



**Homeland Security
and Emergency Services**

BUILDING INFORMATION AND LAND-USE DATASET (BILD) Draft v3.2 Dataset Review

MitigateNY: Multi-Agency Engagement Meeting



BILD – Buildings Information and Land-use Dataset



Introduction

This is the **first of three final acceptance meetings** for BILD. The next and final meetings are anticipated to be held:

Meeting 2 - late February

Meeting 3 - late March

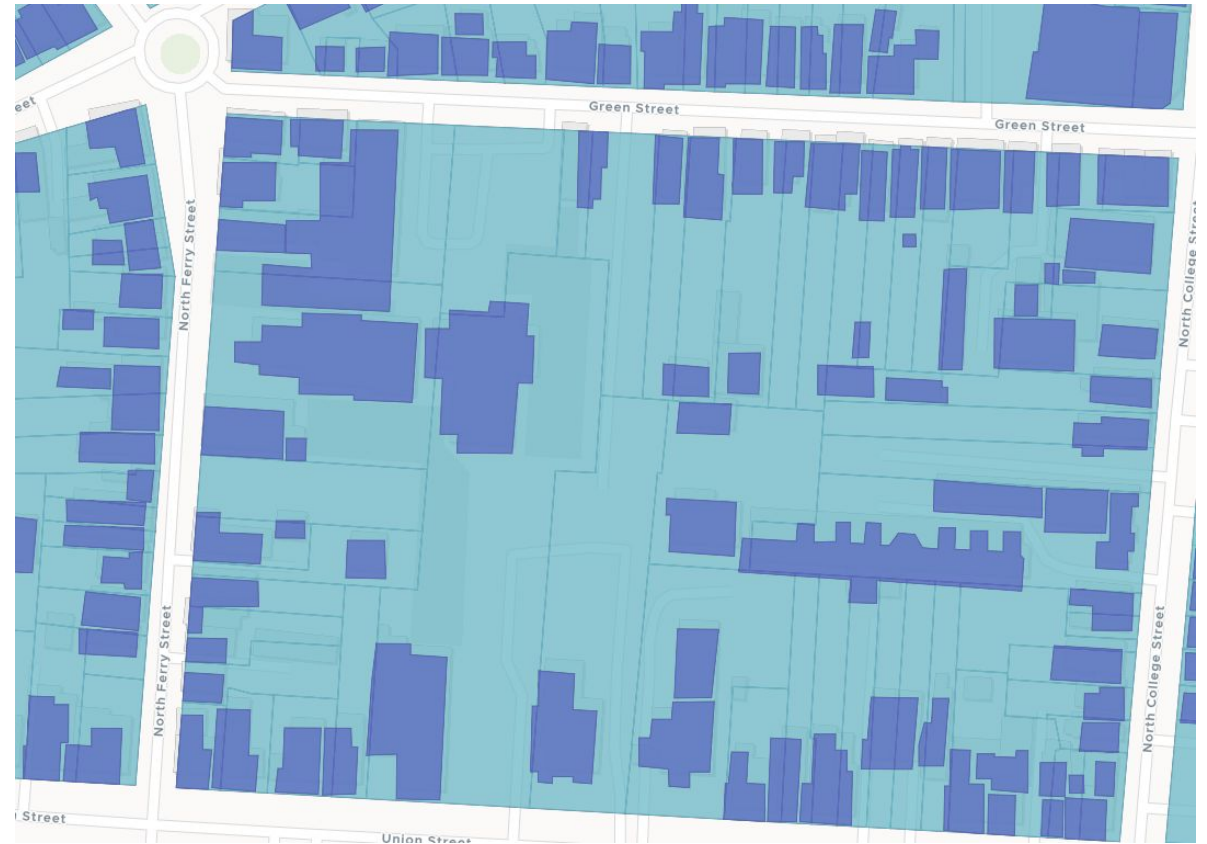
Meeting 1 Overview

- Terminology
- Dataset Inclusion, Attributes, and Format
- BILD Statistics
- Availability
- Use Cases

After this meeting, we will be seeking your feedback on the dataset as a whole and the use cases that we will be presenting in the next meeting and the dataset.

