMAZ areas have a concentration of water-dependent activity or sites that are connected to a particular waterborne transportation network and have the infrastructure to support such uses.

- Significant Maritime and Industrial Areas (SMIA)
  SMIAs are areas that have working waterfront uses with locational requirements that make portions of the Coastal Zone especially valuable as industrial areas. New York City has seven designated SMIAs: South Bronx, Newtown Creek, Brooklyn Navy Yard, Red Hook Container Terminal, Sunset Park/Erie Basin, Kill Van Kull, and Staten Island West Shore.

- Recognized Ecological Complexes (REC)
  RECs are ecological complexes where clusters of valuable natural features are more fragmented than those in the SNWAs and are often interspersed with developed sites. Many of these sites are within protected parkland or areas designated as Forever Wild Preserves.

- The Arthur Kill Ecologically Sensitive Maritime and Industrial Area (ESMIA).
  The Arthur Kill ESMIA, on the northwest waterfront of Staten Island, is particularly well-suited for maritime and industrial uses, and also possesses significant natural resources and ecological systems. There is no other area within the city's Coastal Zone that presents a similar mix of opportunities and constraints.

As shown in Table 6, 31,707 acres, or 75 percent, of all city-owned and leased land are within the Coastal Zone, and therefore subject to WRP's policies. More than 65 percent of these properties are classified as park and open space or properties with a current use (e.g., airports, storage facilities, office space, transportation facilities, and water pollution control plants). Fewer than 7 percent of residential properties and lots with no current use are within the Coastal Zone.

Infrastructure

The MAS online tool provides information for city-owned and leased properties based on sewer and wastewater infrastructure and subway accessibility.[22]

Sewers and Wastewater

As shown in Figure 16, 60 percent of the city is served by combined sewers. Combined sewers are a system in which sanitary and industrial wastewater, rainwater, and street runoff are collected in the same sewers and then conveyed together to treatment plants.[23] The remaining areas of the city are served by separate sewers or are unsewered. In separate sewer areas, sanitary waste and storm water runoff are channeled in separate systems.

Sanitary waste is carried to wastewater treatment plants, and stormwater is channeled directly to local streams, rivers, and bays. In unsewered areas, such as parks and wetlands, this water is absorbed into the ground or channeled into waterways.[24]

In combined sewer systems, sewage is mixed with rainwater and is conveyed into a single pipe system. During wet weather events, impervious surfaces create runoff that is drained into the combined sewer system. Often during these storm events, the system reaches its maximum capacity and the untreated, polluted water is released into the city's waterways. This event is known as a Combined Sewer Overflow (CSO), and the discharge points are known as outfalls. CSOs are of great concern because of their impact on water quality and recreational uses.[25]

In 2012, DEP revised its stormwater rules for new development and redevelopment in combined sewer

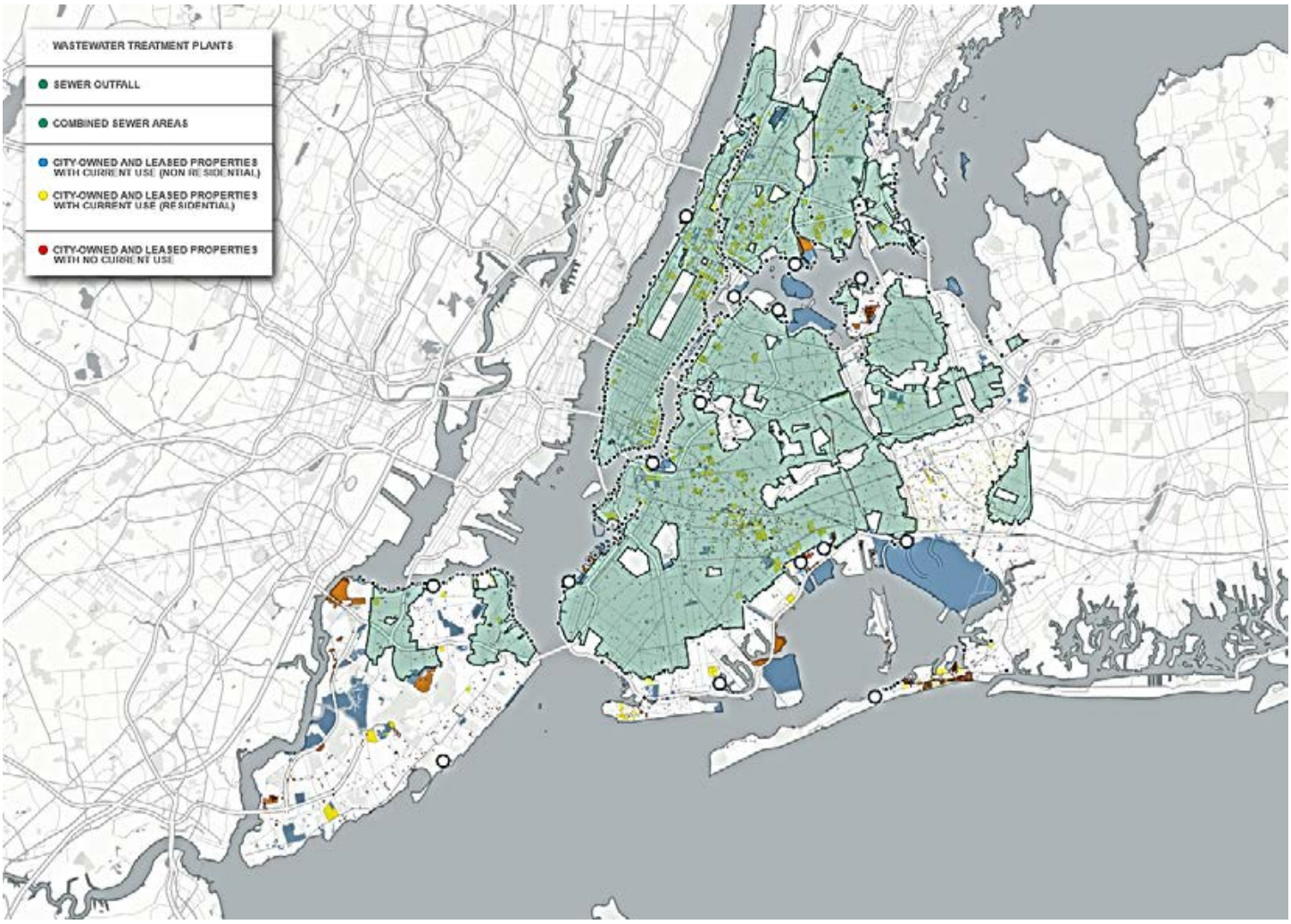
22 Datasets containing information for infrastructure for electric networks and solid waste management are not available at this time.

23 NYC DEP Types of Sewer Drainage Areas http://www.nyc.gov/html/dep/html/stormwater/sewer_system_types.shtml

24 ibid

25 ibid

Figure 16. Combined Sewer Areas and City-Owned and Leased Properties



areas. The performance standard is intended to reduce peak discharges to the sewer system during rain events by requiring greater onsite storage of stormwater runoff and slower release to the sewer system. The implementation of DEP's stormwater performance standard over time is expected to provide additional capacity to the existing sewer system, thereby improving its performance.[26]

City-Owned and Leased Properties by Sewer Infrastructure

Table 7 shows city-owned and leased properties by use category and type of sewer infrastructure. As shown, over 8,300 properties covering over 16,400 acres are served by combined sewers. 35 percent of city-owned and leased properties within the combined sewer areas are classified as properties with a current use. Thirty-one percent of properties within combined sewer areas are parks.

26 Guidelines for the Design and Construction of Stormwater Management Systems http://www.nyc.gov/html/dep/pdf/green_infrastructure/stormwater_guidelines_2012_final.pdf

Subway Access

New York City's subway is the world's largest public rapid transit system. In 2015, the average daily ridership on weekdays was 5,650,610. The city has 470 stations and 1,904 entrances to access the subway system.[27] Access to public transit, primarily subways, can affect land use and development patterns. Typically, properties within one-half mile (equivalent to a 10-minute walk) are considered accessible to transit.[28]

As shown in Figure 18, 64 percent of city-owned and leased properties are located within an average 10-minute walk to a subway station entrance. As shown in Table 8, more than 74 percent of city-owned and leased properties within one-half mileof a subway station are residential. Sixty-one percent of properties with no current use are also within one-half mile of a

27 MTA Developers Download: http://web.mta.info/developers/download.html

28 NYC DCP Sustainable Communities in the Bronx: Leveraging Regional Rail for Access Growth and Opportunity: https://www1.nyc.gov/site/planning/plans/sustainable-communities/sc-bronx-metro-north.page

Figure 17. Subway Access of City-Owned and Leased Properties With No Current Use, East New York, Brooklyn

Table 7. City-Owned and Leased Properties and Sewer Infrastructure by General Use Categories

General Use Category	Combined Sewer		Other Sewer System	
	Properties	Acres	Properties	Acres
Properties with no current use	1,700	589	1,462	1,242
Properties with a current use (non residential)	2,932	5,379	1,098	11,260
Properties with a current use (residential)	1,093	1,834	278	525
Parks and open space	2,614	8,634	2,828	13,159
Total	8,339	16,436	5,666	26,186

Source: OSA NYC and COLP 2014 v2 042315 NYC Department of City Planning

subway station.

