

DATA QUALITY ASSESSMENT REPORT

NYC PROPERTY VALUATION AND ASSESSMENT PROJECT

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1. Introduction

Property Valuation and Assessment Data dataset represents New York City properties assessment for the purpose of property tax calculation, eligible property tax exemption and/or abatements. The dataset was first made public in 2011 and then updated annually. Data is collected by City employees (property assessors, property exemption specialists, ACRIS reporting, etc.) and is provided by Department of Finance, New York City. The dataset consists of 1,070,994 records and 32 variables and each record is a vector of characteristics describing one property.

2. Data Quality Summary

2.1 Categorical Variables (14)

	# Non-null	%Populated	# Levels	Most Common Category	# Occurrence
BBLE	1,070,994	100%	1,070,994	-	-
B	1,070,994	100%	5	4	358,046
BLOCK	1,070,994	100%	13,984	3944	3,888
LOT	1,070,994	100%	6,366	1	24,367
EASEMENT	4,636	0.43%	12	E	4,148
OWNER	1,039,249	97%	863,347	PARKCHESTER PRESERVAT	6,021
BLDGCL	1,070,994	100%	200	R4	139,879
TAXCLASS	1,070,994	100%	11	1	660,721
EXT	354,305	33.1%	3	G	266,970
EXCD1	638,488	60.1%	129	1017	425348
STADDR	1,070,318	99.9%	839,280	501 SURF AVENUE	902
ZIP	1,041,104	97.2%	196	10314	24,606
EXMPTCL	15,579	1.45%	14	X1	6,912
EXCD2	92,948	8.68%	60	1017	65777

2.2 Numeric Variables (14)

	# Non-null	%Populated	Mean	Median	SD	Max	Min
LTFRONT	1,070,994	100%	36.6	25	74	9999	0
LTDEPTH	1,070,994	100%	88.9	100	76	9999	0
STORIES	1,014,730	94.7%	5.0	2	8	119	1
FULLVAL	1,070,994	100%	874,264.5	447,000.0	11,582,431	6.15E+09	0
AVLAND	1,070,994	100%	85,067.9	13,678	4,057,260	2.67E+09	0
AVTOT	1,070,994	100%	227,238.2	25,340	6,877,529	4.67E+09	0
EXLAND	1,070,994	100%	36,423.9	1,620	3,981,576	2.67E+09	0
EXTOT	1,070,994	100%	91,187	1,620	6,508,403	4.67E+09	0
BLDFRONT	1,070,994	100%	23	20	35.6	7,575	0
BLDDEPTH	1,070,994	100%	39.9	39	42.7	9,393	0
AVLAND2	282,726	26.4%	2.46E+05	20145	6.18E+06	2.37E+09	3
AVTOT2	282,732	26.4%	7.14E+05	79962.5	1.17E+07	4.50E+09	3
EXLAND2	87,449	8.17%	3.51E+05	3048	1.08E+07	2.37E+09	1
EXTOT2	130,828	12.2%	6.57E+05	37062	1.61E+07	4.50E+09	7

2.3 Other Variables (3)

	# Non-null	# Levels	Value
PERIOD	1,070,994	1	FINAL
YEAR	1,070,994	1	2010/11
VALTYPE	1,070,994	1	AC-TR

3. Data Quality Assessment

3.1 RECORD

Description: the index of all records from 1 to 1,070,994

3.2 BBLE

Description: the concatenation of B, BLOCK, LOT, EASEMENT; unique ID for each property

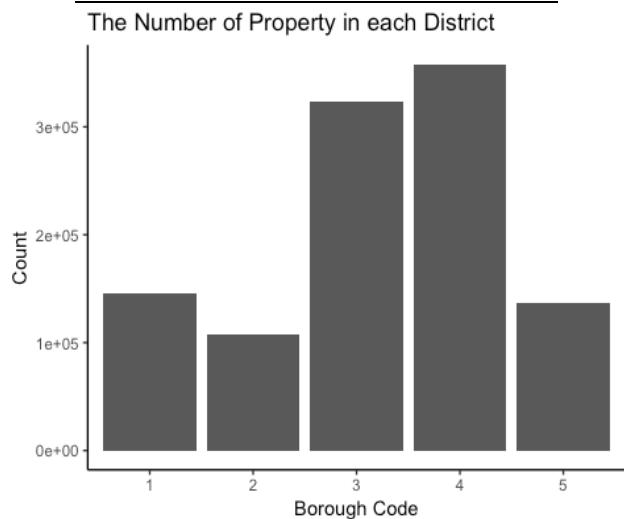
Example:

BBLE	B	BLOCK	LOT	EASEMENT
5080500078	5	8050	78	NA
1000060001E	1	6	1	E

3.3 B

Description: borough code

Borough code	District
1	Manhattan
2	Bronx
3	Brooklyn
4	Queens
5	Staten Island



3.4 BLOCK

Description: block ranges by borough

District	Block
Manhattan	1-2255
Bronx	2260-5958
Brooklyn	1-8955
Queens	1-16350
Staten Island	1-8500

The number of properties in each borough code and block:

B	BLOCK	Count
2	3944	3858
1	16	3538
2	3943	3386
2	3938	2720
1	1171	2295
2	3937	2198
1	1833	1661
5	2450	1587
1	1047	1321
3	7279	1280

3.5 LOT

Description: unique number within borough/block

The table indicates that even though I summarize the number of properties grouping by borough, block and lot, some counts are more than one. This means borough, block and lot together are not unique identification of properties.

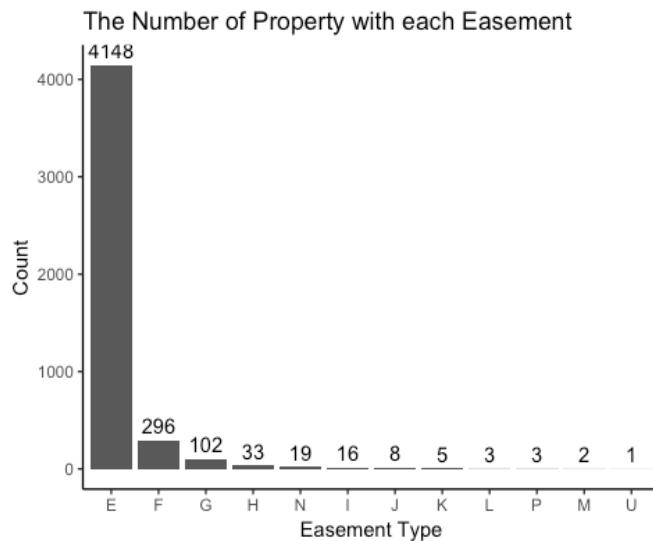
	B	BLOCK	LOT	Count
1	1	6	1	2
2	1	13	27	2
3	1	44	1	2
4	1	58	1	2
5	1	67	23	2

3.6 EASEMENT

Description: a field to describe what kind of easement the property has

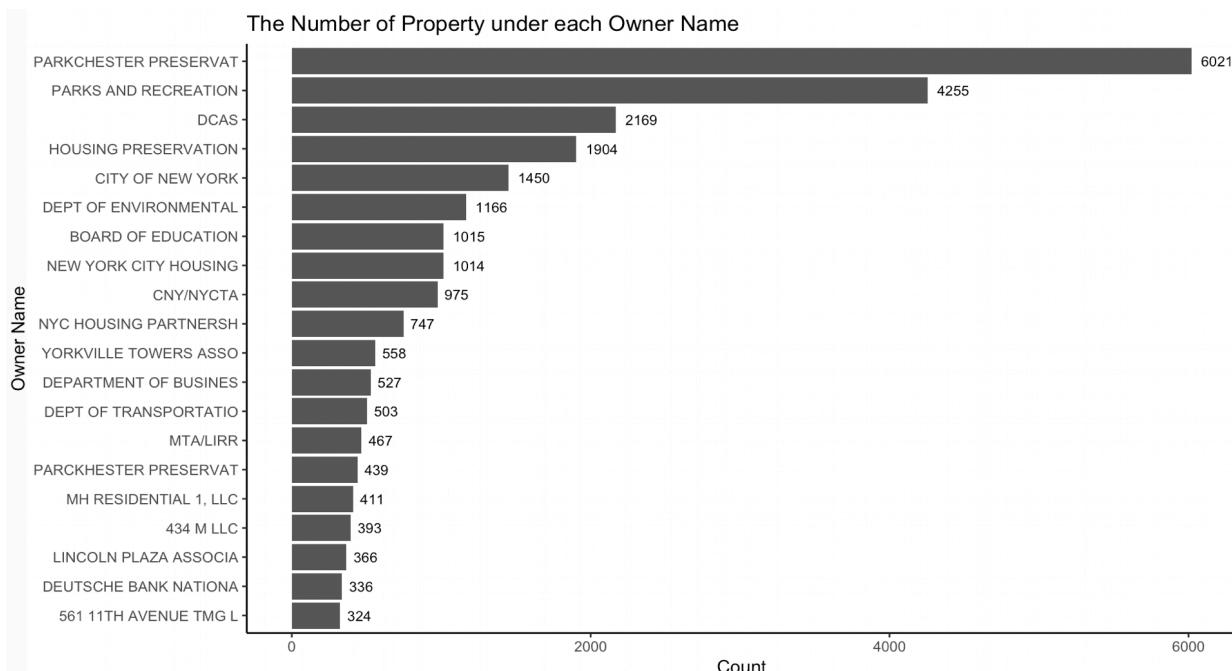
Value	Easement
SPACE	No easement
A	Air easement
B	No-air rights
E-M	Land easement
N	Non-transit easement
P	Piers
R	Railroad
S	Street
U	Government

