Homework 1: DQR on NY Property Data

Section 1: Data Summary

The dataset contained comprehensive data pertaining to the city of New York property tax filings. It is provided by the Department of Finance and is owned by NYC open data. The dataset covers one assessment period for the year 2010/2011. It contains 32 fields and 1,070,994 records. There is one record for each property containing information such as but not limited to property characteristics, assessed property tax value, owner name, and location.

Section 2: Summary Tables

   a. **Numeric Table**

|	% Populated	Min	Max	Mean	Stdev	% Zero
LTFRONT	100	0	9,999	37	74	16
LTDEPTH	100	0	9,999	89	76	16
STORIES	95	1	119	5	8	0
FULLVAL	100	0	6,150,000,000	874,265	11,582,431	1
AVLAND	100	0	2,668,500,000	85,068	4,057,260	1
AVTOT	100	0	4,668,308,947	227,238	6,877,529	1
EXLAND	100	0	2,668,500,000	36,424	3,981,576	46
EXTOT	100	0	4,668,308,947	91,187	6,508,403	40
BLDFRONT	100	0	7,575	23	36	21
BLDDEPTH	100	0	9,393	40	43	21
AVLAND2	26	3	2,371,005,000	246,236	6,178,963	0
AVTOT2	26	3	4,501,180,002	713,911	11,652,529	0
EXLAND2	8	1	2,371,005,000	351,236	10,802,213	0
EXTOT2	12	7	4,501,180,002	656,768	16,072,510	0
YEAR	100	2010/11	2010/11	N/A	N/A	0

b. Categorical Table

	% Populated	# Unique Values	Most Common Value
RECORD	100	1070994	1
BBLE	100	1070994	1000010101
BORO	100	5	4
BLOCK	100	13984	3,944
LOT	100	6366	1
EASEMENT	0	12	E
OWNER	97	863347	PARKCHESTER PRESERVAT
BLDGCL	100	200	R4
TAXCLASS	100	11	1
EXT	33	3	G
EXCD1	60	129	1,017
STADDR	100	839280	501 SURF AVENUE
ZIP	97	196	10,314
EXMPTCL	1	14	X1
EXCD2	9	60	1,017
PERIOD	100	1	FINAL
YEAR	100	1	2010/11
VALTYPE	100	1	AC-TR

Section 3: Exploratory Dara Analysis

a. **RECORD**
   i.   Description: Record is a unique indicator for each property in the dataset.
   ii. Picture
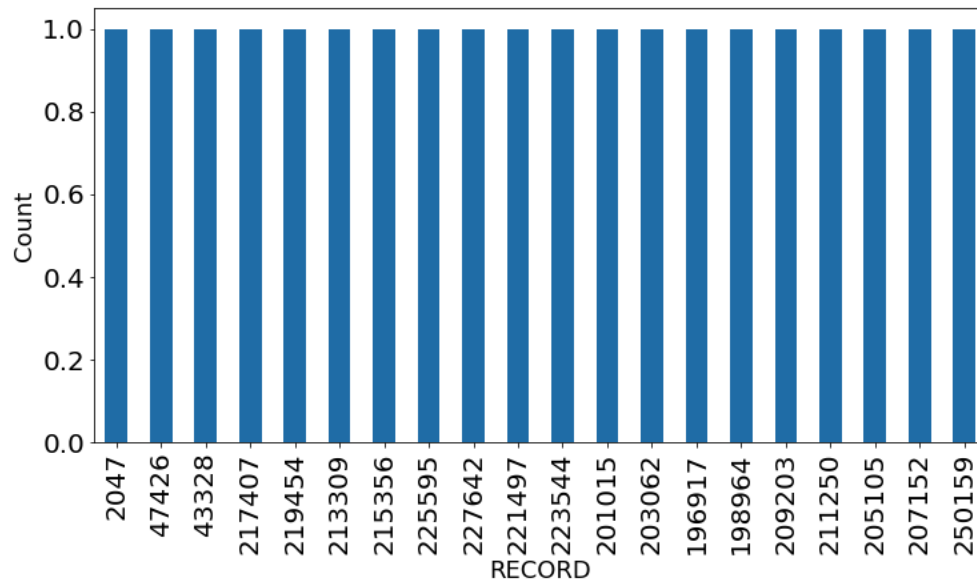
b. **BBLE**
   i.   Description: File key referring to BORO, BLOCK, EASEMENT, LOT
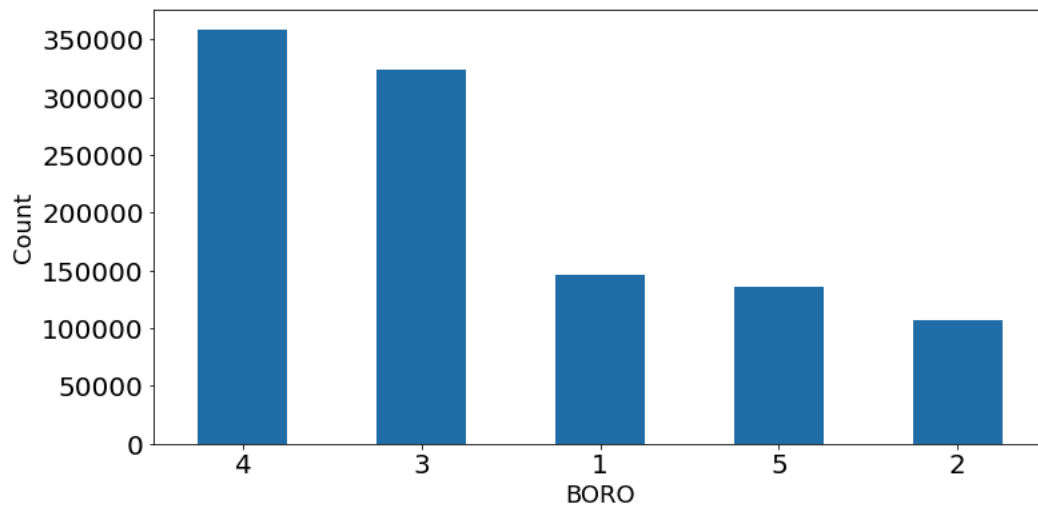   ii. Picture
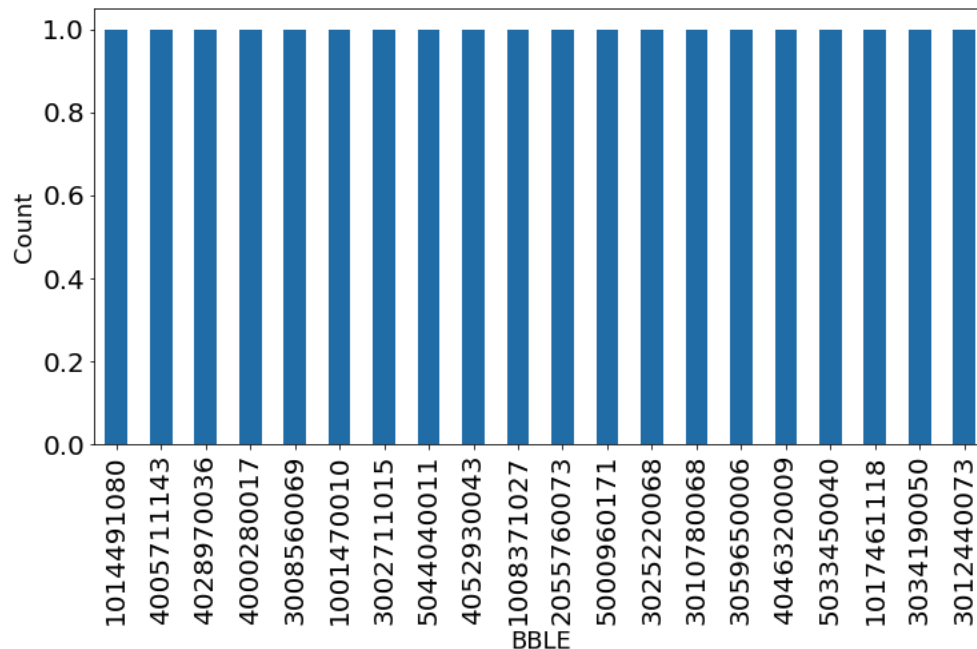
c. **BORO**
  i. Description: BORO indicates which of the 5 Boroughs of NY the property is located in.
      - 1 = Manhattan
      - 2 = Bronx
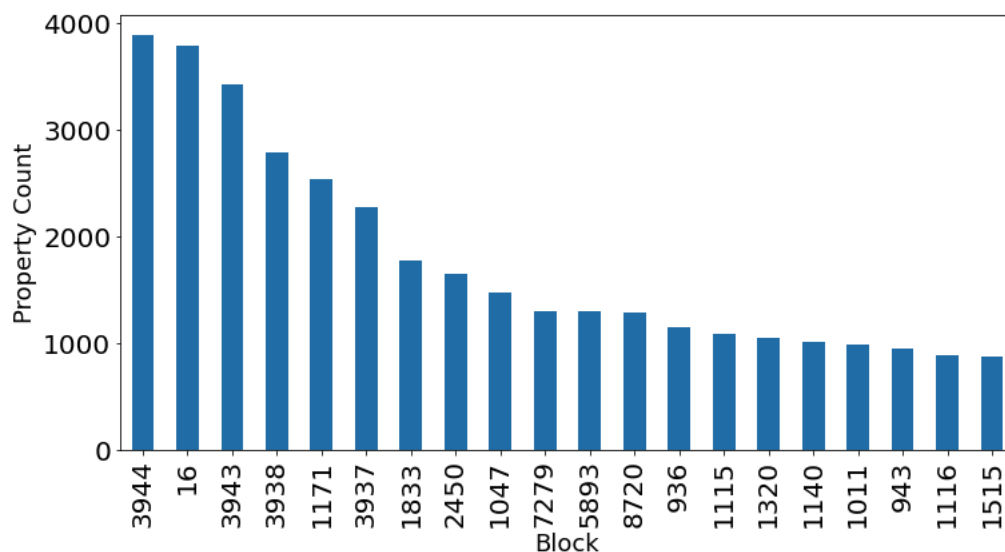   - 3 = Brooklyn
      - 4 = Queens
      - 5 = Staten Island
  ii. Picture

