	Flood-Exposed/Exploratory Inventory						
Attribute	**Description**	**Format**	**Source**	**Field**	**Transformation**	**Detail**	**Phase**
BldgID	Building unique ID. The first four characters will be “NJBF,” followed by a 9-digit zero-padded number.	NJBF#########	NJDEP UDF	BldgUniqueID	None		Asset Description
Address	Typically assessor field for property location. This is distinct from Street Address in MODIV which is associated with the billing address	Alphanumeric	MODIV	PROP_LOC	None		Asset Description
City	Typically assessor field for property location – city.	Alphanumeric	MODIV	MUN_NAME	None	This is needed for Hazus Assignment	Asset Description
State	Typically assessor field for property location - state abbreviation.	Alphanumeric		Autogenerated		Populate with NJ by default	Asset Description
Latitude	Latitude of the Building Centroid (inside polygon).	Floating point number (Decimal Degrees)	NJDEP UDF	Latitude	Transformed to WGS84, EPSG 4326		Asset Description
Longitude	Longitude of the Building Centroid (inside polygon).	Floating point number (Decimal Degrees)	NJDEP UDF	Longitude	Transformed to WGS84, EPSG 4326		Asset Description
OccupancyClass	Subclassifications of buildings across various categories of Residential (RES), Commercial (COM), Industrial (IND), Agriculture (AGR), Government (GOV), Education (EDU), Religious/Non-Profit (REL).	Choices: RES1, RES2, RES3A, RES3B, RES3C, RES3D, RES3E, RES3F, RES4, RES5, RES6, COM1, COM2, COM3, COM4, COM5, COM6, COM7, COM8, COM9, COM10, IND1, IND2, IND3, IND4, IND5, IND6, AGR1, REL1, GOV1, GOV2, EDU1, EDU2	NJDEP UDF	OccupancyClass	None	RES1 - Single Family Dwelling RES2 - Mobile Home RES3A - Multi Family Dwelling - Duplex RES3B - Multi Family Dwelling - 3-4 Units RES3C - Multi Family Dwelling - 5-9 Units RES3D - Multi Family Dwelling - 10-19 Units RES3E - Multi Family Dwelling - 20-49 Units RES3F - Multi Family Dwelling - 50+ Units RES4 - Temporary Lodging RES5 - Institutional Dormitory RES6 - Nursing Home COM1 - Retail Trade COM2 - Wholesale Trade COM3 - Personal and Repair Services COM4 - Business/ Professional/ Technical Services COM5 - Depository Institutions COM6 - Hospitals COM7 - Medical Office/ Clinics COM8 - Entertainment & Recreation COM9 - Theaters COM10 - Parking IND1 - Heavy IND2 - Light IND3 - Food/ Drugs/ Chemicals IND4 - Metals/ Minerals Processing IND5 - High Technology IND6 - Construction AGR1 - Agriculture REL1 - Church/ Membership Organizations GOV1 - General Services GOV2 - Emergency Services EDU1 - Schools/ Libraries EDU2 - Colleges/ Universities	Asset Description
BuildingType	Core construction material type; Wood, Concrete, Steel, Masonry, Manufactured Housing.	Choices: 3001, 3002, 3003, 3004, 3005	NJDEP UDF	BuildingType	None	3001 - Wood 3002 - Steel 3003 - Concrete 3004 - Masonry 3005 - ManufHousing - Mobile Home	Asset Description
UseCode	Class 4 Use Codes (Field 67) applicable to commercial buildings only, describing specific use of commercial properties.	Integer (3-digit)	MODIV	PROP_USE		See MODIV Manual Reference B	Asset Description
BldgClass	Building class according to NJ Appraisal Manual (see Vol 2)	Integer (3-digit)	MODIV	BLDG_CLASS			Asset Description