For EASEMENT, there are 4636 non-null values and 4148 of them are 'E'. Besides, if I summarize the number of properties grouping by borough, block, lot and easement, there will be no count more than one meaning that the four variables together make unique identification of property.



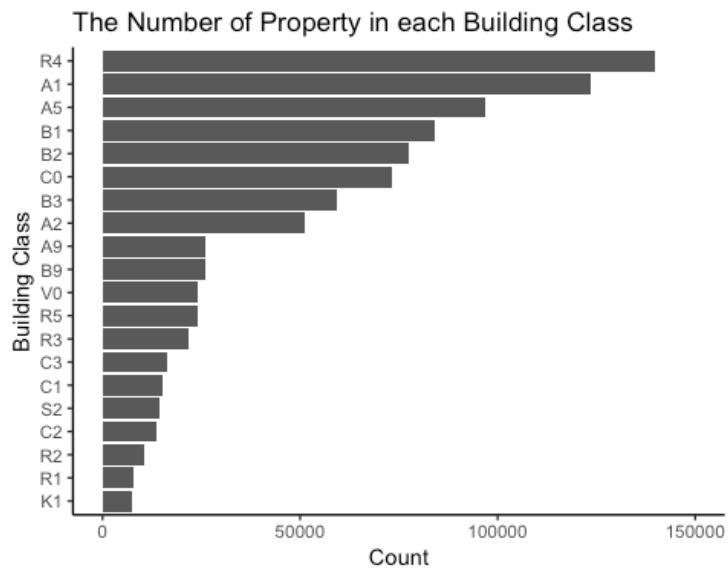
3.7 OWNER

Description: owner's name



3.8 BLDCG

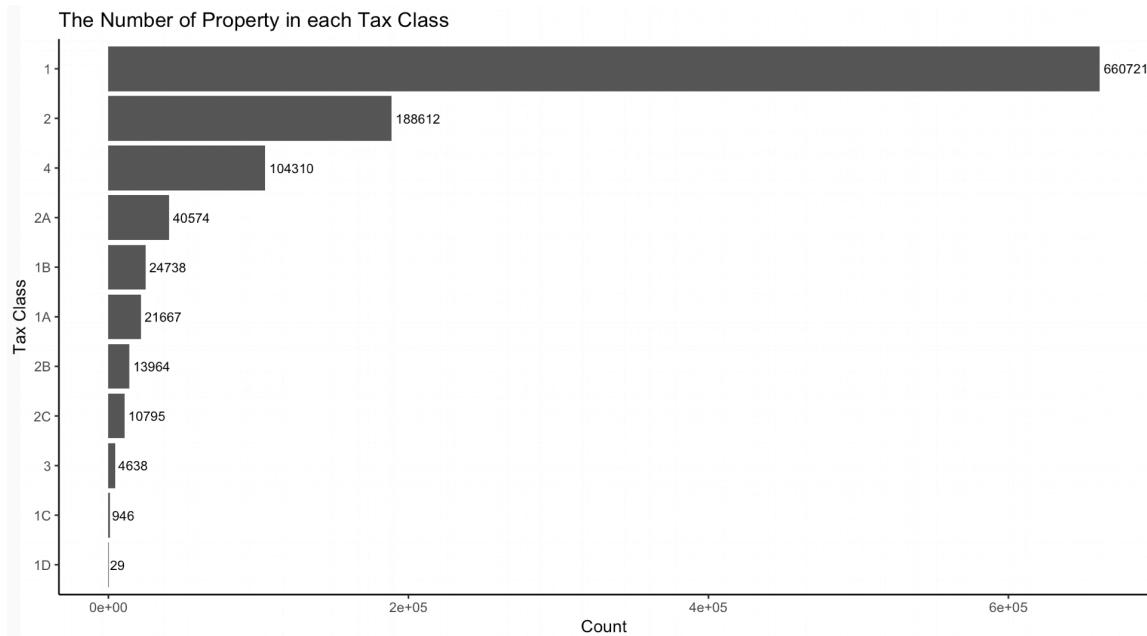