Terminology

- **Polygons** are geometric shapes that show the boundaries of an area, such as tax parcels or building footprints.
- **Attributes** are the data fields available for each polygon, which can be viewed in a table format. The attributes are the column names for the table.
- **Parcels** are polygons where boundaries delineate ownership or land use type for property tax and zoning purposes. Parcel attributes include assessed value and property classes.
- **Footprints** are the borders of buildings drawn along the exterior walls, to create a polygon representing the total area of the building. It usually excludes non-building facilities such as parking lots and streets and provides a good representation of spatial characteristics.



Map showing footprints (purple) inside tax parcels (teal with blue borders)

BILD Data Format

The BILD format includes footprint polygons with associated attributes from various datasets



Polygons

COUNTY_NAME ↕	MUNI_NAME ↕	YR_BLT ↕	SQ_FT ↕	SQFT_LIVING ↕	NBR_BEDROOMS ↕
Chautauqua	Arkwright	1928	0	2972	5
Chautauqua	Arkwright	null	0	null	null
Chautauqua	Arkwright	1996	0	1225	3
Chautauqua	Pomfret	1987	0	480	1
Chautauqua	Pomfret	1987	0	480	1
Chautauqua	Pomfret	1987	0	480	1
Chautauqua	Arkwright	1999	0	1872	3
Chautauqua	Arkwright	1992	0	1280	3
Chautauqua	Arkwright	1928	0	1056	2
Chautauqua	Arkwright	null	0	null	null
Chautauqua	Arkwright	null	0	null	null

Attributes

A large, dark blue circular graphic on the left side of the slide, partially cut off by the edge.

BILD Status Report

BILD Focus Groups

- State-Owned Buildings
- Building Attributes
- Land Use
- Energy
- Risk Scenario Data

A large, dark blue circular graphic on the left side of the slide, partially cut off by the edge.

BILD Status Report

Feedback

- Building Elevations
- Universal Building Identifiers (UBID)
- Office of Real Property Tax Services (ORPTS) Tax Assessment Datasets

Datasets included in BILD v3.2

- Daylight Buildings
- NYS ITS Building Footprints
- OpenStreetMap Building Footprints
- Mapbox terrain Digital Elevation Map (DEM)
- NYS Tax Parcels 2023
- Office of General Services Buildings Dataset
- Office of Real Property Tax Services (ORPTS) Assessments Datasets
 - Residential
 - Commercial
 - Commercial Industrial
- HIFLD Datasets (next slide)

HIFLD Open Datasets

Power Plants	EPA Emergency Response (ER) Toxic Substances Control Act (TSCA) Facilities
Public Schools	EPA Resource Conservation and Recovery Act Treatment Storage and Disposal (RCRATSD) Facilities
Aviation Facilities	EPA Superfund Enterprise Management System (SEMS) Sites
Peak Shaving Facilities	Antenna Structure Registration (ASR)
Petroleum Product Terminals	Broadband Radio Service (BRS) and Educational Broadband Service (EBS) Transmitters
Petroleum Refineries	Cellular Towers
POL Terminals	Land Mobile Broadcast Towers
NCUA Insured Credit Unions	Land Mobile Commercial Transmission Towers
Intermodal Freight Facilities Marine Roll-on/Roll-off	Land Mobile Private Transmission Towers
Child Care Centers	Microwave Service Towers
Colleges and Universities	Paging Transmission Towers
Supplemental Colleges	Intermodal Freight Facilities Air-to-Truck
American Red Cross Headquarters	Intermodal Freight Facilities Pipeline Terminals
Federal Emergency Management Agency Recovery Offices	Ferry Terminals
Fire and Emergency Medical Service (EMS) Stations	Dialysis Centers
Local Emergency Operations Center (EOC)	Nursing Homes
State Emergency Operations Centers (EOC)	Urgent Care Facilities
Above Ground LNG Storage Facilities	Veterans Health Administration Medical Facilities
Ethanol Plants	Mobile Home Parks
Food and Drug Administration (FDA) Office Facilities	FDIC Insured Banks
Local Law Enforcement Locations	Private Schools
Ferrous Metal Processing Plants	National Shelter System Facilities
Nonferrous Metal Processing Plants	Alternative Fueling Stations
EPA Emergency Response (ER) Risk Management Plan (RMP) Facilities	General Manufacturing Facilities
EPA Emergency Response (ER) Toxic Release Inventory (TRI) Facilities	

A large, dark blue circular graphic that is partially visible on the left side of the slide, overlapping the white background.