EssentialClass	Designates several classes of essential facilities in the region based on open data to ensure they are properly modeled.	Choices: PS, EOC, HO, HS, SCH	NJOIT Data			PS: police station FS: fire station EOC: emergency operation center HO: hospital SCH: school (Encompasses ES: elementary school, HS: high school) Process KMLs against footprints to identify locations of police stations, emergency operations centers, hospitals, high schools, fire stations, and elementary schools. Available KMLs define locations of Schools, Fire Stations, Emergency Medical Services, Law Enforcement (Police) and hospitals. Note EOCs for Atlantic County municipalities are generally police stations, so EOCs will not be explicitly distinguished from PS in this testbed. The County EOC is located at: 5033 English Creek Avenue, Egg Harbor Township, NJ 08234.	Asset Description

	Flood-Exposed/Exploratory Inventory						
Attribute	**Description**	**Format**	**Source**	**Field**	**Transformation**	**Detail**	**Phase**
DesignLevel	Classification of level of engineering used in design process: Choices: Engineered (E), Pre-Engineered, (PE) Marginally Engineered (ME), Non-Engineered (NE)	Choices: E, PE, ME, NE		Augmented Data	If OccupancyClass = RES1 OR RES3A oR AGR1, DesignLevel = NE If OccupancyClass = EDU1 OR EDU2 OR GOV1 OR GOV2 OR COM6 OR IND1 OR IND3 OR IND4 OR IND5 OR IND6 OR COM10, DesignLevel = E If OccupancyClass = RES2, DesignLevel = PE If OccupancyClass = IND2, DesignLevel=ME If OccupancyClass = RES3B OR RES3C OR RES3D OR RES3E OR RES3F OR RES4 OR RES5 OR RES6 OR COM1 OR COM2 OR COM3 OR COM4 OR COM5 OR COM7 OR COM8 OR COM9 OR REL1 & NumberofStories>3, DesignLevel = E If OccupancyClass = RES3B OR RES3C OR RES3D OR RES3E OR RES3F OR RES4 OR RES5 OR RES6 OR COM1 OR COM2 OR COM3 OR COM4 OR COM5 OR COM7 OR COM8 OR COM9 OR REL1 & NumberofStories<4, DesignLevel = ME	Will adopt the following definition: E=high rises, critical facilities, government buildings, health care, schools; ME = hotels, apartments, offices, light industrial (1-3 stories); NE=single and duplex residences, small commercial; PE=Metal building systems and other prefab systems like mobile homes (see https://www.nap.edu/read/1993/chapter/15); since metal buildings aren't easy to identify in the inventory, only mobile homes will receive PE; also note that difference between ME and E will be discerned for many classes of hotels, apartments, office and light industry based on height (over 3 stories assumed engineered)	Asset Representation
YearBuiltNJDEP	Assessor-provided Year of Construction from NJDEP Footprints	Integer (4-digit)	NJDEP UDF	YearBuilt		Note exact years are needed for Hazus; 1969 Default	Asset Description
YearBuiltMODIV	Assessor-provided Year of Construction from MODIV	Integer (4-digit)	MODIV	YR_CONSTRUCT			Asset Description
NumberofStories0	Assessor-provided number of stories	Integer (4-digit)	NJDEP UDF	NumberofStories	None	3101 = RES1 1 Stories 3102 = RES1 2 Stories 3103 = RES1 3+ Stories 3109 = RES1 1.5 Stories 3201 = RES2 1 Stories 3202 = RES2 2 Stories 3203 = RES2 3+ Stories 3301 = RES3X 1-2 Stories 3303 = RES3X 3-4 Stories 3305 = RES3X 5+ Stories 3401 = OTHER 1-3 Stories 3404 = OTHER 4-7 Stories 3408 = OTHER 8+ Stories	Asset Description
NumberofStories1	Number of stories estimated via image processing	Integer	StreetView	Augmented Data	None		Asset Description
NoUnits	Number of units in the property (commercial or residential)	Integer	MODIV	DWELL, COMM_DWELL	max(DWELL,COMM_DWELL)	Note if the property is residential, then a value should only be in DWELL; if the property is commercial, then a value should only be in COMM_DWELL	Asset Description
PlanArea0	Plan area in square feet from assessor databases	Floating point number	NJDEP BA	AreaSqFt	None	Applies to Engineered structures	Asset Description
PlanArea1	Plan area in square feet from footprint data	Floating point Number	Footprints	Augmented Data	Calculate from footprints	Applies to Engineered structures	Asset Description