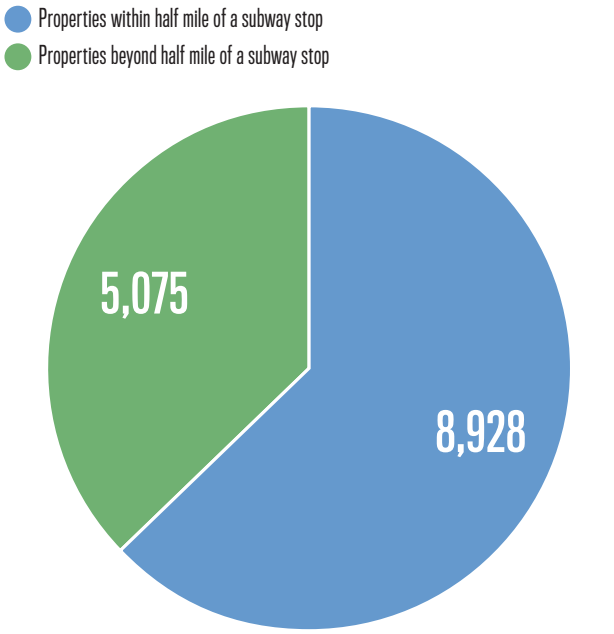
The online tool can be used to examine areas of the city with a high concentration of city-owned and leased properties having no current use that are near subway stations to evaluate potential redevelopment opportunities. For example, Figure 17 shows an area in East New York, Brooklyn, with a relatively high density of city-owned properties with no current use in close proximity to the L and 3 subway lines. As shown, over 90 percent of the properties along Livonia Avenue are within one-fourth mile of the 3 line, which is a typical five-minute walk. 91 of these properties, with a total area of 7.8 acres, are managed by HPD.

Table 8. City-Owned and Leased Properties and Subway Access by General Use Categories

General Use Category	Within one-half mile	
	Properties	Acres
Properties with no current use	1,933	595
Properties with a current use (non residential)	2,954	9,102
Properties with a current use (residential)	1,022	1,744
Parks and open space	3,019	10,230
Total	8,928	21,670

Source: NYC DOITT and COLP 2014 v2 042315 NYC Department of City Planning

Figure 18. City-Owned and Leased Properties within ½-mile of a Subway Station



Historic Preservation

The Landmarks Preservation Commission (LPC) is charged with protecting New York City's architecturally, historically, and culturally significant buildings and sites. LPC has the authority, under New York City's Administrative Code, to designate a property as an individual, interior, or scenic landmark, or a collection of properties as a historic district.[29]

29 Title 25, Chapter 3 of the City's Administrative Code

Including properties within historic districts, more than 35,000 sites are under LPC's authority, of which 665 are city-owned and leased. Designations also include significant non-building features such as lampposts, trees, bridges, and amusement rides, among others.

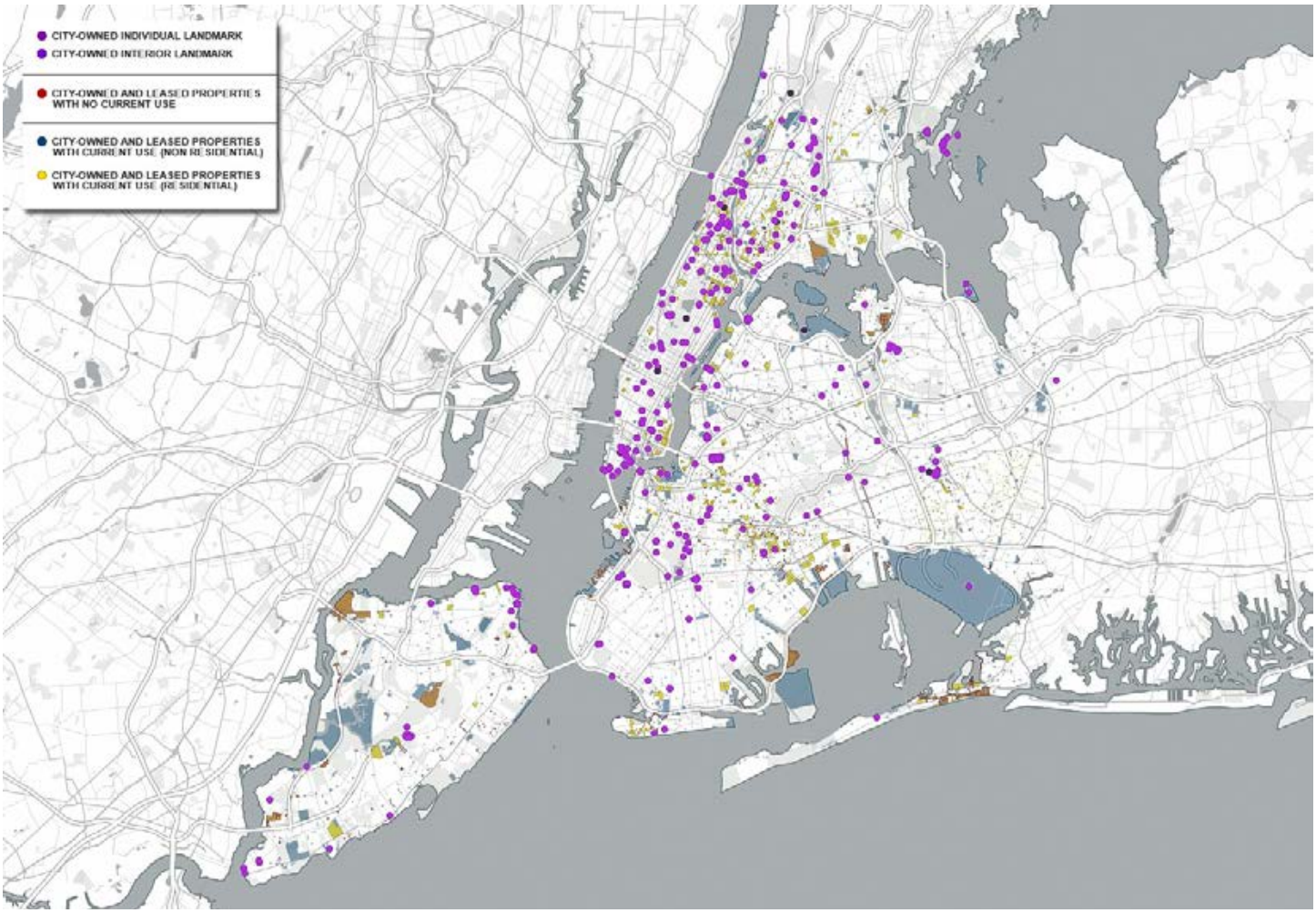
New York City's Landmarks Law requires that property owners obtain permits from the LPC for alterations to landmarks, as well as buildings sited within a historic

Table 9. City-Owned and Leased Properties and Individual Landmarks with No Current Use

Landmark	Address	LP Number
369th Regiment Armory	2367 Fifth Ave., Manhattan	LP-01390
Commandant's House	Evans St. at Little St., Brooklyn	LP-00002
Fire Hook & Ladder Company No. 14	120 East 125th St., Manhattan	LP-01838
Flatbush District No. 1 School, later Public School 90	2274-2286 Church Ave.; 2192-2210 Bedford Ave., Brooklyn	LP-02285
Public School 31	425 Grand Concourse, Bronx	LP-01435
Brooklyn Bridge*	Brooklyn Bridge, City Hall Park (Manhattan) to Cadman Plaza (Brooklyn)	LP-00098

* Listed in two properties. The DCP COLP dataset does not include rights-of-way, however portions of the Brooklyn Bridge are cited as landmarks in these properties without a current use.
Source: LPC and COLP 2014 v2 042315 NYC Department of City Planning

Figure 19. City-Owned and Leased Properties Containing Individual or Interior Landmarks



district. Permits for work that conform with the Rules of the Landmarks Preservation Commission (under Title 63, Rules of the City of New York) can be reviewed and issued by a staff preservationist, while other, more complex projects require approval from the full Commission at a public hearing. The latter also requires review by the Community Board in which the property is located.

In the case of city-owned properties, the LPC will issue a binding report, or an advisory report for those items under the jurisdiction of the New York City Art Commission, commenting favorably or unfavorably after a public hearing on proposed work.

Individual and Interior Landmarks

New York City has 1,463 individual and interior landmarks, 346 of which are city-owned and leased (see Figure 19). More than 50 percent of these landmarks are schools, offices, or facilities for public safety and criminal justice. Forty-two percent are located in parks. Bronx Park, which also includes the New York Botanical Garden and Bronx Zoo, features five individual landmarks.

Twelve percent of city-owned and leased properties that are landmarks are residential properties under the jurisdiction of NYCHA. These include three public housing developments: the First Houses and Harlem River Houses in Manhattan and the Williamsburg Houses in Brooklyn. Two percent of individual landmarks are located within city-owned and leased properties and are classified as having no current use. These are included in Table 9.