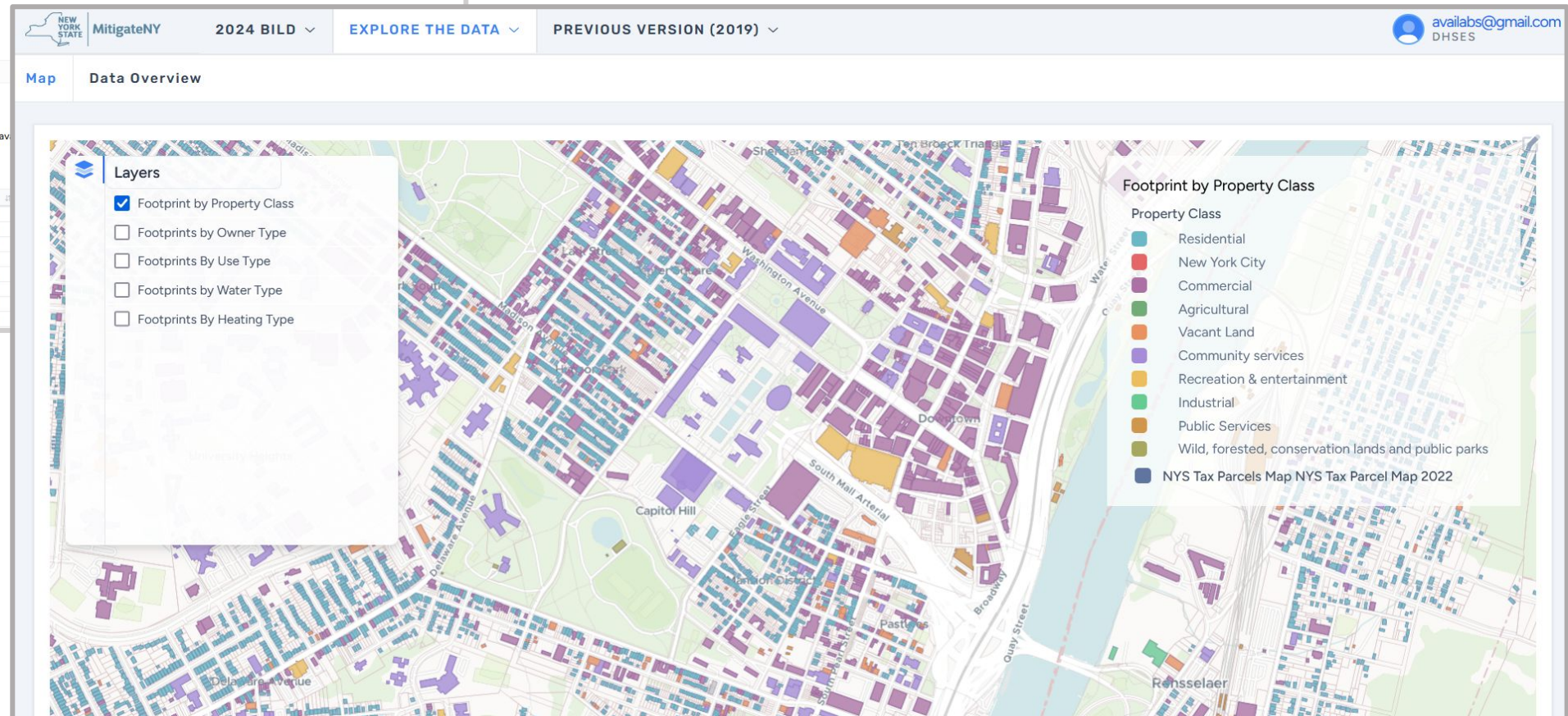
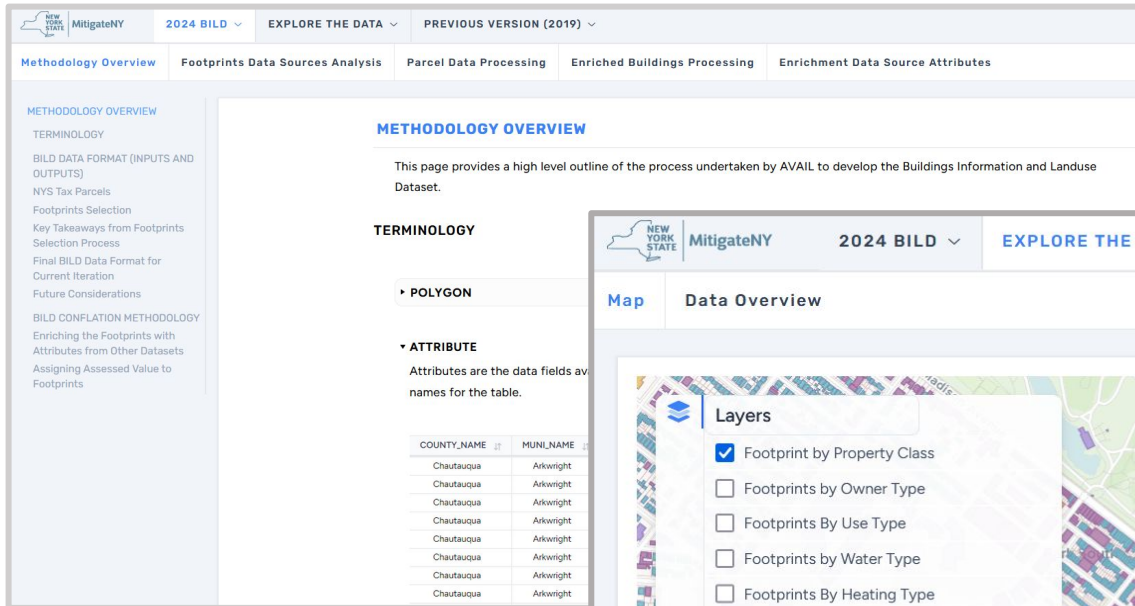
BILD Attributes