d. **BLOCK**
  i. Description: Block pertains to block ranges per Borough.
      - Manhattan: 1 to 2255
      - Bronx: 2260 to 5958
      - Brooklyn: 1 to 8955
      - Queens: 1 to 16350
      - Staten Island: 1 to 8050
  ii. Picture

e. LOT
  i.   Description: LOT is a label for the lot number of the property.
  ii. Picture
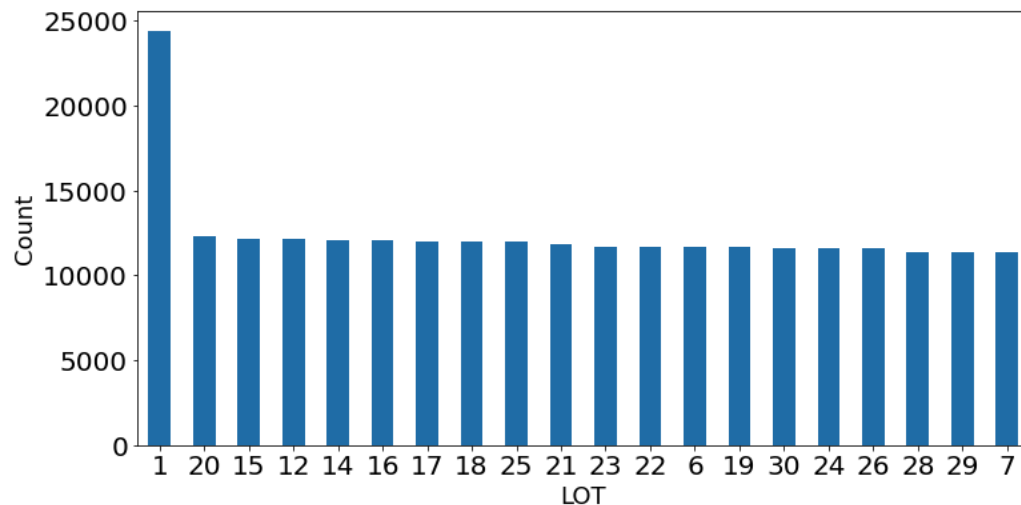
f. EASEMENT
  i.   Description: Easement gives a person or entity the right to access property that's owned by someone else for a limited and specific purpose.
   - Space = No Easement
   - A = Air Easement
   - B = Non-Air Rights
   - E = Land Easement
   - F Thru M are duplicates of E
   - N = Non-Transit Easement
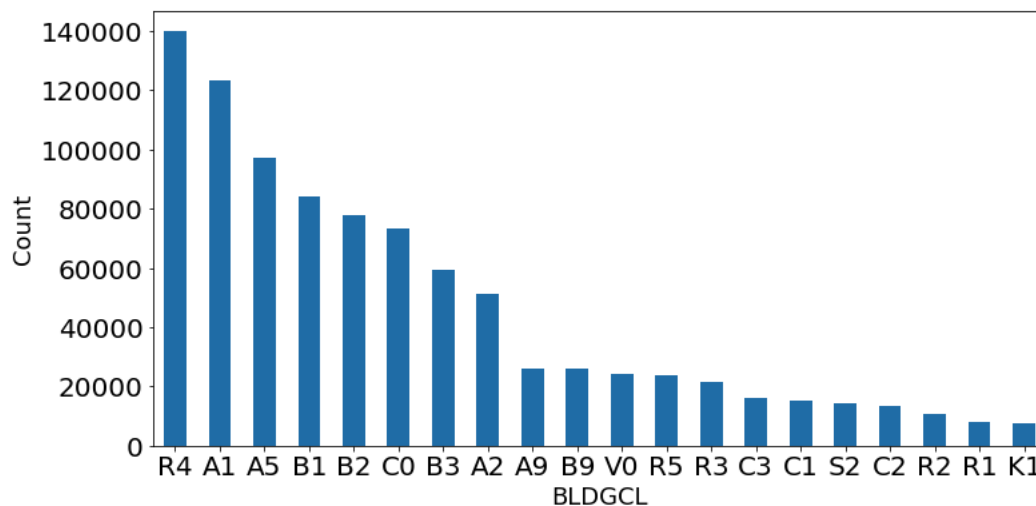   - P = Pier
   - R = Railroad
   - S = Street
   - U = U.S. Government
  ii. Picture
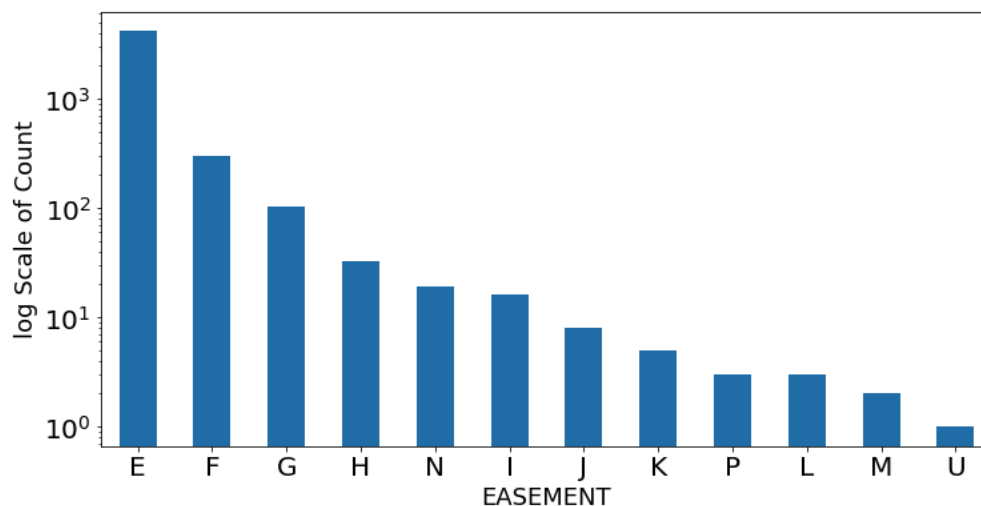
g. OWNER