Figure 20. City-Owned and Leased Properties Located within a Historic District

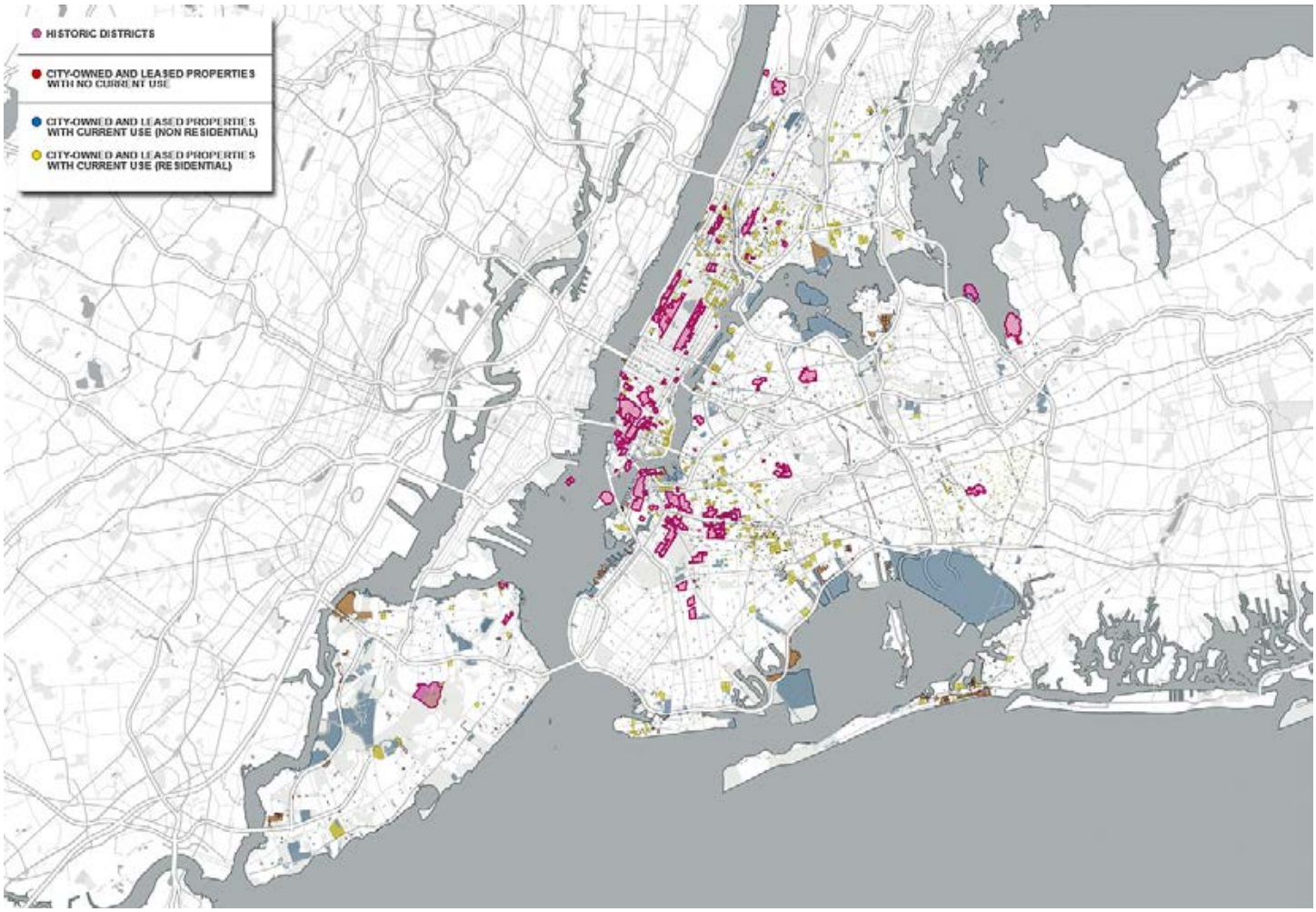


Table 10. City-Owned and Leased Properties with No Current Use Located in Historic Districts

Address	Borough	Historic District	Agency Jurisdiction	Use Category
Walton Ave. (2 lots between 995 & 923 Walton Ave.)	Bronx	Grand Concourse	DCAS	Vacant Land with No Use
278 Putnam Ave.	Brooklyn	Bedford	DCAS	Vacant Land with No Use
Macon St. (between 100 Macon St. & alleyway)	Brooklyn	Bedford	DCAS	Vacant Land with No Use
Macon St. (between 92 Macon St. & alleyway)	Brooklyn	Bedford	DCAS	Vacant Land with No Use
358 Reid Ave.	Brooklyn	Bedford Stuyvesant/Expanded Stuyvesant Heights	HPD	Vacant Land with No Use
Halsey St. (Block 1661, Lot 67)*	Brooklyn	Bedford Stuyvesant/Expanded Stuyvesant Heights	DCAS	Vacant Land with No Use
151 Kane St.	Brooklyn	Cobble Hill	DCAS	Vacant Land with No Use
Dean St. (Block 1206, Lot 164)*	Brooklyn	Crown Heights North	DCAS	Vacant Land with No Use
920-926 Prospect Pl.	Brooklyn	Crown Heights North II	DCAS	Vacant Land with No Use
1101-1117 Park Pl.	Brooklyn	Crown Heights North III	DCAS	Vacant Land with No Use
1124 Prospect Pl.	Brooklyn	Crown Heights North III	DCAS	Vacant Land with No Use
926 St Marks Ave.	Brooklyn	Crown Heights North III	DCAS	Vacant Land with No Use
978 St Marks Ave.	Brooklyn	Crown Heights North III	DCAS	Vacant Land with No Use
Kingston Ave. (Block 1244, Lot 106)*	Brooklyn	Crown Heights North III	DCAS	Vacant Land with No Use
Kingston Ave. (Block 1244, Lot 128)*	Brooklyn	Crown Heights North III	DCAS	Vacant Land with No Use
Kingston Ave. (Block 1257, Lot 175)*	Brooklyn	Crown Heights North III	DCAS	Vacant Land with No Use
St Marks Ave. (Block 1230, Lot 121)*	Brooklyn	Crown Heights North III	DCAS	Vacant Land with No Use
St Marks Ave. (Block 1230, Lot 77)*	Brooklyn	Crown Heights North III	DCAS	Vacant Land with No Use
42 Furman St. along East River Waterfront	Brooklyn	Fulton Ferry	SBS	Not Determined
122A Prospect Park West	Brooklyn	Park Slope	DCAS	Vacant Land with No Use
532A 12th St.	Brooklyn	Park Slope	DCAS	Vacant Land with No Use
890 Union St.	Brooklyn	Park Slope	DCAS	Vacant Land with No Use
941 President St.	Brooklyn	Park Slope	DCAS	Vacant Land with No Use
President St. (Block 1066, Lot 150)*	Brooklyn	Park Slope	DCAS	Vacant Land with No Use
8 St. (Block 1090, Lot 110)*	Brooklyn	Park Slope Extension	DCAS	Vacant Land with No Use
542 Dean St.	Brooklyn	Prospect Heights	DCAS	Vacant Land with No Use
Sterling Pl. (between 425 & 423 Sterling Pl.)	Brooklyn	Prospect Heights	DCAS	Vacant Land with No Use
Vanderbilt Ave. (Block 1887, Lot 128)*	Brooklyn	Wallabout	DCAS	Vacant Land with No Use
Vanderbilt Ave. (Block 1887, Lot 129)*	Brooklyn	Wallabout	DCAS	Vacant Land with No Use
W. 153 St. (between 444-448 & 459 W. 153 St.)	Manhattan	Hamilton Heights/Sugar Hill Northwest	DCAS	Vacant Land with No Use
95 Marginal St.	Manhattan	South Street Seaport	SBS	Non-Residential Structure with No Use
220 W. 139 St.	Manhattan	St. Nicholas	DCAS	Vacant Land with No Use
223 W. 138 St.	Manhattan	St. Nicholas	DCAS	Vacant Land with No Use
242 W 138 St.	Manhattan	St. Nicholas	DCAS	Vacant Land with No Use
165 W. 80 St.	Manhattan	Upper West Side/Central Park West	HPD	Not Determined
Linden Blvd. (between 175-41 & 175-51 Linden Blvd.)	Queens	Addisleigh Park	DCAS	Vacant Land with No Use
North corner of Douglas & Manor Rds.	Queens	Douglaston	DCAS	Vacant Land with No Use
80 St. (between 37-16 & 37-42 80 St.)	Queens	Jackson Heights	DCAS	Vacant Land with No Use
460 Brielle Ave.	Staten Island	NYC Farm Colony - Seaview Hospital	DCAS	Vacant Land with No Use

*Lot inaccessible from street
Source: LPC and COLP 2014 v2 042315 NYC Department of City Planning

Historic Districts

To date, New York City has 139 historic districts and historic district extensions. As shown in Figure 20, 299 city-owned and leased properties are located within a designated historic district or extension. Forty-one percent of these properties include those with a non-residential use, primarily schools, and offices. As an example, a portion of the main campus of the Hunter College of the City University of New York on 68th Street in Manhattan is located within the *Upper East Side Historic District*.

