



BEDA Accelerator Monthly Working Call

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PNNL is operated by Battelle for the U.S. Department of Energy



Overview: UBID in Energy Benchmarking Workflow

Step 0: City creates UBIDs using building footprints (or parcel footprints)

Step 1: City publishes covered building list with UBIDs

Step 2: Reporters verify UBID using the UBID visualization tool and enter UBID in Portfolio Manager

Assessor
Database

Building
Footprints

Building Footprint		Covered Parcel List			
UBID	Footprint_Area_sq	DC_Real_Property_U	Address_random	Owner_Co	
87C4WXXGP+W6P-22-32-31-47	214688.85207800000	3129-0801	111 MICHIGAN AVE NW	WASHINGTON	
87C4WXH8+QHP-42-24-28-34	185470.00958899999	2674-1933	3100 14TH ST NW	DC USA CO	
87C4WXX9+262-33-30-34-18	175204.66345600001	2811-0802	4701 14TH ST NW	WMATA RE	
87C5W2X2+648-34-11-39-16	110935.18704000000	3788-0813	4900 PUERTO RICO AVE NE	CAPITAL AI	
87C4XX6F+Q3G-26-18-26-17	108558.35471400000	3085-0838	5009 GEORGIA AV NW	SCG 5929 S	
87C4WXXMX+8PQ-26-16-25-18	78111.11111111111		MICHIGAN AVE NE	NATIONAL	
87C4WXP6+HX2-15-29-16-37	73111.11111111111		6 16TH ST NW	ROCK CREE	
87C4XX9P+9PR-20-13-22-14	68111.11111111111		1 - 6527 CHILLUM PL NW	MFS CHILL	
87C4XXEP+G94-29-21-30-21	62111.11111111111		6 - EASTERN AV NW	JEMAL'S TA	
87C4XX7R+67F-14-26-12-25	62111.11111111111		1 KANSAS AVE NW	KANSAS AV	
87C4WXP+6MC-12-19-14-20	62111.11111111111		IRVING ST NW	WASHINGTON	
87C4XX9Q+F35-17-12-21-21	62111.11111111111		1 - 6527 CHILLUM PL NW	MFS CHILL	
87C5W2Q3+PCG-19-12-22-15	50111.11111111111		TAYLOR ST NE	MECO LLC	
87C4XX6R+PG8-11-27-14-30	54014.29093870000	3379-0823	5909 BLAIR RD NW	BLAIR ROA	
87C4XX9F+R9G-10-17-11-17	52175.94052830000	2974-0020	6500 PINEY BRANCH RD NW	NAI SATUR	
87C4WXXFH+Q9-13-34-10-22	51288.81302390000	3057-0092	2440 6TH ST NW	HOWARD U	
87C5W2W3+3M7-23-17-17-16	51126.59620670000	3894-0021	725 BUCHANAN ST NE	PROVIDEN	
87C4WXXGW+X92-19-22-23-18	50062.88961350000	PAR01200034	125 MICHIGAN AVE NE	TRINITY CC	
87C4WXXJ9+C8Q-15-18-15-17	49163.15304370000	2837-0079	1345 PARK RD NW	TIVOLI PAR	
87C4WXXRC+GJC-18-10-15-11	47398.79992370000	2911-0004	1291 TAYLOR ST NW	PENN B RE	
87C4WXH8+9G5-11-25-16-15	46587.77715090000	2672-0888	1400 IRVING ST NW	COLUMBIA	
87C5W2F4+66G-12-16-20-15	44381.73985140000	3846-0860	0806 CHANNING PL NE	JEMAL'S CH	

Covered
Buildings List
With UBID

Bldg 1

Bldg 2

Bldg 3

Bldg 4

ENERGY STAR Portfolio Manager

Step 3: City updates UBIDs based on submissions

<https://buildingid.pnnl.gov>



About UBID

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Unique Building IDENTIFICATION

Unique Building Identification

City agencies, commercial real estate, and others keep track of a numerous amount of buildings in the United States developed local building identification (ID) numbering systems but these local systems are inadequate for the rising needs of connecting building data sources.