 i. Description: This field lists the owner of the property.
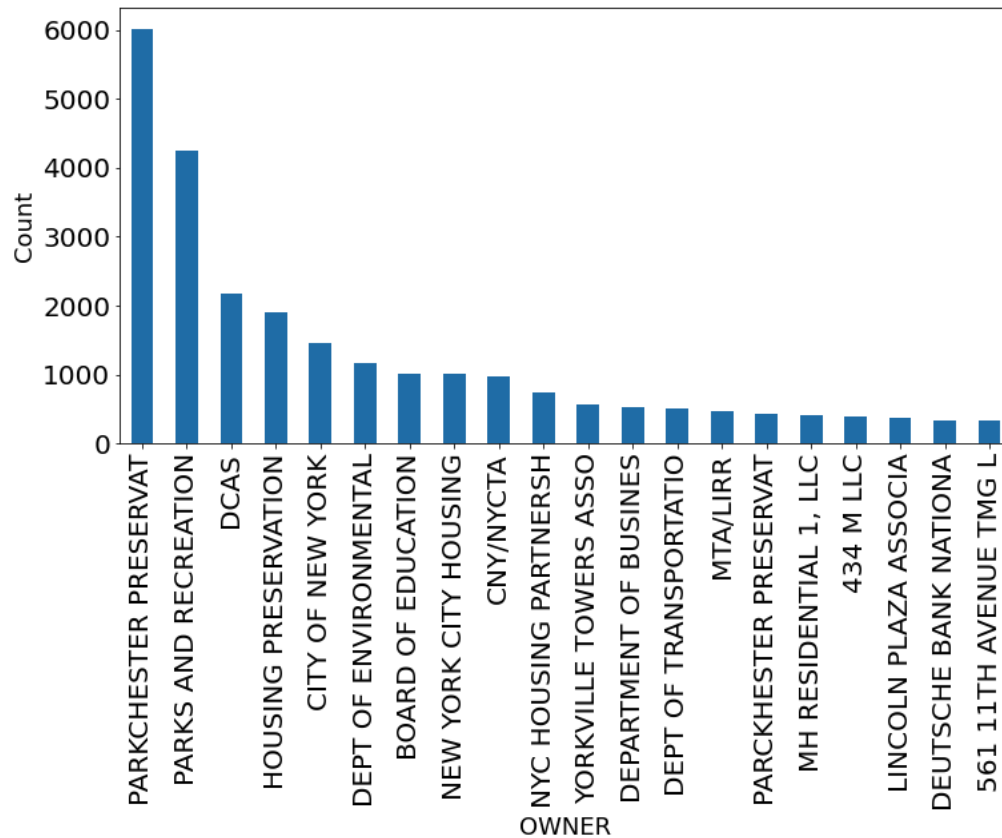
 ii. Picture

h. BLDGCL

 i. Description: This field refers to building class of the property.

 ii. Picture

i. TAXCLASS

    i.   Description: This refers to the tax class that the property falls under.