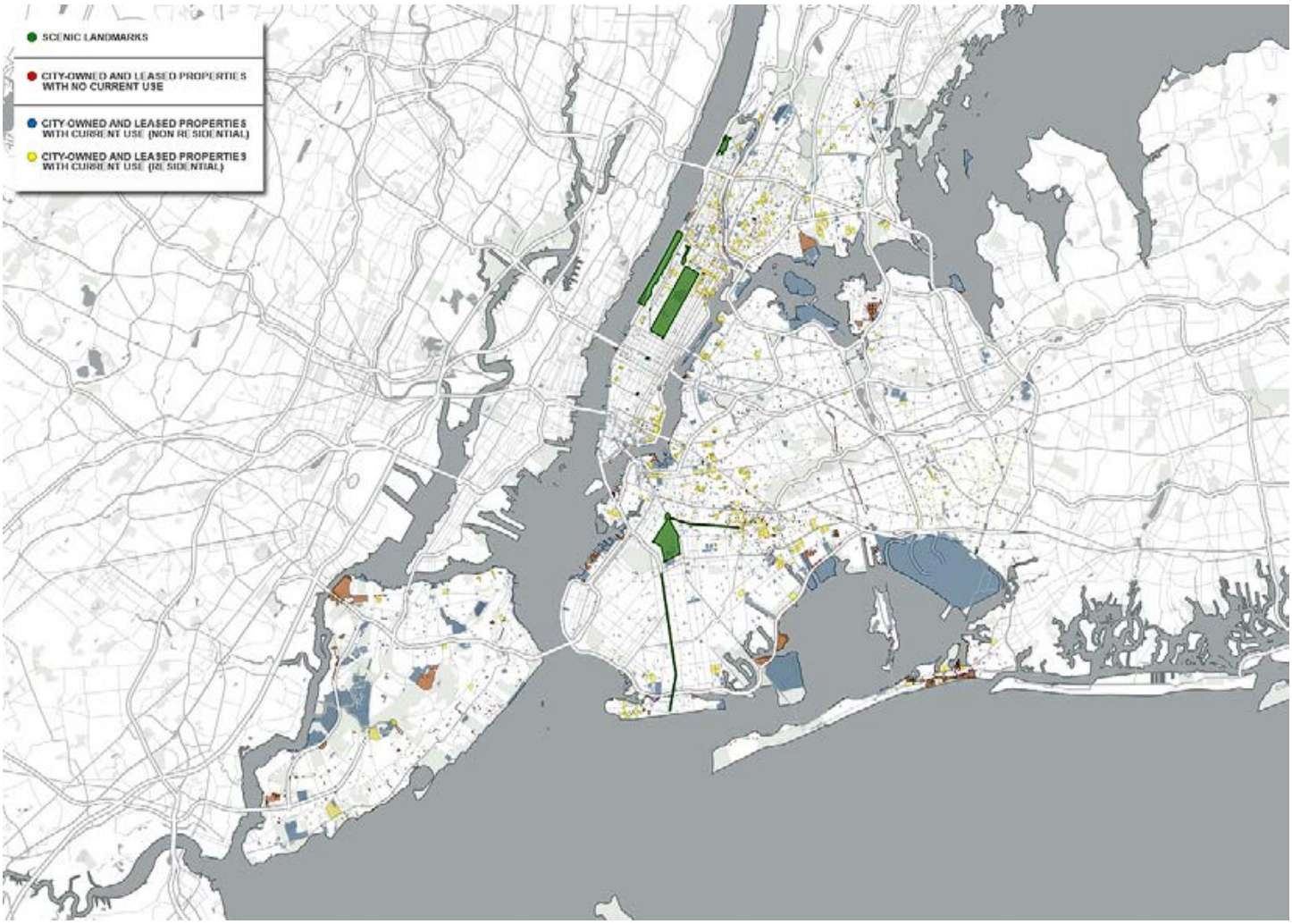
Thirty-two percent of city-owned and leased properties located within historic districts are categorized as parks and open space, and 13 percent are residential uses under the jurisdiction of NYCHA or HPD.

Thirteen percent of city-owned and leased properties with no current use are located in historic districts. These properties are shown in Table 10. As shown, 68 percent of these properties are classified as vacant land in Brooklyn, and are under the jurisdiction of DCAS.

Scenic Landmarks

Each of New York City's 10 scenic landmarks are city-owned. Shown in Figure 21, these landmarks include Central Park, Bryant Park, Morningside Park, Riverside Park and Riverside Drive, Verdi Square and Fort Tryon Park in Manhattan; and Grand Army Plaza, Prospect Park, Ocean Parkway, and Eastern Parkway in Brooklyn. These sites comprise approximately 1,620 acres.

Figure 21. City-Owned and Leased Properties and Scenic Landmarks



Population

The *Public Assets* online tool provides information on population and income for New York City, census tract information for total population, and median household income from the U.S. Census Bureau.

Table 11. City-Owned and Leased Properties and Census Tracts below Average Density by General Use Categories

General Use Category	Census Tracts below Average Density*	
	Properties	Acres
Properties with no current use	2,554	1,742
Properties with a current use (non residential)	2,715	14,979
Properties with a current use (residential)	559	976
Parks and open space	4,099	17,857
Total	9,927	35,554

*Average population density is 84.3.
Source: People per acre COLP 2014 v2 042315 NYC Department of City Planning and U.S. Census Income in the Past 12 Months 2010-2014 American Community Survey

Density

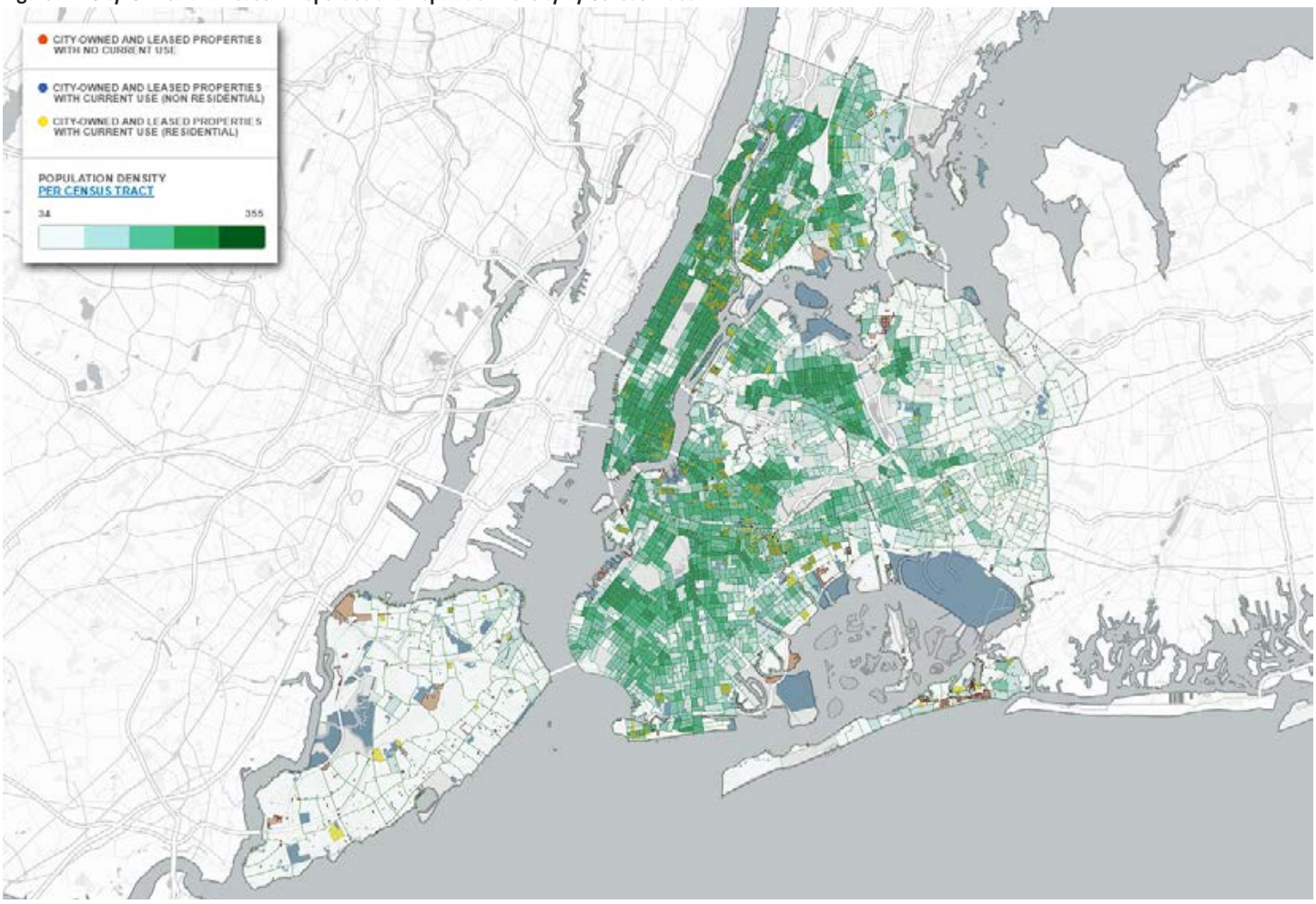
According to the Population Division of DCP, New York City is projected to grow from 8.3 million in 2014 to 9 million residents by 2040.[30] As shown in Figure 22, the online tool examines population density as a measure of estimated residential population per census tract surface area. The average population density per census tract in the City is 84.3 people per acre.[31]

As shown in Table 11, 9,927, or 71 percent, of city-owned and leased properties are located in census tracts less dense than the city average. Similarly, 4,099, or 75 percent, of parks are within census tracts less dense than the city average. Approximately 2,700, or 67 percent, of properties classified as having a current use are also within areas less dense than the city average.

30 DCP Population Division projections http://www1.nyc.gov/site/planning/data-maps/nyc-population/current-future-populations.page

31 Total Population. U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates. Density of New York City was derived by dividing the total population of each census tract by surface area in acres, exluding census tracts with no residential population: John F. Kennedy International Airport and LaGuardia Airport in Queens; Floyd Bennett Field and the Pennsylvania Ave. Landfill in Brooklyn; and the Freshkills Landfill in Staten Island, among others.