FoundationType	Classification using 7 types referenced by flood model	Integer (4-digit)	NJDEP UDF	FoundationType	None	3501 = Piles 3502 = Piers 3503 = Solid Wall 3504 = Basement 3505 = Crawlspace 3506 = Fill 3507 = Slab-on-Grade	Asset Description
SplitLevel	Specifies if residential construction is split-level	Choices: Yes, No	MODIV	BLDG_DESC	IF BLDG_DESC(style)=S, SplitLevel=Yes, ELSE SplitLevel=No	Building Description Field (13) - fifteen alphanumeric characters: The information in a description should be listed in the following order: 1: stories, 2: exterior structural material, 3:style, 4:number of stalls, and 5: type of garage. Style contains the desired information for this field, where style of S is split-level. See p. 18 of MODIV Manual	Asset Description
ElevationR0	Elevation of the bottom plane of the roof (lowest edge of roof line) relative to grade (ft)	Floating point number	StreetView	Augmented Data		See Elevation schematic for details	Asset Description
ElevationR1	Elevation of highest point of the roof (peak of gable or apex of hip) relative to grade (ft)	Floating point Number	StreetView	Augmented Data		See Elevation schematic for details	Asset Description
FirstFloorHt0	Height above grade estimated from elevation certificate or inferred from foundation type (in feet): Defined as top of lowest/bottom floor	Floating point Number	NJDEP UDF	FirstFloorHt	None		Asset Description
FirstFloorHt1	Height of top of floor as estimated from base of door height above grade, based on streetview imagery (in feet)	Floating point Number	StreetView	Augmented Data	min(Elevations)		Asset Description

	Flood-Exposed/Exploratory Inventory						
Attribute	**Description**	**Format**	**Source**	**Field**	**Transformation**	**Detail**	**Phase**
FloodZone	Flood zone specified on FEMA FIRM based on building location	Choices: 6101, 6102, 6103, 6104, 6105, 6106, 6107, 6108, 6109, 6110, 6111, 6112, 6113, 6114, 6115, 6199	NJDEP SDE	FloodZone	None	6101 = VE-Riverine floodway shown in coastal zone 6102 = VE 6103 = AE-Floodway 6104 = AE-Administrative floodway 6105 = AO-Floodway 6106 = AE 6107 = AH 6108 = AO 6109 = A 6110 = X-0.2 pct annual chance flood hazard 6111 = X-Area with reduced flood risk due to levee 6112 = X-Area of minimal flood hazard 6113 = Open water 6114 = D 6115 = Area not included 6199 = No zone available where A=1% annual flood risk, no BFEs AE=1% annual flood risk, with BFEs AH=1% annual flood risk, shallow flooding like ponds AO=1% annual flood risk, river or stream areas V=1% annual flood risk, no BFEs, with damaging waves VE = 1% annual flood risk, BFEs, with damaging waves X=areas with minor flood risks, typically less than 1 ft.	Hazard Characterization
DSWI	DesignWindSpeed I in mph	Floating point number	ATC API (ASCE 7)	Augmented Data			Asset Description
DSWII	DesignWindSpeed II in mph	Floating point number	ATC API (ASCE 7)	Augmented Data			Asset Description
DSWIII	DesignWindSpeed III in mph	Floating point number	ATC API (ASCE 7)	Augmented Data			Asset Description
DSWIV	DesignWindSpeed IV in mph	Floating point number	ATC API (ASCE 7)	Augmented Data			Asset Description
WindZone	HAZUS-defined Wind Zone (For Manufactured homes, based on HUD Designation)	Choices: I, II, III		Rule-assigned data	WindZone=I	All of NJ is in Zone I (https://www.manufacturedhousing.org/wind-map/)	Asset Representation
AvgJanTemp	Average temperature in January below or above critical value of 25F.	Choices: Above, Below		Default Assignment	Default all values to Above.	Verify against NOAA average daily temperature in January for NJ	Asset Representation