    ii.   Picture
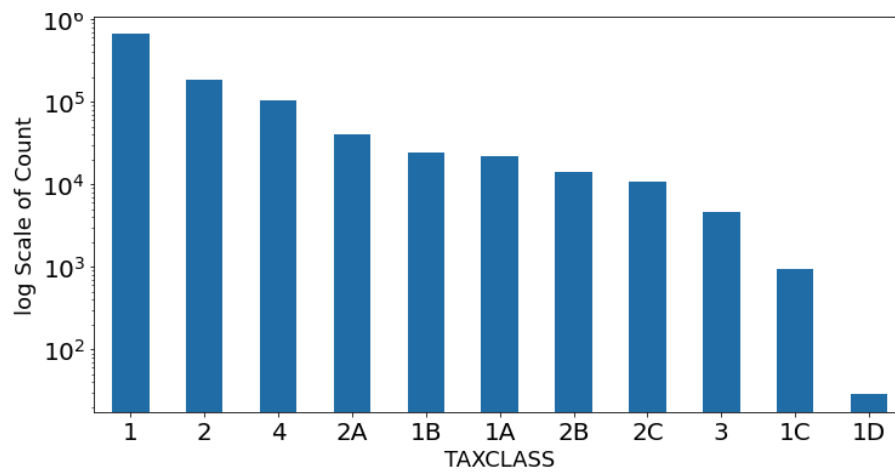
j. LTFRONT

    i.   Description: LTFRONT refers to the property lot width.
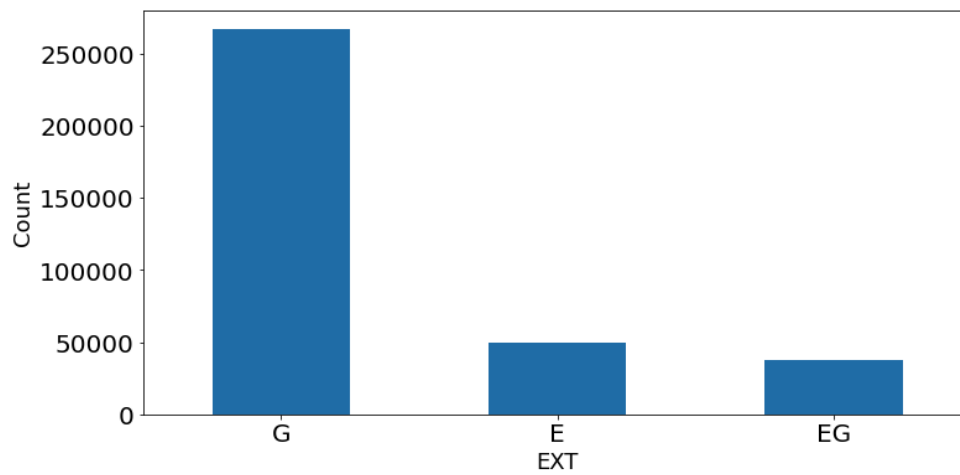
    ii.   Picture
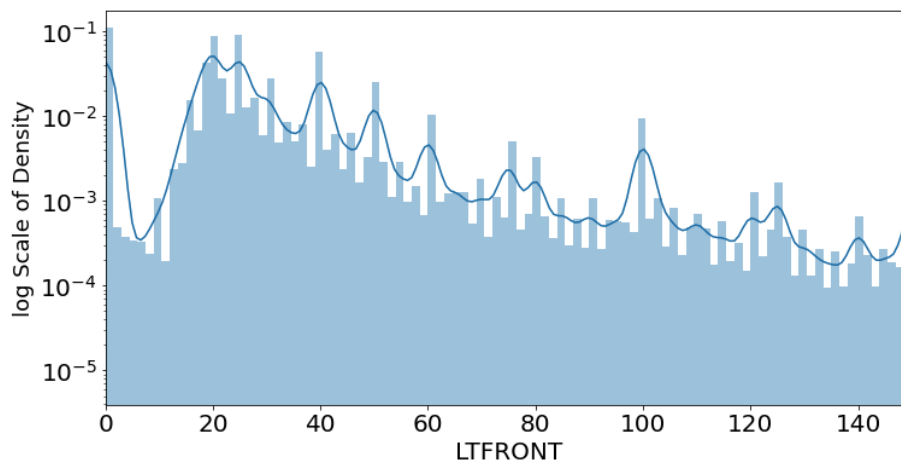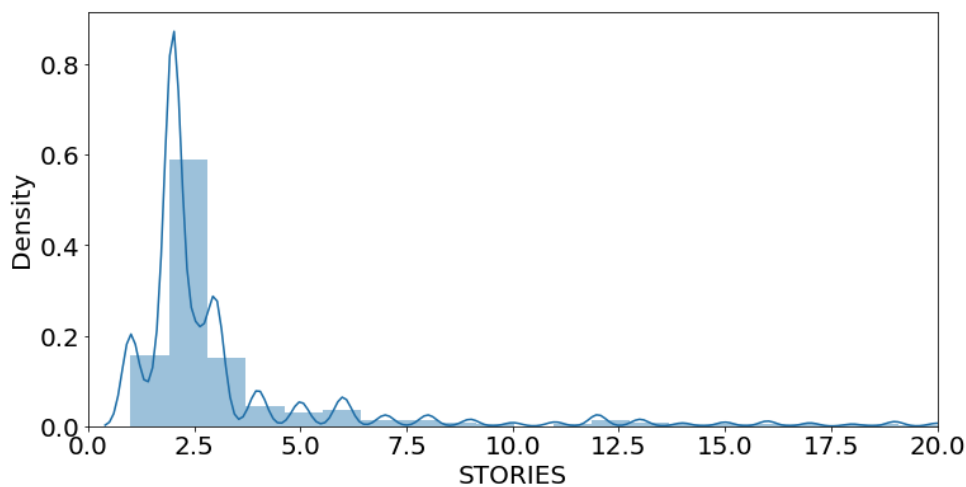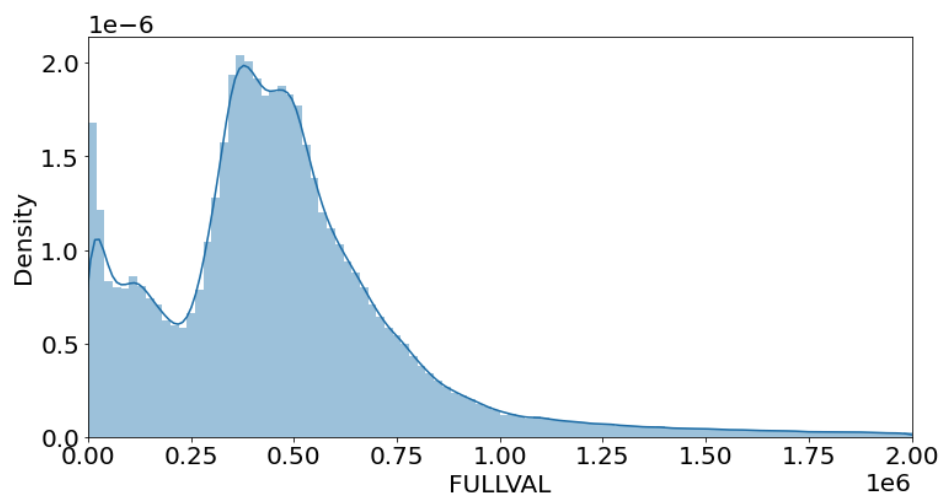
k. LTDEPTH

    i.   Description: LTDEPTH refers to the lot depth.

    ii.   Picture
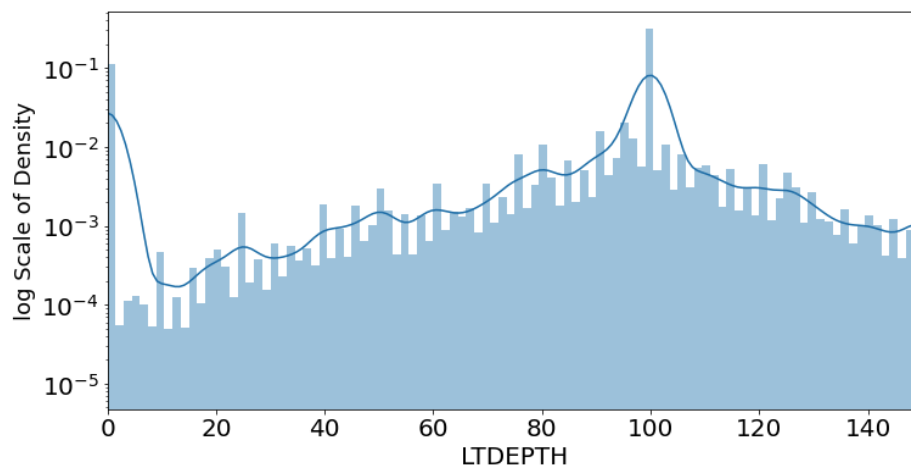
l. EXT
    i.   Description: EXT refers to extension indicator.
    ii.   Picture