Figure 22. City-Owned and Leased Properties and Population Density by Census Tract



Income

According to the U.S. Census Bureau, the average household size in New York City is 2.74 persons, and the median annual income of New York residents is $52,737. Income levels between boroughs vary significantly. The Bronx has a yearly median household income of $34,284, Brooklyn $46,958, Queens $57,210, Manhattan $71,656, and Staten Island $74,043.[32]

32 ibid

Table 12. City-Owned and Leased Properties and Census Tracts below Median Household Income by General Use Categories

General Use Category	Census Tracts below Median Income	
	Properties	Acres
Properties with no current use	1,658	598
Properties with a current use (non residential)	2,203	3,896
Properties with a current use (residential)	1,068	2,082
Parks and open space	2,040	8,936
Total	6,969	15,511

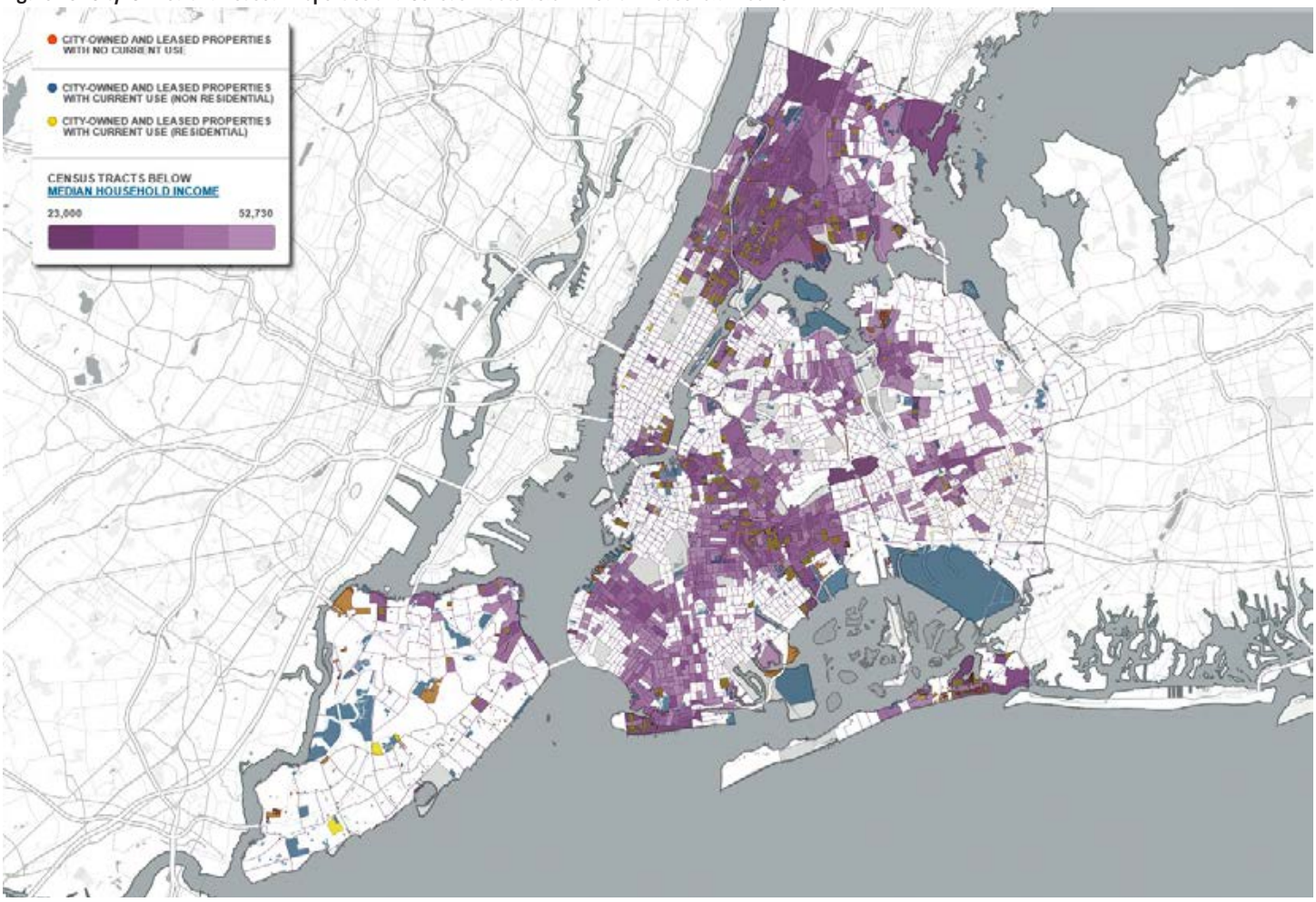
Source: COLP 2014 v2 042315 NYC Department of City Planning and U.S. Census Income in the Past 12 Months 2010-2014 American Community Survey

As mentioned in the its comprehensive development plan, *One New York: The Plan for a Strong and Just City (OneNYC),* the city seeks an inclusive, equitable economy that offers well-paying jobs and opportunity for all New Yorkers.[33] It also aims to improve access to affordable and market-rate housing, as well as strengthen infrastructure and neighborhood services.

Given the magnitude of its holdings, city-owned and leased properties can play a critical role in advancing key goals identified in *OneNYC*. For example, undeveloped properties owned or leased by the city could pose potential redevelopment opportunities. As shown in Figure 23, 1,658 properties with no current use are concentrated in neighborhoods with median incomes below New York City as a whole. As shown in Table 12, 6,969 city-owned and leased properties, totaling 15,511 acres, are located within census tracts with low median household income.

33 The City of New York. One New York: The Plan for a Strong and Just City. Accessed November 3, 2016, from http://www.nyc.gov/html/onenyc/downloads/pdf/publications/OneNYC.pdf.

Figure 23. City-Owned and Leased Properties and Census Tracts below Median Household Income



Neighborhood Rezonings

The city uses rezoning actions as a means to stimulate economic development, increase affordable housing prospects, and shape future growth in particular areas. Rezonings may also present opportunities to examine city-owned and leased properties to determine potential redevelopment options that could help achieve the city's goals.

One of the primary objectives of the city's housing plan, *Housing New York: The Plan for a Strong and Just City*, is to build or preserve 200,000 affordable housing units over the next ten years. Mandatory Inclusionary Housing (MIH), a text amendment to the New York City Zoning Resolution approved by the New York City Council in March 2016, is one of the tactics that the city has employed to achieve this target. The requirements of MIH are triggered whenever new housing capacity is approved through a rezoning.[34] Under MIH, redevelopment is subject to a range of four options for housing affordability. The option with the deepest level of affordability sets aside 25 percent of residential floor area as affordable for residents earning a maximum annual income of $47,000 for a family of three. The option with the lowest level of affordability sets aside 30 percent of the residential floor area for residents earning a maximum annual income of $89,000 for a family of three.[35]

Current Rezonings

The online tool provides information on the 12 neighborhood rezonings and studies currently underway. As shown in Table 13, these include the seven neighborhoods under DCP's Planning for Livability, Affordability, Community, Economic Opportunity, and Sustainability (PLACES) plan; two neighborhood development studies by EDC; a neighborhood plan

34 Mandatory Inclusionary Housing Summary: https://www1.nyc.gov/assets/planning/download/pdf/plans-studies/mih/mih-summanry-adopted.pdf

35 ibid.

Figure 24. City-Owned and Leased Properties Located within Rezoning Areas

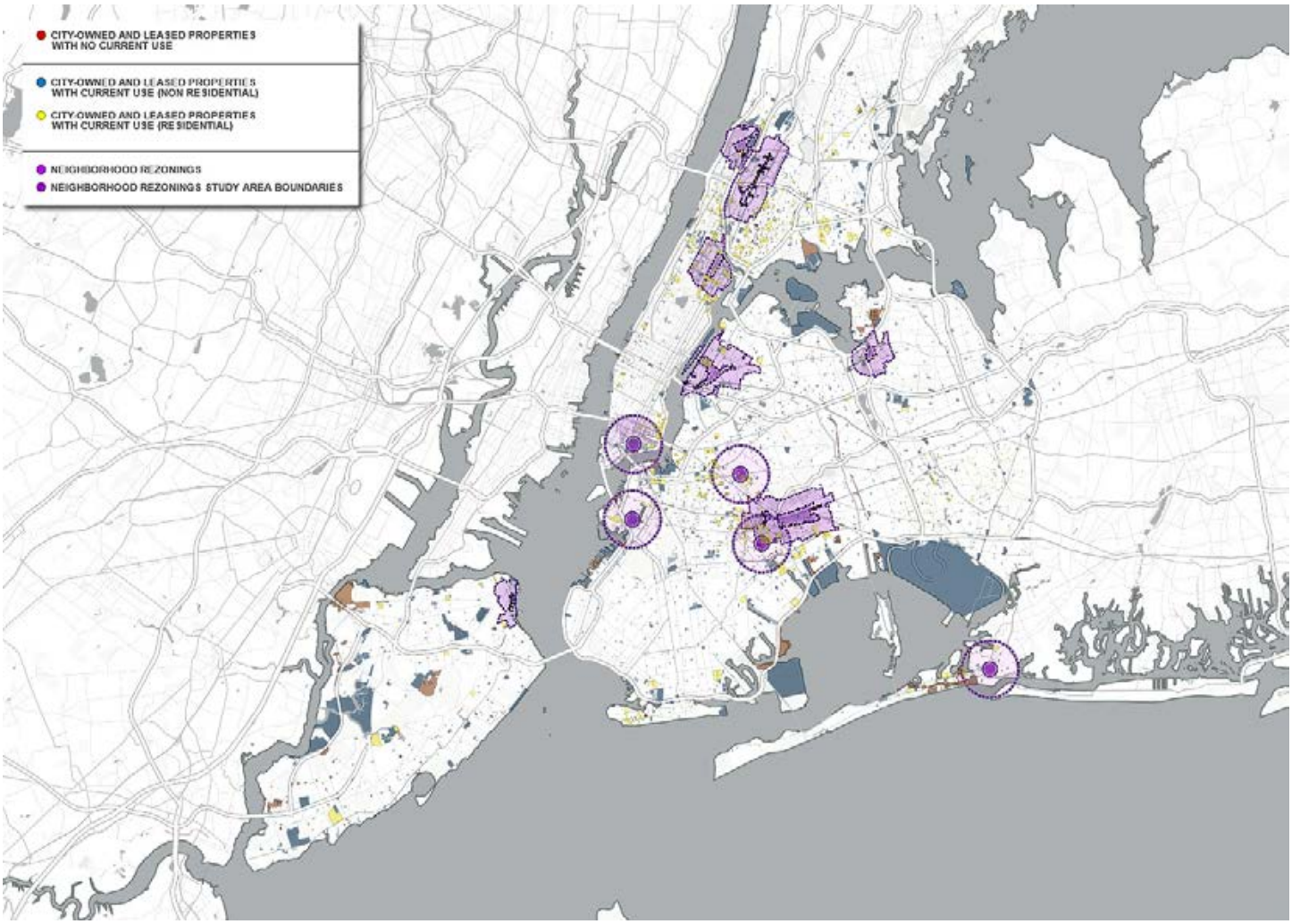


Table 13. Rezoning Neighborhoods and Their Current Status as of November 2016

Neighborhood	Lead By	Current Status (as of November 2016)
Bay Street Corridor, Staten Island	DCP	CEQR Public Scoping Meeting held June 2015
Brownsville, Brooklyn	HPD	HPD public engagement ongoing
Bushwick, Brooklyn	Council Members Antonio Reynoso and Rafael Espinal	Independent community-based planning process ongoing
Downtown Far Rockaway, Queens	EDC	CEQR Public Scoping Meeting held September 2016
East Harlem, Manhattan	DCP	Independent community-based plan prepared February 2016; DCP public engagement ongoing
East New York, Brooklyn	DCP	Approved April 2016
Flushing West, Queens	DCP	Paused
Gowanus, Brooklyn	DCP	Independent community-based plan prepared August 2016; DCP public engagement ongoing
Inwood, Manhattan	EDC	EDC public engagement ongoing
Jerome Avenue, Bronx	DCP	CEQR Public Scoping Meeting held September 2016
Long Island City Core, Queens	DCP	DCP process has not begun
Lower East Side, Manhattan	Chinatown Working Group	Community-based plan prepared December 2013

Sources: Bridging Gowanus, Bushwick Community Plan, Chinatown Working Group, DCP, East Harlem Neighborhood Plan, EDC, and HPD

launched by HPD; and two community-based plans initiated by local stakeholders and City Council members.