- [Project Overview \(Office of Energy Efficiency & Renewable Energy\)](#)
- [GitHub Repository](#)
- [UBID Apps and Examples Website](#)

Market Needs

As public and private entities collaborate to gain a better understanding of building assets through a variety of tools and services, a major obstacle presents itself across the board: the difficulty of joining various types of data from disparate sources in a single location. Typically, that effort is based solely on address matching strategies—an outdated strategy which often yields low match rates and leaves significant portions of the building stock unaccounted for across multiple data sources.

Value Proposition

A unique identification system for buildings will provide a standardized framework under which a unifying field is used to match building data from various sources to a single object. It will facilitate data management and sharing by reducing the risk of mismatching or duplicating building data, and it will ease the burden of data exchange.

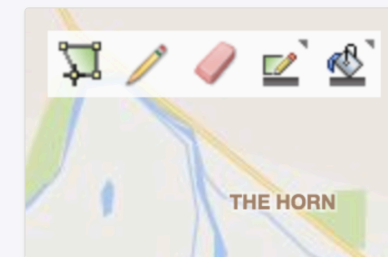
Unique Building Identification (UBID)

Identify the location and extent of any physical object on the surface of the Earth.

[Visit us on GitHub](#)

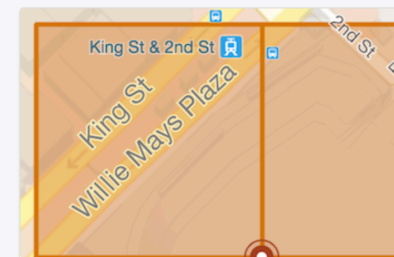
[Learn more](#)

UBID Visualizer Tool



Drawing Tools. Draw an area on the map. Edit and erase an existing shape. Import UBID code strings and Well Known Text strings.

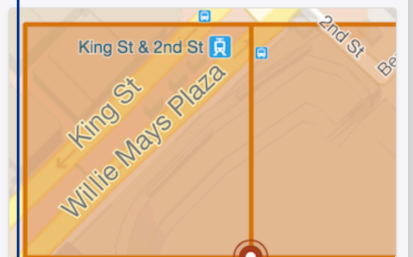
[Try it Now](#)



Decode Example. Decode a UBID code string, then view the shape on the map. View minimum and maximum coordinates for UBID code area.

[Try it Now](#)

Developer-friendly



Encode Example. Encode minimum and maximum coordinates as a UBID code string, then decode and view the shape on the map.