m. STORIES
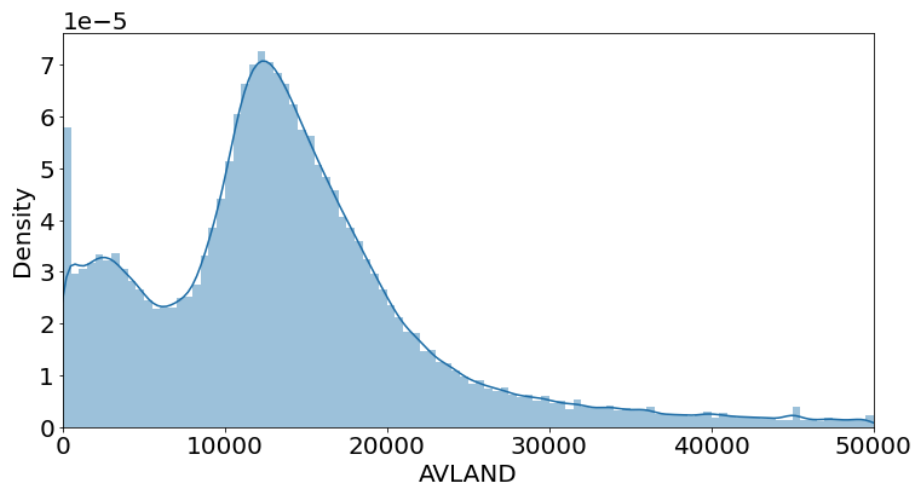   i.   Description: STORIES refers to the number of stories in the building
    ii.   Picture

n. FULLVAL
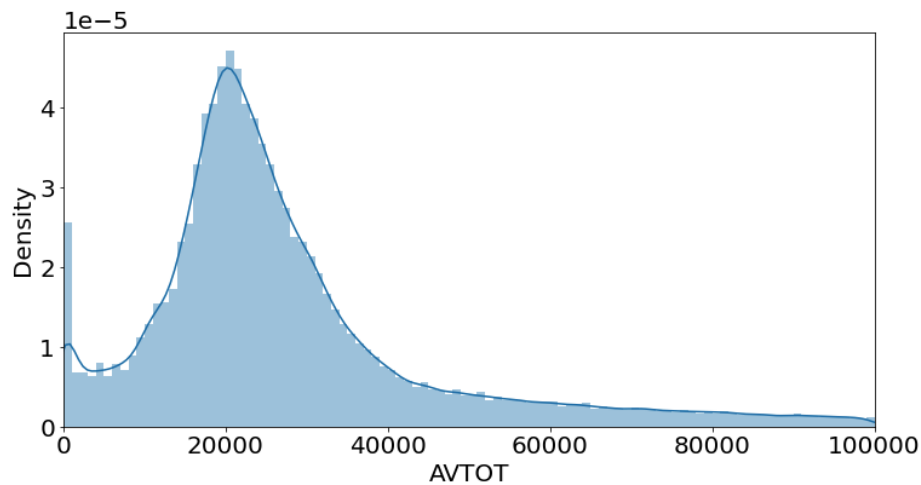   i.   Description: FULLVAL refers to the market value of the property
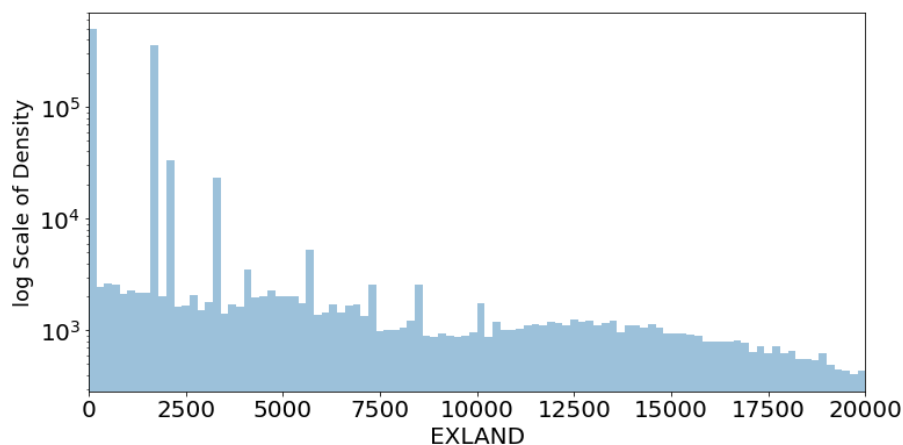   ii.   Picture

o. AVLAND
  i.   Description: AVLAND refers to the actual land value of the property.
  ii.   Picture

p. AVTOT
  i.   Description: AVTOT refers to the total property value.
  ii.   Picture

q. EXLAND
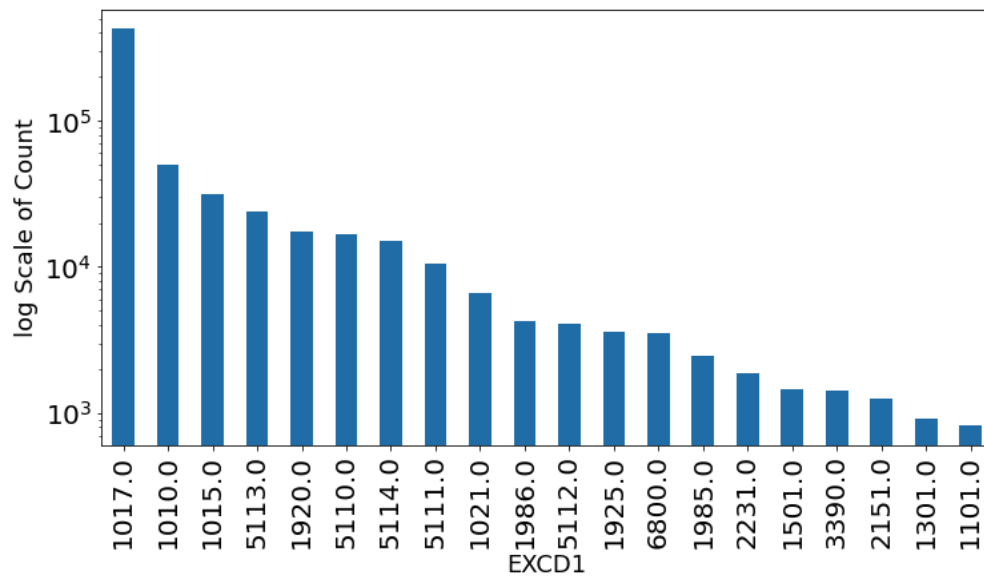 i.   Description: EXLAND refers to the actual exempt land value.
  ii.   Picture