Of the 12 rezonings and studies, only those with rezoning boundaries officially announced by the city were included in the GIS analysis utilized in the online tool. As shown in Figure 24, these include the rezonings for Jerome Avenue, Inwood, East Harlem, Long Island City Core, Flushing West, East New York, and Bay Street Corridor.

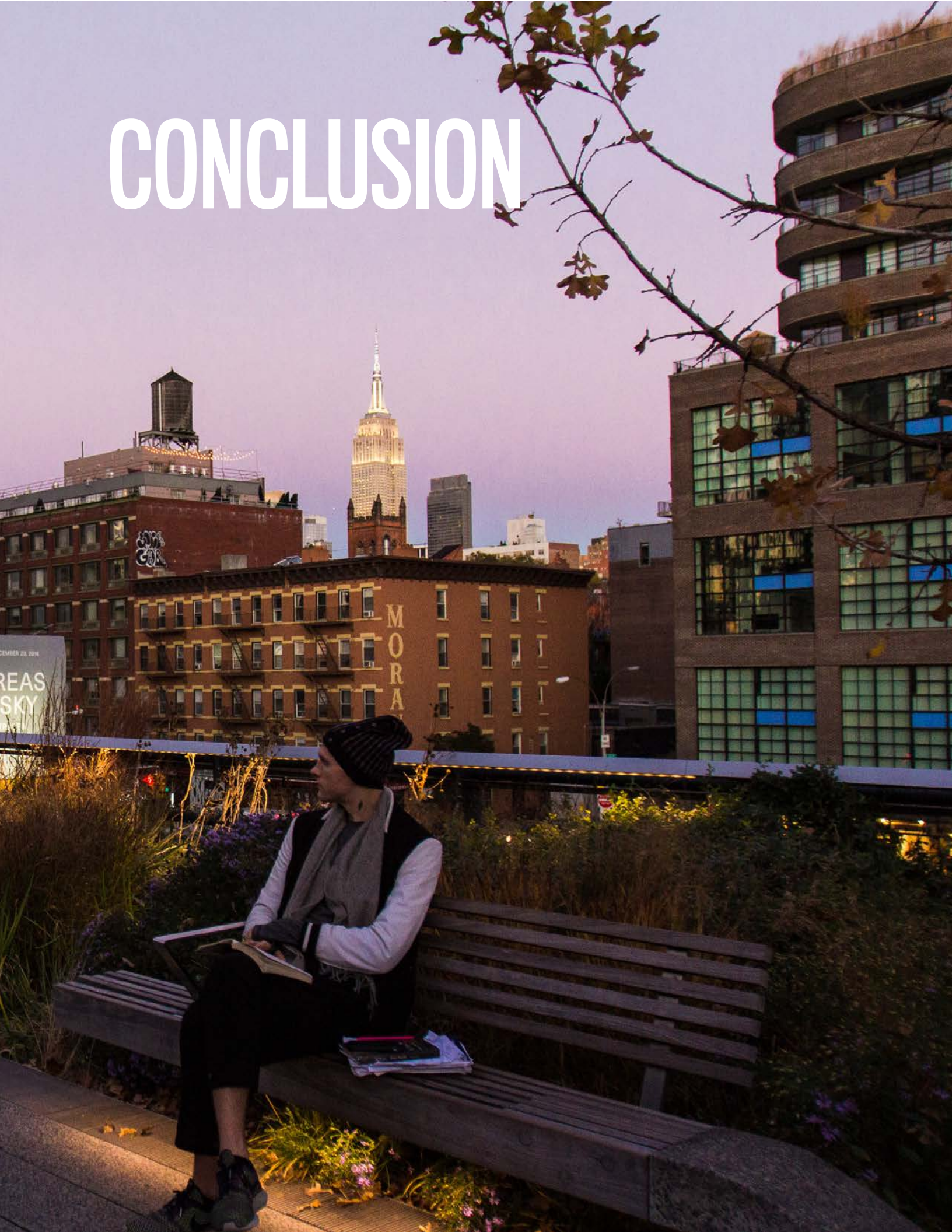
Table 14 shows city-owned and leased properties included in current rezoning and study areas by use classification. Approximately 8 percent of city-owned and leased properties are located in rezoning areas, including 1,864 individual parcels consisting of 2,500 acres. Thirty-four percent of these properties are parks and open space. Thirty-two percent are used as offices or facilities for social service, public safety, and criminal justice. Twenty-two percent do not have a use, and 12 percent are residential.

Table 14. City-Owned and Leased Properties within Rezoning Areas

General Use Category	Within Boundaries	
	Properties	Acres
Properties with no current use	42	6
Properties with a current use (non residential)	97	167
Properties with a current use (residential)	22	55
Parks and open space	106	67
Total	267	294

Source: COLP 2014 v2 042315 NYC Department of City Planning, DCP and EDC

CONCLUSION



MAS is pleased to present *Public Assets* at a time when the city is making significant strides toward increasing transparency in its planning and land-use actions.

Over the past year, MAS has supported legislation that would make new practical datasets available to the public for the first time. These datasets would enable citizens to track city commitments during the ULURP process, review deed restrictions placed on city-owned properties, and identify appropriate vacant land for the construction of affordable housing.

If adopted, these legislative actions would provide information and oversight on an unprecedented level. However, in an effort to expand transparency, MAS recommends that the city increase the availability of its databases, in formats that could be integrated with a variety of geospatial information.

A truly equitable New York City depends on an informed public.

Since 1893, MAS has sought to inspire, educate, and empower New Yorkers to engage in the betterment of New York City. To advance these goals in the 21st century, we assert that more resources need to be provided to keep the public up to date about planning and land-use decisions that affect the city.

A truly equitable New York City depends on an informed public. The information presented in this report and the online tool is the start of an ongoing, participatory process that ultimately will improve our public assets and contribute to a healthier, more dynamic, and inclusive New York City.

Acknowledgments

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Maps and Data Sources

2007 FIRMs 100-Year Floodplain (FEMA). http://www.region2coastal.com/view-flood-maps-data/what-is-my-bfe-address-lookup-tool/

2050 Projected Sea Level Rise 100-year Floodplain (NPCC). https://data.cityofnewyork.us/Environment/Sea-Level-Rise-Maps-2050s-100-year-Floodplain-/hbw8-2bah

Coastal Zone Boundary (DCP). http://www1.nyc.gov/site/planning/data-maps/open-data.page#waterfront

Designated Tidal Wetlands (NYS DEC). https://gis.ny.gov/gisdata/

LPC Landmarks and Historic Districts (NYC LPC).https://data.cityofnewyork.us/Recreation/Individual-Landmarks/ch5p-r223

Median Household Income by Census Tracts (U.S. Census ACS). http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_14_5YR_S1901&prodType=table

Neighborhood Studies (NYC EDC). http://www.nycedc.com/project/inwood-nyc-neighborhood-study

Number of Residents by Census Tract (U.S. Census ACS). http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_14_5YR_B01003&prodType=table

PLACES Initiative (NYC DCP). https://www1.nyc.gov/site/planning/plans/places.page

Remediation Sites (NYS DEC). https://gis.ny.gov/gisdata/

Sewer Infrastructure (OSA NYC). http://openseweratlas.tumblr.com/data

Subway Access (DOITT). https://data.cityofnewyork.us/Transportation/Subway-Entrances/drex-xx56

APPENDIX A: GIS METHODOLOGY

This section describes the steps, geoprocessing tools, software, and data sources utilized for the creation of an online mapping tool and quantitative analysis for *Public Assets: City-Owned and Leased Properties*. This work was conducted by the Municipal Art Society of New York from March to November of 2016. The online tool is hosted at http://www.mas.org/colp.

Merging COLP with MapPLUTO™

In order to provide information for each individual parcel, MAS merged two NYC data sources: MapPLUTO™ V15.1 and City-Owned and Leased Properties (COLP 2014 v2 042315). Both datasets are available to the public and can be downloaded for free through the Department of City Planning's website: http://www1.nyc.gov/site/planning/data-maps/open-data.page

MapPLUTO™ contains more than seventy fields derived from data maintained by city agencies and is one of the most complete datasets for land use in the city. The COLP dataset compiles information for over 14,000 city-owned parcels. The dataset specifies over 200 individual types of use and identifies properties that are currently leased and those that are committed for sale or long-term leases.

MAS utilized ArcMap 10.3.1 for the initial part of the merger. The first step in the process was to define the relationship between the MapPLUTO™ shapefile and the COLP table by using the common attribute data field *BBL* or Borough-Block-Lot number.