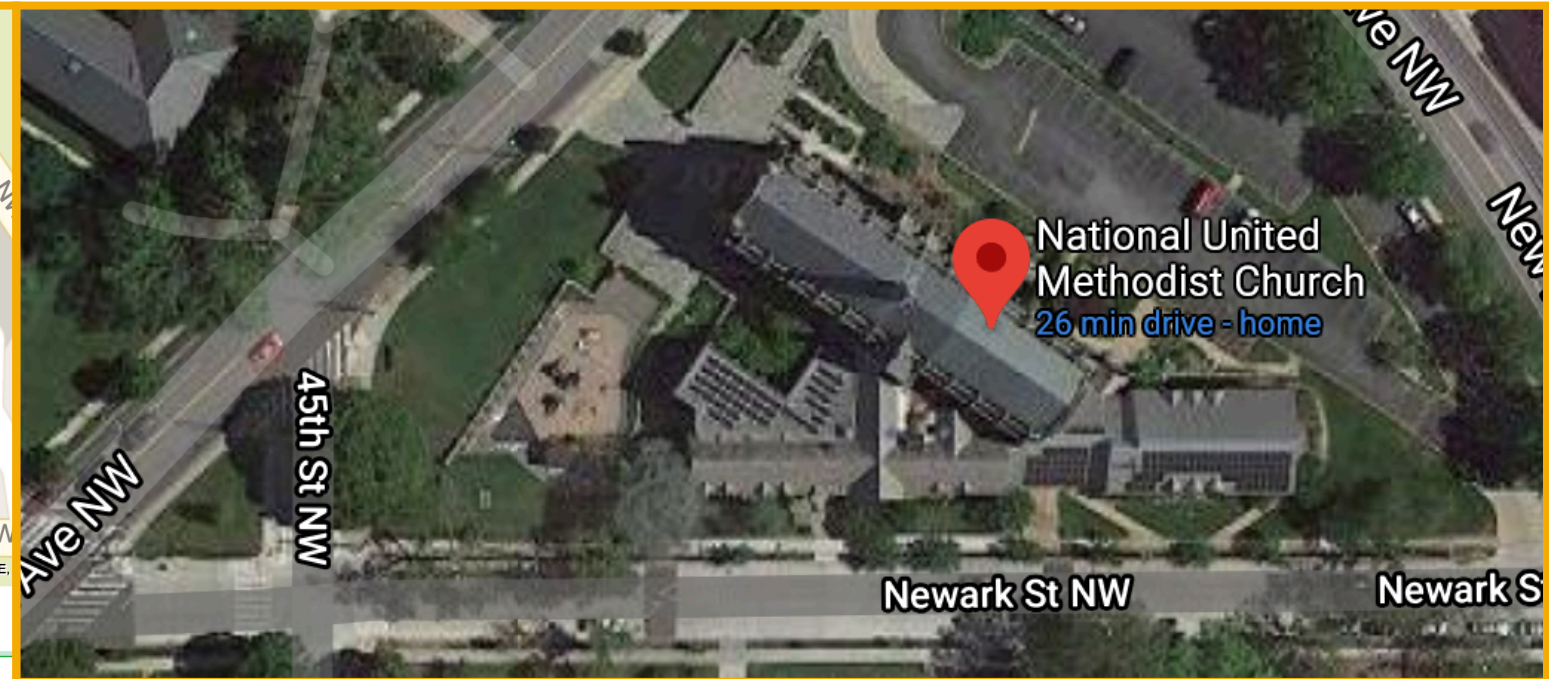
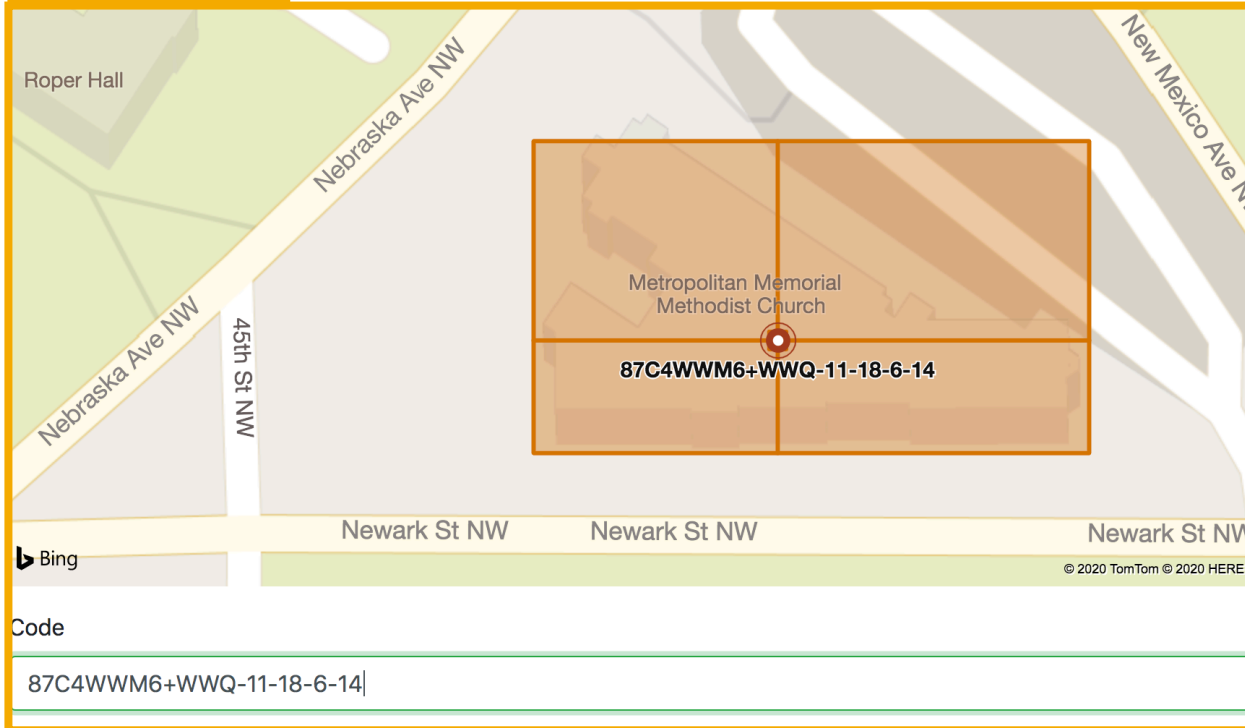
[Try it Now](#)