r. EXTOT
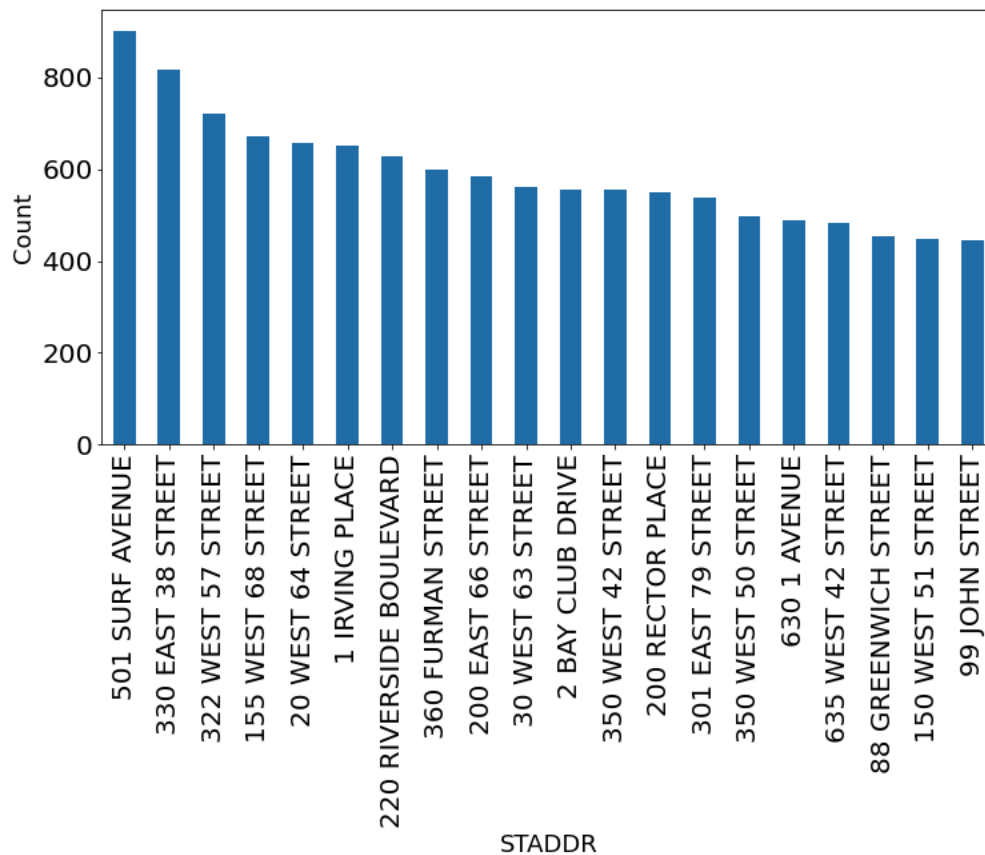   i. Description: EXTOT refers to the actual exempt land total.
   ii. Picture
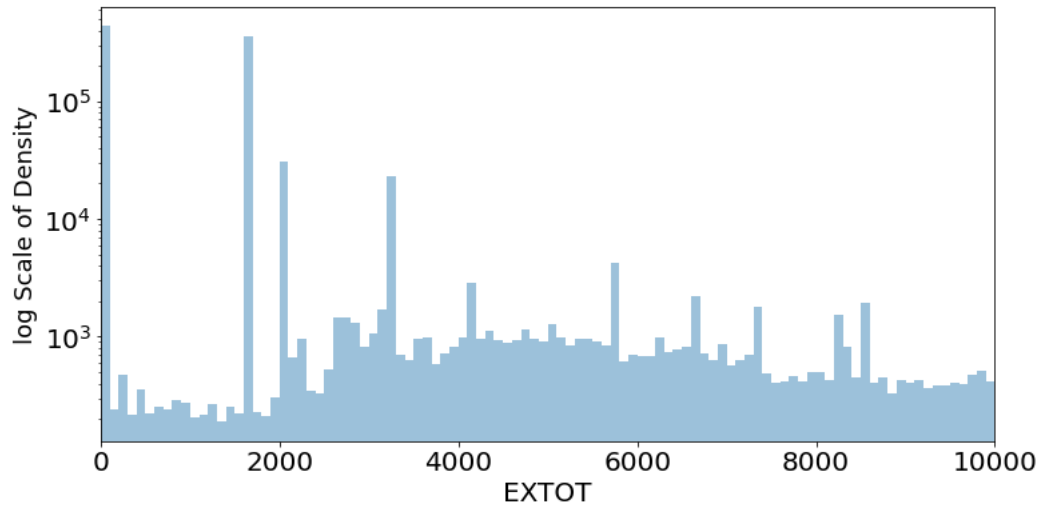
s. EXCD1
   i. Description: EXCD1 refers to exemption code 1.
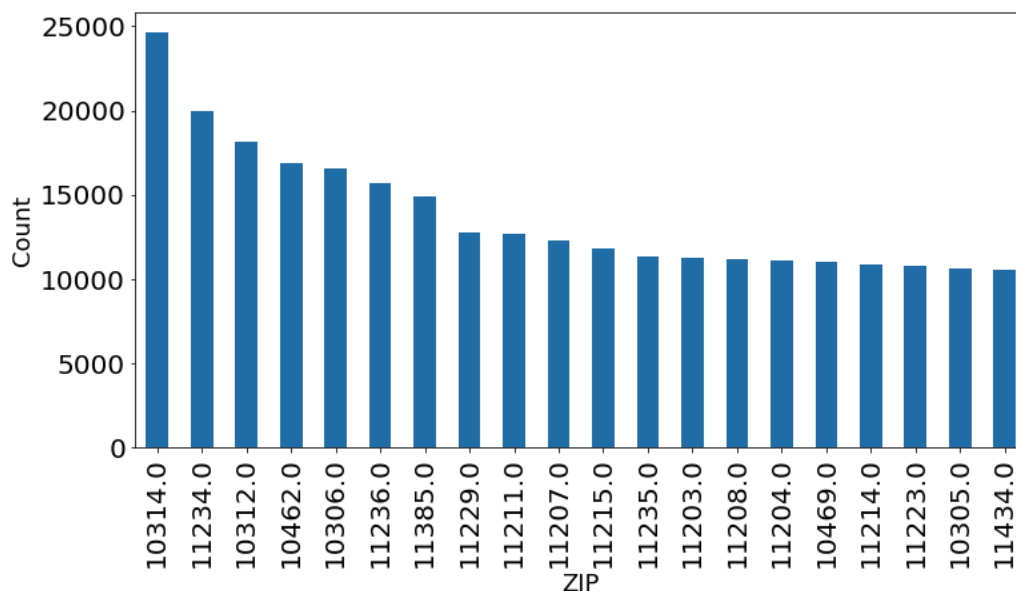   ii. Picture