Once the relationship was established, the file was exported as a shapefile containing attribute data from both datasets. This shapefile was then uploaded into the GIS online platform CARTO. However, since the COLP dataset includes attribute data describing more than one use type per parcel and MapPLUTO™ registers one land use per parcel, the additional land use entries from COLP were not reflected in the merged file. MAS resolved this issue by utilizing SQL capabilities available on the GIS online platform CARTO. SQL stands for Structured Query Language, and according to ANSI (American National Standards Institute), it is the standard language for relational database management systems.

The COLP dataset lists use type entries by cell, and therefore contains duplicate entries for each parcel or BBL number. In order to complete the merger with MapPLUTO™, we reorganized COLP data from the *use type* and *BBL* fields so that additional use type entries could be listed in a single row instead of multiple cells. This also removed duplicate parcel entries from the dataset.

The process was done through utilizing CARTO's SQL capabilities. The script used is listed under the CARTO SQL Notes section. The dataset was exported into Microsoft Excel and the use type values were separated into multiple rows. This dataset listed only one BBL per parcel and the corresponding land use values were placed horizontally as use1, use2, use3, etc. This new file was uploaded to CARTO as a CSV table. The final step in the merger was to update the uploaded dataset in CARTO with the new aggregate use type information. This was also done using CARTO's SQL capabilities. The utilized script is listed in this document section titled CARTO SQL notes.

Web Maps Infowindow, Display, and Symbology

In order to display the additional use type information, we utilized CARTO's infowindow HTML custom capabilities. As users click on properties across the map, the window shows selected attribute data from the layers. The window displays the COLP *expanded category mode* data field as "general land use," the *use type* data field as "specific land use," and includes over a dozen more selected fields in the merged COLP MapPLUTO™ dataset. An extract of the HTML script is listed in HTML or the Infowindow and the Google Image SQL sections.

In order to optimize the streaming of the map and reduce chances of crashing the online platform, we decided not to utilize additional SQL queries to filter and display symbology properties. Instead, we exported separate shapefiles from the merged dataset based on COLP's "category code" and initially divided the dataset into three categories: (i) properties with a current use (non residential), (ii) residential properties, and (iii) properties with no current uses.

In addition, we created a fourth layer, (iv) properties with cultural, recreational, and open space, by extracting properties from the second category (properties with a current use – nonresidential). Each of these separate shapefiles contains all the attribute data from the merged COLP and MapPLUTO™ datasets. As shown in Figure A, we then uploaded the individual shapefiles into CARTO and assigned their corresponding symbology values. Red indicates no use, blue indicates non-residential use, yellow indicates residential use, and green for parks and open space.

In addition to the general use categories described above, we also created additional shapefiles for (i) properties that are leased, (ii) properties committed for sale or lease, and (iii) properties based on agency jurisdiction for the four agencies with most parcels.

We used the select "by attributes" tool from ArcMap to select parcels listed in the leased properties and final commitment COLP datafields. For agency jurisdiction, we selected parcels using "agencymod," and for state or federal properties we selected parcels using "Other – Public Authority, State, or Federal Ownership". Both data entries are listed in MapPLUTO™.

Once the parcels were selected, we exported them as additional layers, uploaded them in CARTO (shown in Figure B), and assigned the following symbology values: square hatches for properties that are leased and stripe hatches for properties committed for sale or lease. Symbology for agency jurisdiction would not be altered as it is based on use category.

Total List of Utilized Layers Derived from COLP and MapPLUTO™ Merger

- Properties with a current use (non residential)
- Residential properties
- Properties with no current use
- Properties with cultural, recreational, and open space uses
- Properties that are leased
- Properties that are committed for sale or lease
- Properties managed by the Department of Citywide Administrative Services (DCAS)
- Properties managed by the Department of Education (DOE)
- Properties managed by the Department of Housing Preservation and Development (HPD)
- Properties managed by the New York City Housing Authority (NYCHA)
- Properties managed by remaining agencies

CARTO SQL Notes

Aggregate COLP dataset by BBL

Run the following sql:

```
SELECT
colp_2014_dcp.bbl,
string_agg(colp_2014_dcp.use_type,',') as agg
FROM colp_2014_dcp
GROUP BY colp_2014_dcp.bbl
```

This consolidates all land-use values for each BBL into one cell. Export the dataset and separate the land-use values in excel. Clean up the dataset to remove duplicates. Finally, upload this new file to CARTO as a CSV (bbl_landuse_all).

Update COLP Merged Dataset

Add columns to each dataset (12 in this case) and name each use#.

Run the following sql for each dataset (split it into two for faster processing):

```
UPDATE FILENAME
SET use1 = bbl_landuse_all.use1, use2 = bbl_landuse_all.
use2, use3 = bbl_landuse_all.use3, use4 = bbl_landuse_
all.use4, use5 = bbl_landuse_all.use5, use6 = bbl_
landuse_all.use6
FROM bbl_landuse_all
WHERE FILENAME = bbl_landuse_all.bbl

UPDATE FILENAME
SET use7 = bbl_landuse_all.use7, use8 = bbl_landuse_all.
use8, use9 = bbl_landuse_all.use9, use10 = bbl_landuse_
all.use10, use11 = bbl_landuse_all.use11, use12 = bbl_
landuse_all.use12
FROM bbl_landuse_all
WHERE FILENAME = bbl_landuse_all.bbl
```

Figure A. Web Map

Figure B. Web Map Symbology

For example, for the file colp_dcp_final_commitment, the sql would look like this:
UPDATE colp_dcp_final_commitment.bbl
SET use1 = bbl_landuse_all.use1, use2 = bbl_landuse_all.use2, use3 = bbl_landuse_all.use3, use4 = bbl_landuse_all.use4, use5 = bbl_landuse_all.use5, use6 = bbl_landuse_all.use6
FROM bbl_landuse_all
WHERE colp_dcp_final_commitment.bbl = bbl_landuse_all.bbl

This updates the original dataset to include all the additional land-use columns. (The SQL disappears after the dataset has been updated.)

HTML or the Infowindow

The language can be altered, but essentially the HTML to display general and specific land use is the following:

The use for this property is {{excatcodmo}}, specifically {{use1}}{{#use2}}, {{use2}}{{/use2}}{{#use3}}, {{use3}}{{/use3}}{{#use4}}, {{use4}}{{/use4}}{{#use5}}, {{use5}}{{/use5}}{{#use6}}, {{use6}}{{/use6}}.

The format for each is: {{#use3}}, {{use3}}{{/use3}}. The {{#use3}} ---- {{/use3}} pattern allows the text to be optional in the case that there is no value in that cell.

Google Image SQL

SELECT *,
'https://maps.googleapis.com/maps/api/streetview?size=350x170&location='||
mid_y||','||mid_x||'&sensor=false&fov=110' as image
FROM colp_dcp_properties_with_no_use_03_28_2016

Quantification and GIS Analysis

In order to provide quantifiable indicators, MAS utilized ArcMap capabilities to measure data from the attribute table. The GIS analysis consisted of counting the number of properties and measuring surface areas. For example, in order to count the total number of properties with no use, we opened the shapefile attribute table, displayed all records, and annotated the total number into an Excel spreadsheet (in this case 3,162 parcels). In order to measure the surface area, we opened the attribute table, selected calculate geometry on the shape_area field, chose acres (US), and then annotated the number listed in the sum entry from the summary window (no use properties represent 1,832 acres). This process was repeated for all layers derived from the COLP and MapPLUTO™ merger:

- Properties with a current use (non residential)
- Residential properties
- Properties with no current use
- Properties with cultural, recreational, and open space uses

- Properties that are leased
- Properties that are committed for sale or lease
- Properties managed by DCAS
- Properties managed by DOE
- Properties managed by HPD
- Properties managed by NYCHA
- Properties managed by remaining agencies

MAS studied the relationship between city-owned parcels with additional layers of information and identified citywide trends. The conducted GIS analysis for this additional group of datasets was similar to the one described above, essentially counting the number of properties and measuring surface areas, but selecting parcels with the select by location tool available in ArcMap. For example, in order to count the total number of residential properties that were located within a New York State remediation site, we conducted the following steps: selected residential properties as the target layer, selected the state remediate sites layer as the source layer, and chose "intersect the source layer" feature as the spatial selection method for target layer.

Once the desired parcels were selected, we opened the shapefile attribute table, displayed selected records, and annotated the total number into an Excel spreadsheet (in this case 140 parcels). In order to measure the surface area, we opened the attribute table, selected calculate geometry on the shape area field, chose acres (US), and then annotated the number listed in the sum entry from the summary window (parcels that fully or partially intersect remediation sites represent 5,255 acres). This process was repeated for each of the following layers:

- Properties with a current use (non residential)
- Residential properties
- Properties with no current use
- Properties with cultural, recreational, and open space uses

We counted the number of properties and measured the area of parcels contained in the COLP MapPLUTO™ merger by replicating the process of choosing the source layer of the select by location tool for seventeen different layers. These additional layers were grouped into five focus areas: environment, infrastructure, landmarks, population, and rezonings. All datasets are directly or indirectly[1] provided by city, state or federal agencies and are available to the public. All datasets were downloaded in March 2016 and represented the latest publicly available version from the source at the time.