RoofShape	Roof classified into equivalent hip, gable or flat	Choices: Hip, Gable, Flat	Aerial Imagery	Augmented Data	None		Asset Representation
RoofSlope	Slope of roof covering the majority of the dwelling	Floating point number	Aerial + StreetView Imagery	Augmented Data	Derive from elevations and polygon (footprint) geometry		Asset Representation
RoofCover	Roof covering, specified only for residential construction.	Choices: 5701, 5702, 5703, 5704	NJDEP SDE	RoofCovering	None	5701 = Shingles - Asphalt, Wood 5702 = Clay Tiles 5703 = Standing Seam (Metal) 5704 = Slate	Asset Representation
MeanRoofHt	Mean height of roof system in ft	Floating point number	StreetView	Derived Data	(ElevationR1+ElevationR0)/2	Used only for WMUH	Asset Description
WindowArea	Percentage of walls defined by window openings	Floating point number (decimal<1)	StreetView	Augmented Data	None	Applies to Engineered Buildings Only (masonry, concrete, and steel); calculated via segmentation algorithm on front image and assume same density on all sides	Asset Description
Garage	Assessor-provided type of garage.	Floating point number	MODIV	BLDG_DESC	IF BLDG_DESC(Type of garage)=AG, Garage=1.N, where N=BLDG_DESC(Number of stalls) IF BLDG_DESC(Type of Garage)=UG, Garage=0.N, where N=BLDG_DESC(Number of Stalls) IF BLDG_DESC(Type of garage)=00, Garage=0	Building Description Field (13) - fifteen alphanumeric characters: The information in a description should be listed in the following order: 1: stories, 2: exterior structural material, 3:style, 4:number of stalls, and 5: type of garage. Number of Stalls and Type of Garage contain the desired information for this field, where AG: Attached Garage, UG: Unattached Garage. See p. 18 of MODIV Manual	Asset Description

	Flood-Exposed/Exploratory Inventory						
Attribute	**Description**	**Format**	**Source**	**Field**	**Transformation**	**Detail**	**Phase**
Terrain	HAZUS-defined terrain classifications (x100) based on LULC data	Choices: 3, 15, 35, 70, 100	LU/LC Data	Augmented Data	IF FloodZone = 6101 or 6102 or 6102 or 6104 or 6106 or 6109, Terrain = 3 ELSE IF LU/LC = 5000-5999 OR 4400 OR 6240 OR 7600, Terrain = 3 ELSE IF LU/LC = 2000-2999, Terrain = 15 ELSE IF LU/LC = 1110-1140 OR 6250-6252, Terrain = 35 ELSE IF LU/LC = 4100-4300 OR 1600, Terrain = 70	Based on processing Land Use/Land Cover data; note that due to proximity to shoreline and thus open exposure of approaching hurricane at landfall, all coastal A and V-Zone properties are assumed to have roughness 0.03. This encompasses all V and A Zone properties except those associated with AH or AO (6105, 6107, 6108) open (0.03) = 3 light suburban (0.15) = 15 suburban (0.35) = 35 light trees (0.70) = 70 trees (1.00) = 100 Details: Mapped to Land Use Categories in NJ (see https://www.state.nj.us/dep/gis/digidownload/metadata/lulc02/anderson2002.html) by T. Wu group (see internal report on roughness calculations, Table 4). These are mapped to Hazus definitions as follows: Open Water (5400s) with zo=0.01 and barren land (7600) with zo=0.04 assume Open Open Space Developed, Low Intensity Developed, Medium Intensity Developed (1110-1140) assumed zo=0.35-0.4 assume Suburban High Intensity Developed (1600) with zo=0.6 assume Lt. Tree Forests of all classes (4100-4300) assumed zo=0.6 assume Lt. Tree Shrub (4400) with zo=0.06 assume Open Grasslands, pastures and agricultural areas (2000 series) with zo=0.1-0.15 assume Lt. Suburban Woody Wetlands (6250) with zo=0.3 assume suburban Emergent Herbaceous Wetlands (6240) with zo=0.03 assume Open HAZUS category of trees (1.00) does not apply to any LU/LC in NJ Note: If any LU/LC in the current GIS layer is unassigned using these rules, the ranges in the ruleset will be expanded to encompass it. Exposure is currently averaged for full 360 around structure; can be determined from directional analysis when loads/pressures are directly specified on SAM	Asset Representation