BILD has 100 building characteristic and land use data points for each footprint including replacement value, property class, and others, and will continue to be enhanced with others.

BILD Attributes

ogc_fid (Unique Identifier)	Agricultural District Name
Year Built	Spatial Year
# of Parcels	Owner Type
Parcel ID	NYS Agency Name
Property Class	NYS Agency Source
Municipality Parcel ID	Building Assessed Value
County Name	Building Full Market Value
Municipality Name	Total Assessed Value
Property Classes	Full Market Value
Parcel Address	Well-Known Boundary Geometry
County Names	Elevation
Municipality Names	OGS State-Owned
Years Built	OGS Replacement Cost
School Name	geoid
Sewer Type	Building Type
Water Type	Building ID (UBID)
Utilities	ORPTS OGC ID
Building Style	ORPTS View ID
Heat Types	ORPTS Site Number
Used As Type	<i>...and more!</i>

MNY Buildings – Statistics



Statistics by BILD Attributes

Total Number of Buildings

7,032,078

Total Value of All Buildings

\$1.2 T

Number and value by high-level property classes

Major Property Class	# of Buildings	Total Assessed Value
100: Agricultural	151,191	\$ 12,640,178,762
200: Residential	4,945,497	\$ 495,364,119,103
300: Vacant land	162,426	\$ 8,529,681,945
400: Commercial	413,557	\$ 105,303,215,886
500: Recreation and Entertainment	64,334	\$ 8,260,171,799
600: Community Services	111,262	\$ 77,262,363,443
700: Industrial	27,159	\$ 16,249,407,887
800: Public services	25,810	\$ 22,139,874,273
900: Wild Forested Conservation lands and public parks	22,410	\$ 4,162,553,778

Statistics by
BILD
Attributes

Total Number of
State-Owned Buildings

24,768

Total Value of
State-Owned Buildings

\$38.7 B

Top 3 Most Common Use Types

Use Type	# of Buildings	Total Assessed Value
Trailer park	56,885	\$ 1,456,179,412
Converted apt	29,442	\$ 3,598,275,531
Walk-up apt	26,967	\$ 7,081,085,294

A large, dark blue circular graphic on the left side of the page, partially cut off by the edge.