Environment

- 2007 FIRMs 100-Year Floodplain (FEMA): http://www.region2coastal.com/view-flood-maps-data/what-is-my-bfe-address-lookup-tool/
- 2050 Projected Sea Level Rise 100-year Floodplain (NPCC): https://data.cityofnewyork.us/Environment/Sea-Level-Rise-Maps-2050s-100-year-Floodplain-/hbw8-2bah
- Designated Freshwater and Tidal Wetlands (NYS DEC): https://gis.ny.gov/gisdata/
- Remediation Sites (NYS DEC): https://gis.ny.gov/gisdata/
- Coastal Zone Boundary (DCP): http://www1.nyc.gov/site/planning/data-maps/open-data.page#waterfront

Infrastructure

- Sewer Infrastructure (OSA NYC): http://openseweratlas.tumblr.com/data
- Subway access (DOITT): https://data.cityofnewyork.us/Transportation/Subway-Entrances/drex-xx56

Landmarks

- LPC Landmarks and Historic Districts (NYC LPC): https://data.cityofnewyork.us/Recreation/Individual-Landmarks/ch5p-r223

Population

- Median Household Income by Census Tracts (U.S. Census ACS): http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_14_5YR_S1901&prodType=table
- Number of Residents by Census Tract (U.S. Census ACS): http://factfinder.census.gov/

1 The only datasets that are not directly provided by a government agency are the sewershed and CSO drainage area shapefiles. These GIS files were created by the Open Sewer Atlas NYC project through a combination of outdated NYC DEP shapefiles, publicly available documents like the Water-body/Watershed Facility Plans, Long Term Control Plans, and Environmetal Impact Statements. They have been updated manually to reflect the most current publicly available pdf documents. *These layers are not official and should not be used for planning purposes.* They are intended for illustrative and educational purposes only.

faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_14_5YR_B01003&prodType=table

Rezonings

- PLACES Initiative (NYC DCP) : https://www1.nyc.gov/site/planning/plans/places.page
- Neighborhood Studies (NYC EDC): http://www.nycedc.com/project/inwood-nyc-neighborhood-study

Future Updates

Public Assets: City-Owned and Leased Properties is scheduled to be launched during The 2016 Municipal Art Society of New York Summit for New York City. MAS envisions this effort as ongoing, and foresees several iterations in order to improve accuracy and performance. The first update of the project will likely commence in spring 2017, including MapPLUTO™ V17.1 and the latest version of COLP (both datasets are expected to be released by then).

Furthermore, MAS will explore partnerships with other organizations to facilitate public interaction and encourage participation in the planning process for these properties. MAS will examine alternatives for integrating an online interface with the maps that would allow for the general public to provide feedback and commentary addressed to individual parcels.

APPENDIX B: DATA RECOMMENDATIONS

During our work on this project, we discovered that there is much to be done to improve current and future city datasets. Inconsistencies, incompatible formats, and other issues outlined below should be addressed to facilitate ease of use.

1. New databases should be made available as a downloadable file in a format that facilitates analysis. Poorly designed websites, disorganized spreadsheets, or un-editable PDF files are common obstacles that limit examination. Databases should be made available to the public in formats that allow evaluation, such as a downloadable CSV file or an Excel spreadsheet. Such files should also include a template that defines abbreviations and explains the fields of information.

2. Moreover, in order to allow correlation and comparison to other datasets, they should incorporate at minimum the following attribute information: identification numbers for the Uniform Land Use Review Procedure (ULURP) and City Environmental Quality Review (CEQR), the agreed timeline for implementation, the estimated allocated budget and funding source, the lead and coordinating City agencies for implementation, status of the project, geographic location based on address and Borough Block Lot (BBL) number, and date of the latest update.

3. MAS also encountered some inconsistencies that made the analysis and merger between the existing MapPLUTO™ and COLP datasets challenging. The following considerations should be made for updates or any future databases.

    - Organization and structure of information should be consistent across datasets. Specifically, databases should avoid arranging data that creates duplicate entries for each property. The COLP dataset breaks use types into 223 use codes, providing information for a detailed assessment of how these properties are being utilized. An individual property can have more than one use type. For example, Central Park has the following: museum/gallery, theater, garage, reservoir, police station, agency executive office, indoor storage and park. The COLP database organizes this information vertically (by cells) which requires duplicating each property entry, as result Central Park is duplicated 11 times in the database. In contrast, MapPLUTO™ does not have replicated, as it lists all pertaining information to a tax lot in a horizontal way (columns). In order to integrate both datasets, MAS staff used Python (a high-level, general-purpose, interpreted, dynamic programming language) to organize use types from COLP in a horizontal arrangement compatible with MapPLUTO™. In order to encourage robust databases and cross examination of City information, consistent organization and structure should be implemented.

    - The attribute fields describing agency jurisdiction varies within the datasets themselves. For example, under MapPLUTO™ The Metropolitan Transportation Agency (MTA) is listed with dozens of different name variations (METROPOLITAN TRANS/AU, METROPOLITAN TRNSPRTN, MTA- NYCTA, etc). As a result, identifying properties under MTA's jurisdiction is challenging and time consuming. Agency names and other labels should remain consistent within and across different datasets.

    - The attribute field describing ownership under MapPLUTO™ is often unreliable. The dataset obtains this information from IPIS and provides the following codes: C (City Ownership), M (Mixed City & Private Ownership), O (Other-Public Authority, State or Federal Ownership), P (Private Ownership), X (Fully tax exempt property that could be owned by the city, state, or federal government; a public authority; or a private institution), and blank (unknown, usually private ownership). For example, according to MapPLUTO™ 12,660 properties are classified as C (City Ownership), but according to COLP there are 14,003 properties. Ownership properties across datasets should be consistent as they are both derived from IPIS.

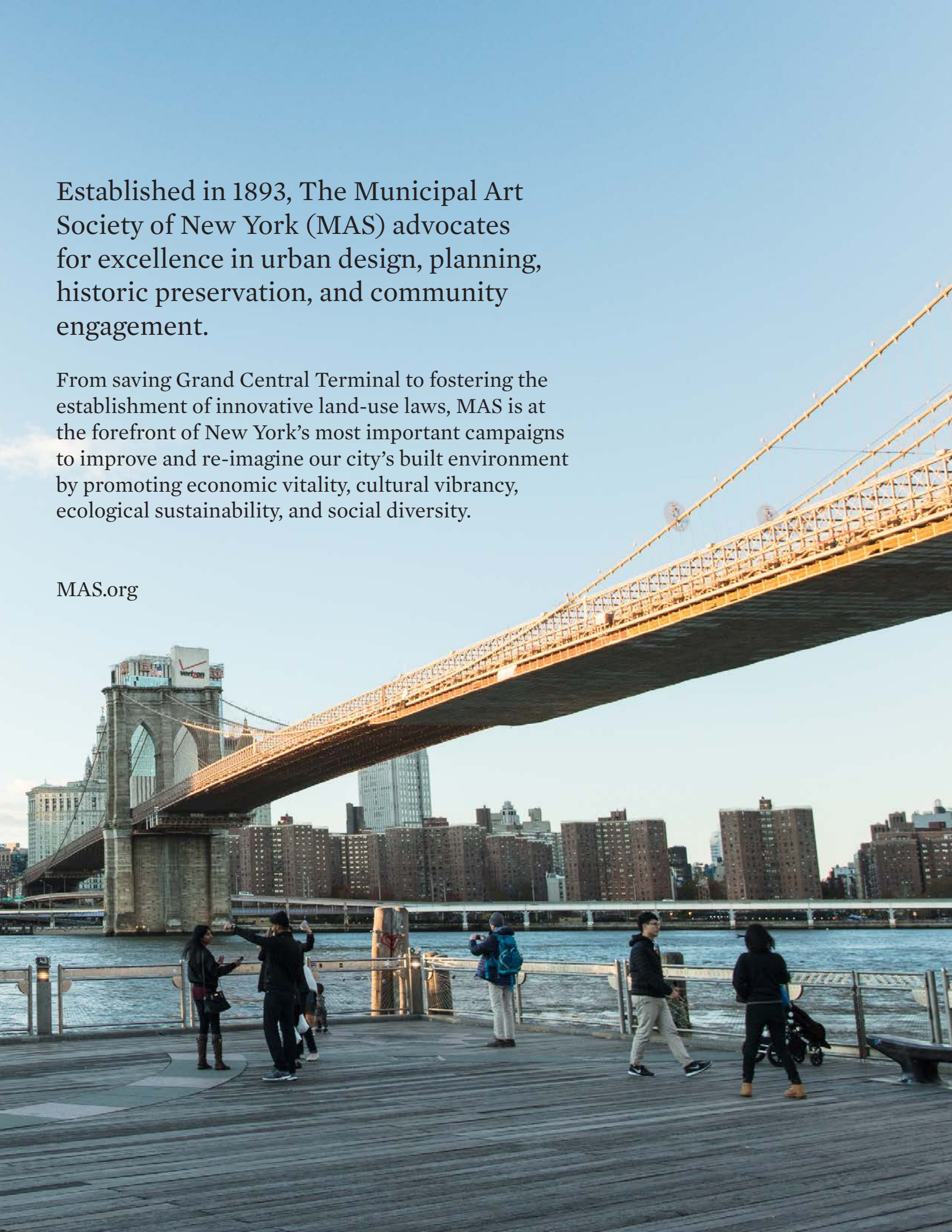
The Municipal Art Society of New York

MASNYC

Established in 1893, The Municipal Art Society of New York (MAS) advocates for excellence in urban design, planning, historic preservation, and community engagement.

From saving Grand Central Terminal to fostering the establishment of innovative land-use laws, MAS is at the forefront of New York's most important campaigns to improve and re-imagine our city's built environment by promoting economic vitality, cultural vibrancy, ecological sustainability, and social diversity.

MAS.org



Note to Our Readers

When we came upon the vast COLP dataset, MAS selected specific criteria for study based upon our own expertise and institutional priorities. The report and online tool are by no means exhaustive. They serve to highlight the relationship between city-owned and leased properties and the environment, infrastructure, landmarks, population, and neighborhood rezonings. But they also are intended to provide a model for further study. Our research process is documented extensively in Appendix A: GIS Methodology, and we encourage expansion on these or other topics by any engaged citizen.

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