AnalysisDefault	Defines the default level of fidelity for analysis	Choices: 1, 2, 3		Augmented Data	IF NumberofStories1>6, AnalysisDefault=2; ELSE AnalysisDefault=1		Asset Description
AnalysisAdopted	Defines the adopted level of fidelity for analysis	Choices: 1, 2, 3		User Defined Data	AnalysisAdopted=AnalysisDefault	For now, set all to default	Asset Description
Modifications	Record of manual updates, corrections or modifications to record	Alphanumeric (freeform)		User Defined Data			General
HazusClass-W	Hazus building classes as defined for wind hazards	CHOICES: WSF1, WSF2, WMUH1, WMUH2, WMUH3, WMUH1NE, WMUH2NE, WMUH3NE, WMUH4NE, MSF1, MSF2, MMUH1, MMUH2, MMUH3, MLRM1, MLRM2, MLRI, MERBL, MERBM, MERBH, MECBL, MECBM, MECBH, MMUH1NE, MMUH2NE, MMUH3NE, CERBL, CERBM, CERBH, CECBL, CECBM, CECBH, SPMBS, SPMBM, SPMBL, SERBL, SERBM, SERBH, SECBL, SECBM, SECBH, MHPHUD, MH76HUD, MH94HUD-I, MH94HUD-II, MH94HUD-III, HUEFFS, HUEFSS, HUEFSM, HUEFSL, HUEFHS, HUEFHM, HUEFHL, HUEFPS, HUEFEO		Augmented Data	Apply Hazus Building Class - Wind Rulesets		Asset Representation
RoofSystem	Underlying roof structure, applies only to masonry buildings	Choices: Wood, OWSJ			IF HazusClass=MSF1-2, RoofSystem=Wood; IF HazusClass=MLRM1 or MLRM2, RoofSystem=OWSJ	Note the only roof option for commercial masonry in NJ appraisers manual is OSWJ (BldgClass=103) so this suggests they do not even see alternate roof systems for this building class; residences would not need OWSJ (too short of span). Leave blank for all others.	Asset Description
HPR	Defines Hazard Prone Regions (HPR) for the purposes of Hazus wind vulnerability assignments for WSF1-2	Choices: yes, no		Augmented Data	Apply Hazus Building Attribute - Wind Rulesets		Asset Representation
WBD	Defines Wind Borne Debris (WBD) for the purposes of Hazus wind vulnerability assignments for WSF1-2	Choices: yes, no		Augmented Data	Apply Hazus Building Attribute - Wind Rulesets		Asset Representation
SWR	Defines Secondary Water Resistance (SWR) for the purposes of Hazus wind vulnerability assignments for WSF1-2, WMUH1-3, MSF1-2, MMUH1-3	Choices: yes, no		Augmented Data	Apply Hazus Building Attribute - Wind Rulesets		Asset Representation
RoofCvr	Defines roof cover for the purposes of Hazus wind vulnerability assignments for WMUH1-3, MMUH1-3, MERBL-M-H, MECBL-M-H, MLRI, MLRM1, MLRM2, SERBL-M-H, SECBL-M-H, CECBL-M-H, CERBL-M-H and Fire Stations (HUEFFS), Elementary Schools (HUEFSS), 2-story High School (HUEFSM) and 3-story High School (HUEFSL) and Hospitals (small - HUEFHS, medium - HUEFHM, large - HUEFHL) and Police Stations (HUEFPS), Emergency Operation Centers (HUEFEO)	Choices: N/A, BUR, SPM		Augmented Data	Apply Hazus Building Attribute - Wind Rulesets		Asset Representation

	Flood-Exposed/Exploratory Inventory						
Attribute	**Description**	**Format**	**Source**	**Field**	**Transformation**	**Detail**	**Phase**
RoofQual	Defines roof cover quality for the purposes of Hazus wind vulnerability assignments for WMUH1-3, MMUH1-3, MLRI	Choices: N/A, poor, good		Augmented Data	Apply Hazus Building Attribute - Wind Rulesets		Asset Representation