Statistics by BILD Attributes

Top 3 Building Styles (by Number of Buildings)

Building Style	# of Buildings	Total Assessed Value
Old style	1,291,304	\$ 95,231,781,023
Ranch	743,834	\$ 75,148,367,327
Colonial	514,648	\$ 97,114,655,526

Top 3 Heat Types

Heat Type	# of Buildings	Total Assessed Value
Hot air	2,295,466	\$ 266,365,932,962
Hot water / steam	1,067,861	\$ 152,978,308,561
Electric	194,103	\$ 25,587,997,591

A large, dark blue circular graphic on the left side of the page, partially cut off by the edge.

Statistics by BILD Attributes

Top 3 Water Types

Sewer Type	# of Buildings	Total Assessed Value
Comm/public	2,202,689	\$ 382,627,479,670
Private	2,150,922	\$ 283,494,889,393
None	162,014	\$ 23,635,972,104

Top 3 Sewer Types

Sewer Type	# of Buildings	Total Assessed Value
Comm/public	2,752,742	\$ 479,123,759,545
Private	1,646,846	\$ 194,856,260,214
None	142,018	\$ 17,726,118,333

How to Download and Other Analyses

BILD Availability

Methods by which this information is available for review

- <https://buildings.mitigateny.org/cenrep/source/1217>
 - Excel (csv)
 - Shapefile
- https://buildings.mitigateny.org/draft_bild_v3_2

Use Cases Identified



State-Owned: In response to a grant opportunity, conduct a market assessment to determine which state-owned buildings in Utica were built before 1984.



Building Characteristics: Using the BFE as a point of reference for each footprint, understand flood insurance needs for the city of Hudson. Conduct a house heating and cooling type analysis to determine susceptibility to extreme heat and cold in Kingston. Conduct a housing stock assessment in Newburg to understand percent of homes built before 1984.



Landuse: Conduct a market assessment of heating/cooling and fuel types vs. sqft living area. Utilize UBID to understand changes over time of buildings longitudinally



Scenario - What are the total value of buildings in the floodplain? by category (critical infrastructure, multi-family homes). What percent of buildings in high hazard risk areas intersect with high social vulnerability areas.

A large, dark blue circular graphic on the left side of the slide, partially cut off by the edge.

BILD Tools

Scenario Tools Next Steps

As an additional task in the MitigateNY project, DHSES will be developing a scenario mapping tool which utilize the BILD dataset in relationship with other risk and vulnerability datasets.

The scenario tool will be designed to handle specific Hazard Mitigation Planning tasks for use in mitigation planning in New York State. DHSES expects to launch this tool in Q3 2025. DHSES will make the tool available on the BILD site but level of support for state agency partners is TBD.

Conclusion

Feedback

Download and interrogate the BILD Dataset.

Was there a specific use-case that you wanted to see? Reach out to us.

BILD Final Acceptance Meetings

Meeting 2 - late February

Meeting 3 - late March

Contact Info & Data Access



MitigateNY

Corrina Cavallo

Deputy Chief of Mitigation Programs
corrina.cavallo@dhses.ny.gov

Beth O'Reilly

Community Engagement and
MitigateNY Supervisor
elizabeth.oreilly@dhses.ny.gov

Julia McWest

Project Management Lead
julia.mcwest@dhses.ny.gov

Tiffany Campo

Hazard Mitigation Planner
tiffany.campo@dhses.ny.gov

Shelby Meyers

Hazard Mitigation Planner
shelby.meyers@dhses.ny.gov

Sam Horowitz

Climate Policy Specialist
sam.horowitz@dhses.ny.gov

ACCESS MNY

SHMP: mitigateny.org

BILD: buildings.mitigateny.org

Email: your email address
Password: BILD!



Alex Muro

Lead Developer
amuro@albany.edu

Eric Krans

Program Manager
ekrans@albany.edu



**Homeland Security
and Emergency Services**