t. STADDR
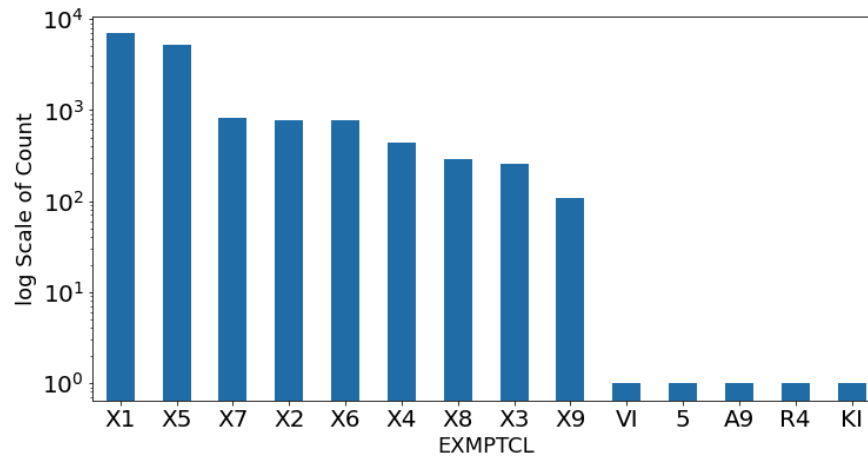 i.   Description: STADDR refers to the street address of the property.
  ii. Picture

u. ZIP
  i.   Description: ZIP refers to the zip code in which the property is in.
  ii. Picture
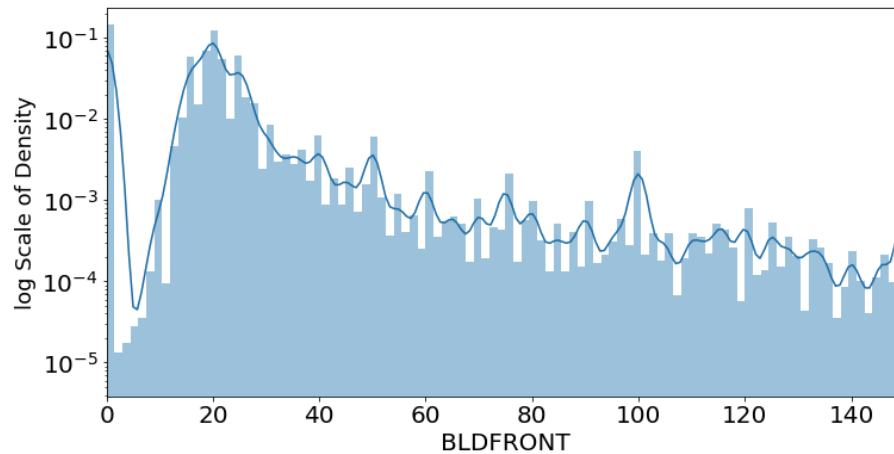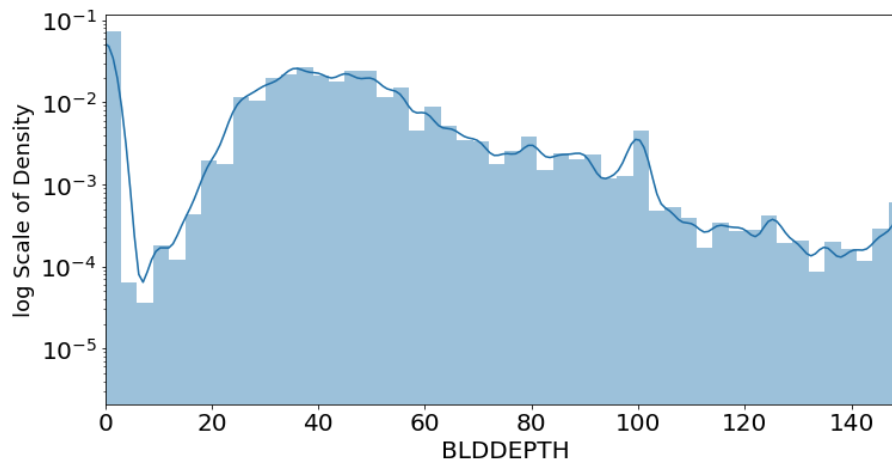
v. EXMPTCL
   i.   Description: EXMPTCL refers to the exemption class of the property.
   ii. Picture

w. BLDFRONT
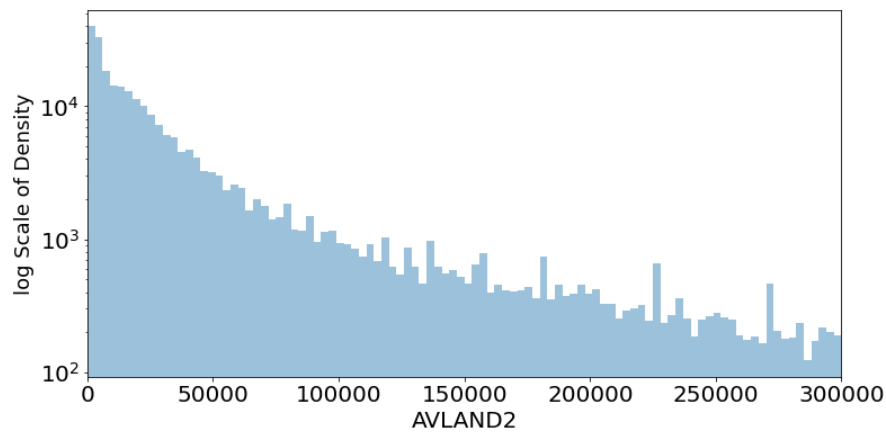   i.   Description: BLDFRONT refers to building width.
   ii. Picture

x. BLDDEPTH
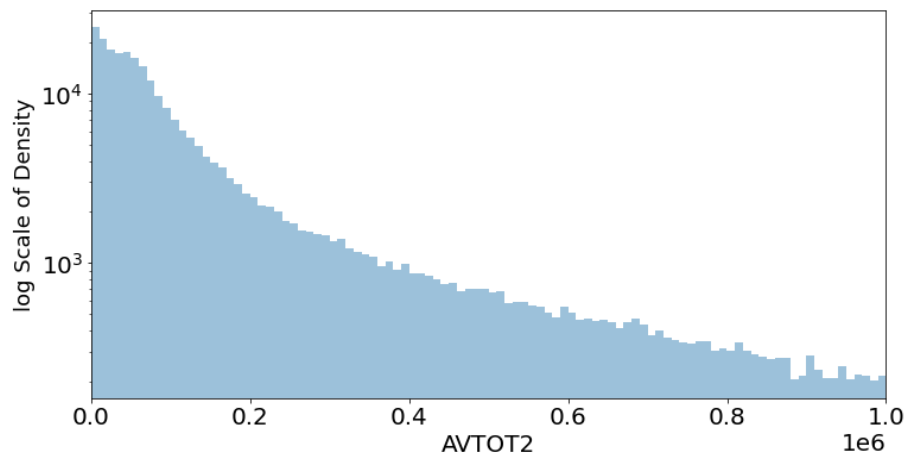   i.   Description: BLDDEPTH refers to the building depth.
   ii. Picture