Developer-friendly

Washington, DC Examples

Name	Address	UBID(s)	SSL(s)	Note
National United Methodist Church	3401 Nebraska Ave NW, Washington, DC 20016	87C4WWM6+WWQ-11-18-6-14	16010010	1 Building 1 Lot

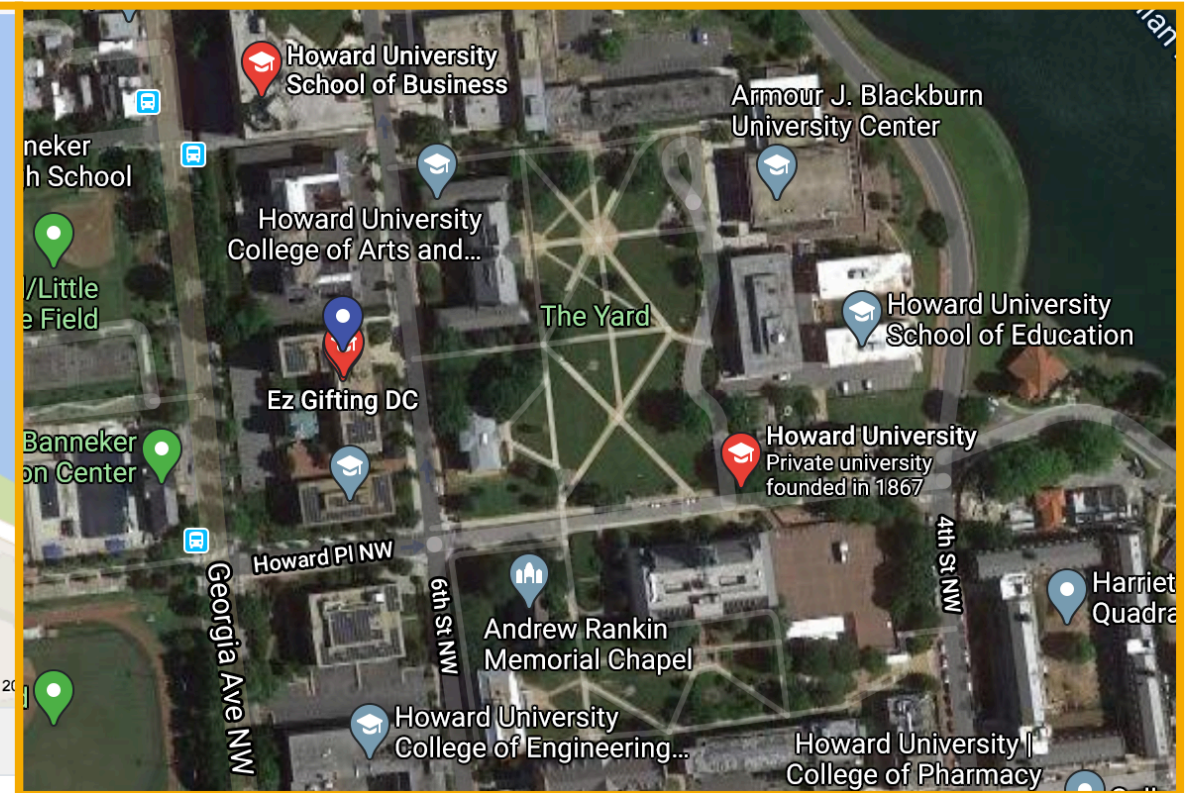
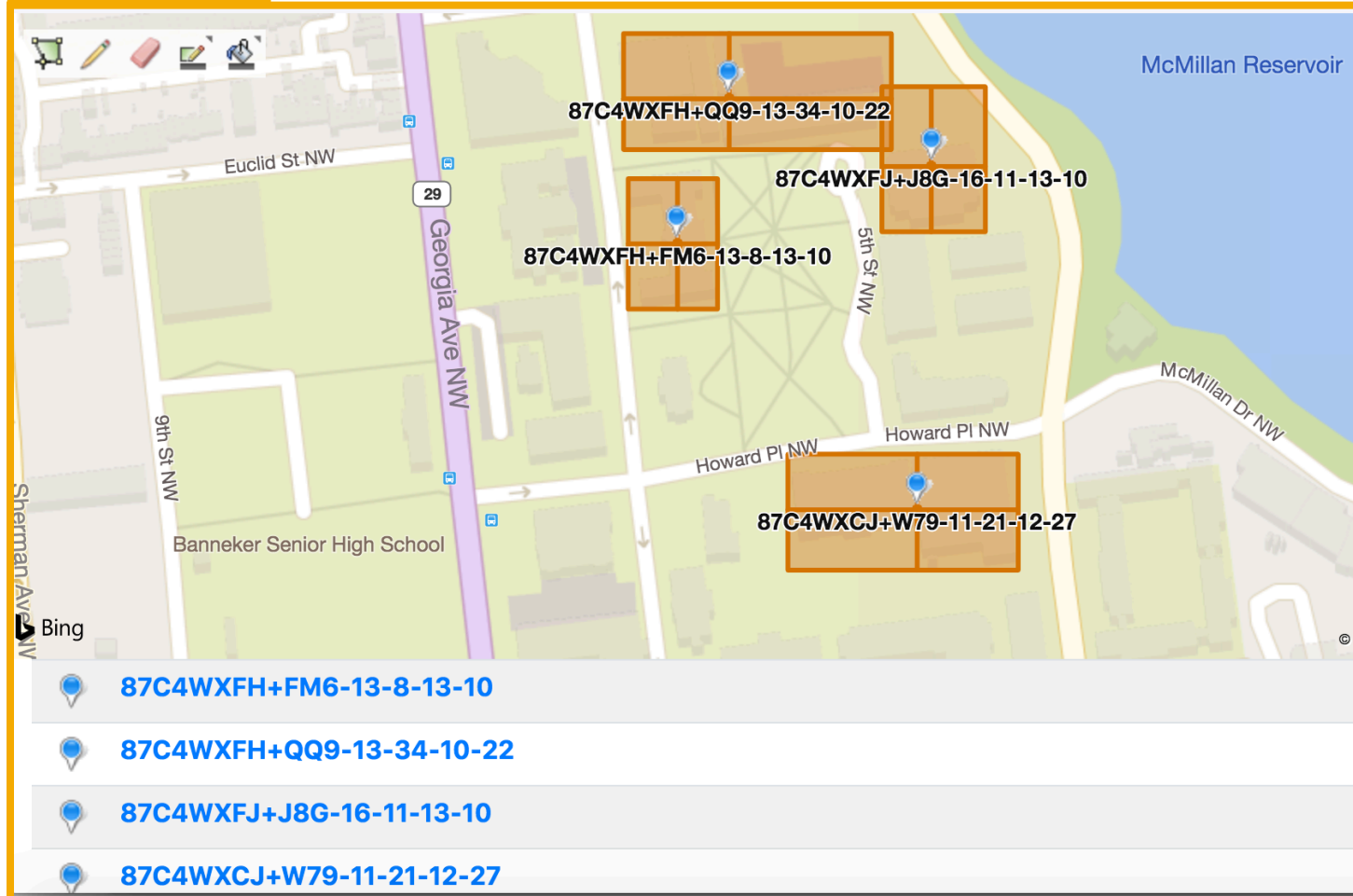
Example:



Washington, DC Examples

Name	Address	UBID(s)	SSL(s)	Note
Howard University	2400 6th St NW, Washington, DC 20059	87C4WXFH+FM6-13-8-13-10; 87C4WXFH+QQ9-13-34-10-22; 87C4WXFJ+J8G-16-11-13-10; 87C4WXCJ+W79-11-21-12-27 ...	30570092	Multiple Buildings 1 Lot

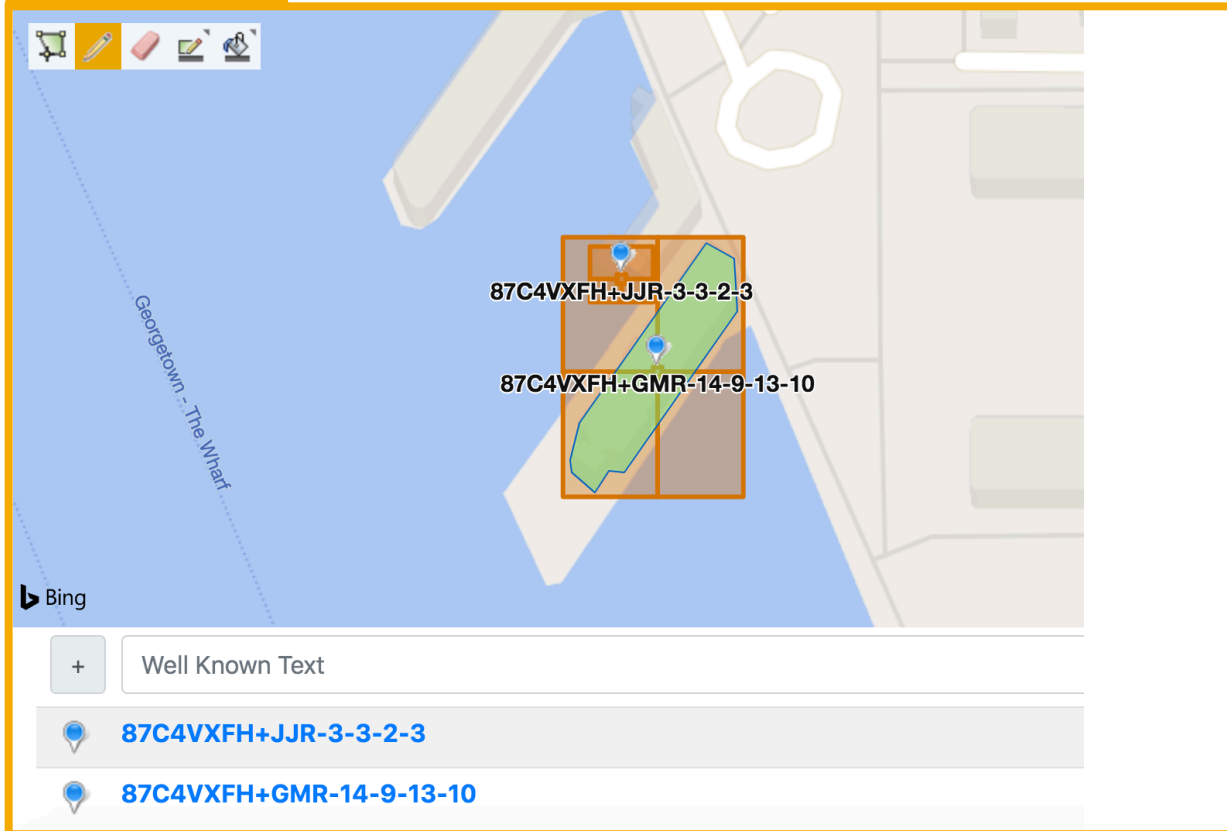
Example:



Washington, DC Examples

Name	Address	UBID(s)	SSL(s)	Note
Near Washington DC Police Harbor Patrol	Near 550 Water St SW Washington, DC 20024	87C4VXFH+JJR-3-3-2-3	N/A	No Lot Assignment & Footprint in Washington Channel

Example:





Thank you