RDA-Wood	Defines Roof Deck Attachment (RDA) for wood for the purposes of Hazus wind vulnerability assignments for WSF1-2, WMUH1-3, MMUH1-3, MSF1-2, MLRM1, MLRM2	Choices: A, B, C, D		Augmented Data	Apply Hazus Building Attribute - Wind Rulesets	WSF and WMUH: A = 6d @ 6”/12” B = 8d @ 6”/12” C = 6d/8d mix @ 6”/6” D = 8d @ 6”/6”	Asset Representation
RDA-OWSJ	Defines Roof Deck Attachment (RDA) for OWSJ for the purposes of Hazus wind vulnerability assignments for MSF1-2	Choices: smtl standard, smtl superior, cshl standard, cshl superior		Augmented Data	Apply Hazus Building Attribute - Wind Rulesets		Asset Representation
R2WC	Defines Roof to Wall Connection (R2WC) for the purposes of Hazus wind vulnerability assignments for WSF1-2, WMUH1-3, MMUH1-3, MSF1-2, MLRM1, MLRM2	Choices: strap, toe-nail		Augmented Data	Apply Hazus Building Attribute - Wind Rulesets		Asset Representation
shutters	Defines use of window opening protection for the purposes of Hazus wind vulnerability assignments for WSF1-2, WMUH1-3, MMUH1-3, MSF1-2, MERBL-M-H, MECBL-M-H, MMUH1-3,MLRM1, MLRM2, SERBL-M-H, SECBL-M-H, CECBL-M-H, CERBL-M-H, SPMBS-M-L, MH94HUDI-II-III, MH76HUD, MHPHUD and Fire Stations (HUEFFS), Elementary Schools (HUEFSS), 2-story High School (HUEFSM) and 3-story High School (HUEFSL) and Hospitals (small - HUEFHS, medium - HUEFHM, large - HUEFHL) and Police Stations (HUEFPS), Emergency Operation Centers (HUEFEO)	Choices: yes, no		Augmented Data	Apply Hazus Building Attribute - Wind Rulesets		Asset Representation
Agarage	Defines presence of attached garage for the purposes of Hazus wind vulnerability assignments for WSF1-2, MSF1-2	Choices: none, SFBC 1994, standard, weak		Augmented Data	Apply Hazus Building Attribute - Wind Rulesets		Asset Representation
Mreinf	Defines presence of reinforcement in masonry walls for the purposes of Hazus wind vulnerability assignments for MSF1-2, MLRI, MLRM1, MLRM2, MMUH1-3	Choices: yes, no		Augmented Data	Apply Hazus Building Attribute - Wind Rulesets		Asset Representation
OWSJ-r	Defines property of OWSJ required for Hazus wind vulnerability assignments for MSF1-2	Choices: cshl, smtl		Augmented Data	Apply Hazus Building Attribute - Wind Rulesets		Asset Representation
Metal-RDA	Defines Metal Roof Deck Attachment (RDA) for purposes of Hazus wind vulnerability assessments for MLRI, MERBL-M-H, MECBL-M-H, MLRM1, MLRM2, SERBL-M-H, SECBL-M-H, SPMBS-M-L and Fire Stations (HUEFFS), Elementary Schools (HUEFSS), 2-story High School (HUEFSM) and 3-story High School (HUEFSL) and Hospitals (small - HUEFHS, medium - HUEFHM, large - HUEFHL) and Police Stations (HUEFPS), Emergency Operation Centers (HUEFEO)	Choices: standard, superior		Augmented Data	Apply Hazus Building Attribute - Wind Rulesets		Asset Representation
RDage	Defines roof deck age for the purposes of Hazus wind vulnerability assessments for MLRM1, MLRM2, SPMBS-M-L and Fire Stations (HUEFFS), Elementary Schools (HUEFSS)	Choices: new/avg, old		Augmented Data	Apply Hazus Building Attribute - Wind Rulesets		Asset Representation
UnitClass	Defines number of units in strip mall for purposes of Hazus wind vulnerability assessments for MLRM2	Choices: single, multi		Augmented Data	Apply Hazus Building Attribute - Wind Rulesets		Asset Representation
JoistSpace	Defines joist spacing for multi-unit strip malls for purposes of Hazus wind vulnerability assessments for MLRM2	Choices: N/A, 4, 6		Augmented Data	Apply Hazus Building Attribute - Wind Rulesets		Asset Representation