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y. AVLAND2
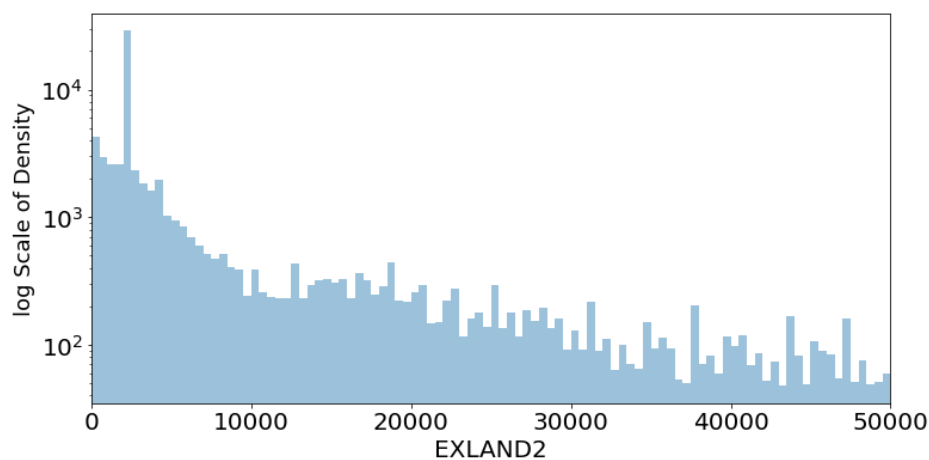 i.   Description: AVLAND2 refers to the transitional land value.
  ii. Picture

z. AVTOT2
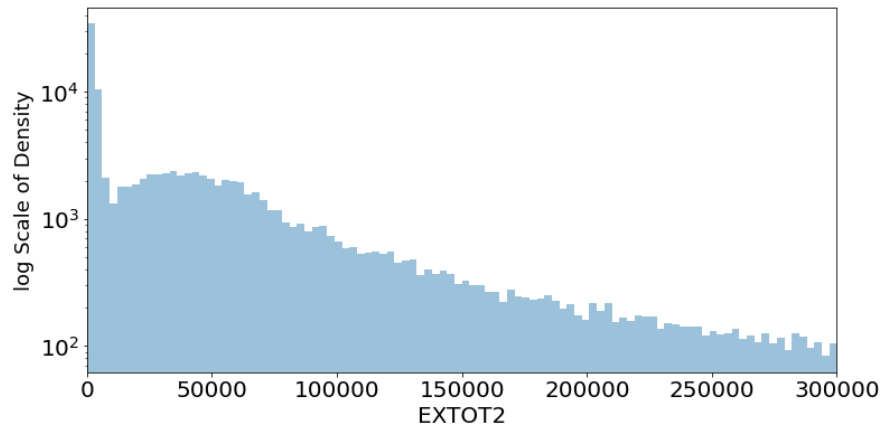 i.   Description: AVTOT2 refers to the transitional total value.
  ii. Picture

aa. EXLAND2
  i.   Description: EXLAND2 refers to the transitional exemption land value.
  ii. Picture
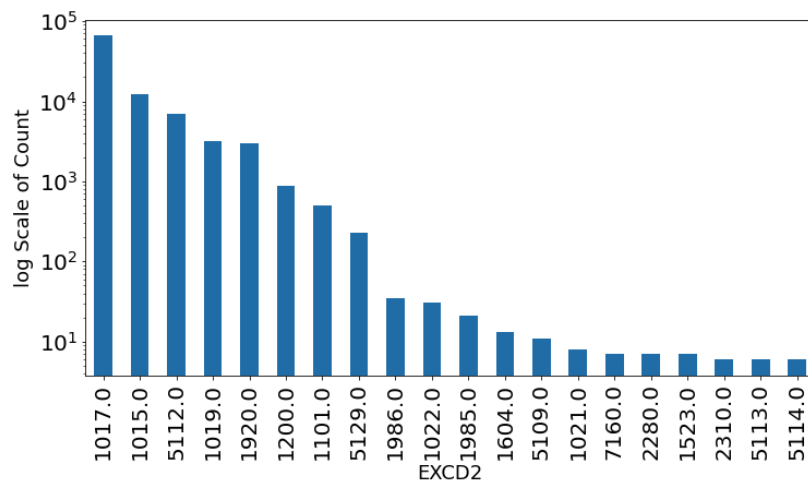
bb. EXTOT2
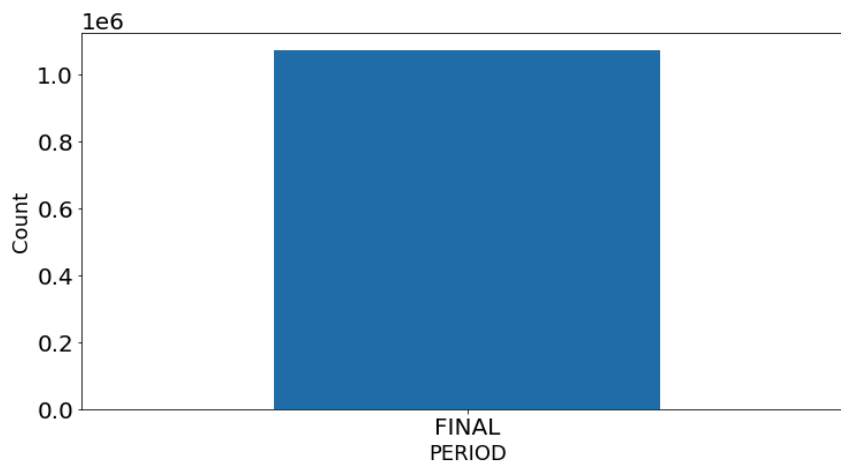   i.   Description: EXTOT2 refers to the transitional exemption land total.
    ii.   Picture

cc. EXCD2
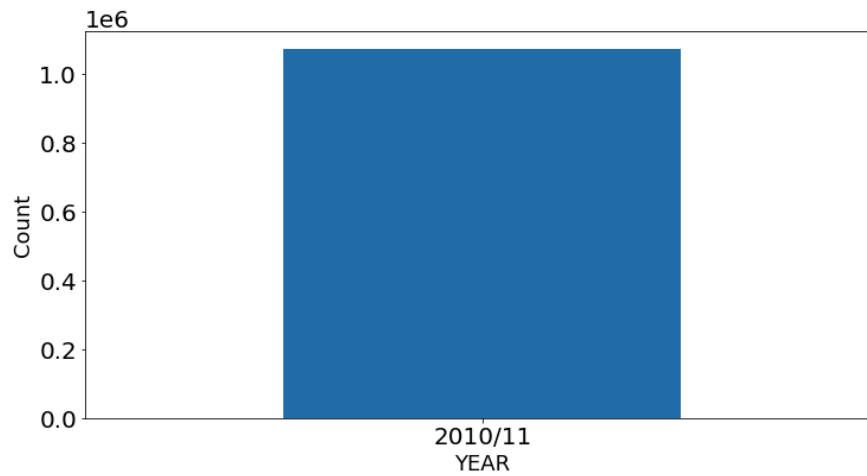   i.   Description: EXCD2 refers to the exemption code 2.
    ii.   Picture

dd. PERIOD
    i.   Description: There is only one period (FINAL). PERIOD refers to the assessment period which pertains to the period when the data was created.
    ii.   Picture

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ee. YEAR
   i.   Description: YEAR refers to the assessment year.
   ii.   Picture

ff. VALTYPE
   i.   Description: Valuation type and has one value (AC-TR)
   ii.   Picture