WindDebris	Defines likely sources of wind debris for purpose of Hazus wind vulnerability assessments for MERBL-M-H, MECBL-M-H, MLRM1, MLRM2, SERBL-M-H, SECBL-M-H, CECBL-M-H, CERBL-M-H and Fire Stations (HUEFFS), Elementary Schools (HUEFSS), 2-story High School (HUEFSM) and 3-story High School (HUEFSL) and Hospitals (small - HUEFHS, medium - HUEFHM, large - HUEFHL) and Police Stations (HUEFPS), Emergency Operation Centers (HUEFEO)	Choices: Res/Comm, Varies by Direction, Residential, None, A, B, C, D		Augmented Data	Apply Hazus Building Attribute - Wind Rulesets	Note essential facilities attributes were defined as A, B, C, D which are respectively equivalent to the attributes used for non-essential classes as follows: A: Res/Comm B: Varies by Direction C: Residential D: None	Asset Representation
WWR	Defines window to wall ratio (WWR) for purpose of Hazus wind vulnerability assessments for MERBL-M-H, MECBL-M-H, SERBL-M-H, SECBL-M-H, CECBL-M-H, CERBL-M-H and Police Stations (HUEFPS), Emergency Operation Centers (HUEFEO)	Choices: low, medium, high		Augmented Data	Apply Hazus Building Attribute - Wind Rulesets		Asset Representation
TieDowns	Defines use of ties to connect mobile homes to foundations per HUD guidelines for purpose of Hazus wind vulnerability assessments for MH94HUDI-II-III, MH76HUD, MHPHUD	Choices: yes, no		Augmented Data	Apply Hazus Building Attribute - Wind Rulesets		Asset Representation
HazusClass-IN	Hazus building classes as defined for inundation (flooding)	Choices: SF1XA, SF1XV, SF2XA, SF2XV, SF2BA, SF2BV, SF2SA, SF2SV, MH, APT, HOT, NURSE, RETAIL, WHOLE, SERVICE, OFFICE, BANK, HOSP, MED, REC, THEAT, GARAGE, INDH, INDL, CHEM, PROC, CONST, AGRI, RELIG, CITY, EMERG, SCHOOL		Augmented Data	Apply Hazus Building Class - Flood Rulesets		Asset Representation
HazusClass-WA	Hazus building classes as defined for wave action	Choices: W1, W2, W3, MC1, MC2, MC3, S1, S2, S3, MH		Augmented Data	Apply Hazus Building Class - Wave Rulesets		Asset Representation
FloodType	Assignment to flood zones as defined for Hazus damage/loss descriptions	Choices: Riverine/A-Zone, Coastal/A-Zone, Coastal/V-Zone		Augmented Data	Apply Hazus Building Attribute - Flood Rulesets		Asset Representation
FirstFloorElev	Assignment of first floor height as defined by Hazus	Floating Point Number		Augmented Data	Apply Hazus Building Attribute - Flood Rulesets		Asset Representation

	Flood-Exposed/Exploratory Inventory						
Attribute	**Description**	**Format**	**Source**	**Field**	**Transformation**	**Detail**	**Phase**
PostFIRM	Assignment of FIRM phasing as defined by Hazus	Choices: Yes, No		Augmented Data	Apply Hazus Building Attribute - Flood Rulesets		Asset Representation
NumberofStories	Initializing number of stories for Hazus analysis	integer		Augmented Data	Apply Hazus Building Attribute - Flood Rulesets		Asset Representation
BasementType	Assignment of basement type for Hazus analysis	Choices: Basement, Split-Level Basement, No Basement		Augmented Data	Apply Hazus Building Attribute - Flood Rulesets		Asset Representation
OccupancyType	Assignment of Occupancy type for Hazus analysis	Choices: SF1XA, SF1XV, SF2XA, SF2XV, SF2BA, SF2BV, SF2SA, SF2SV, MH, APT, HOT, NURSE, RETAIL, WHOLE, SERVICE, OFFICE, BANK, HOSP, MED, REC, THEAT, GARAGE, INDH, INDL, CHEM, PROC, CONST, AGRI, RELIG, CITY, EMERG, SCHOOL		Augmented Data	Apply Hazus Building Attribute - Flood Rulesets		Asset Representation
Duration	Assignment of storm duration for Hazus Analysis	Short, Long		Augmented Data	Apply Hazus Building Attribute - Flood Rulesets		Asset Representation
Wave Velocity	Definition of wave velocity in ft/s for Hazus Analysis	Floating Point Number		Augmented Data	Apply Hazus Building Attribute - Flood Rulesets		Asset Representation