Description: building class



3.9 TAXCLASS

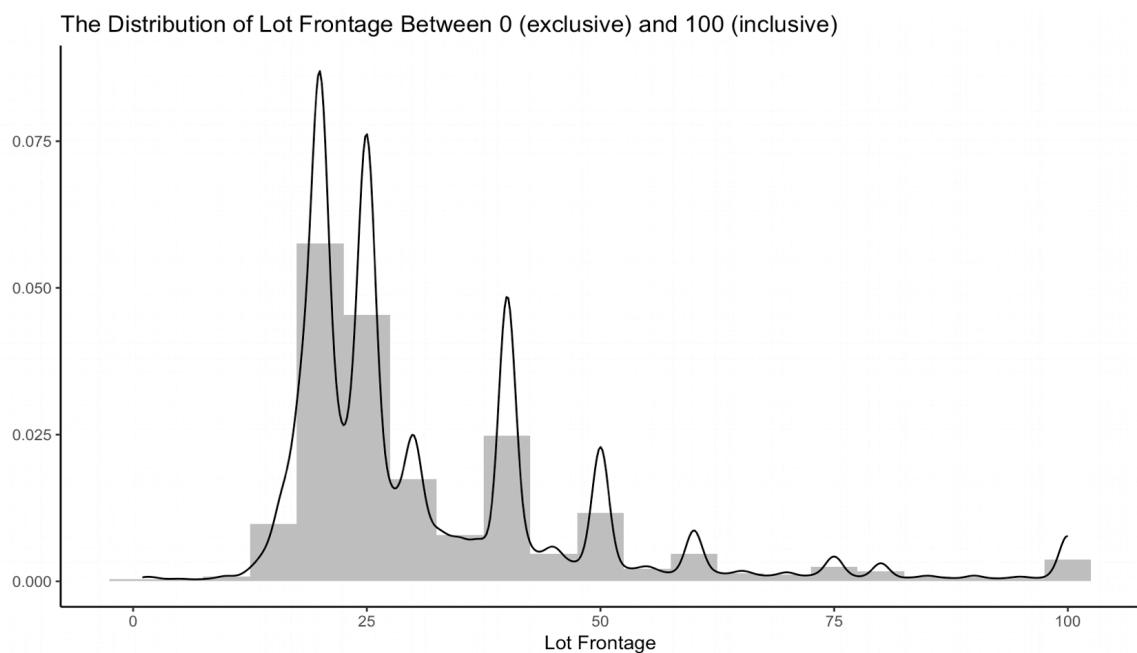
Description: tax class

Tax Class	Description
1	1-3 Unit Residences
1A	1-3 Story Condominiums
1B	Residential Vacant Land
1C	1-3 Unit Condominiums
1D	Select Bungalow Colonies
2	Apartments
2A	Apartments With 4-6 Units
2B	Apartments With 7-10 Units
2C	Coops/Condos With 2-10 Units
3	Utilities (Except Ceiling Rr)
4A	Utilities - Ceiling Railroads
4	All Others



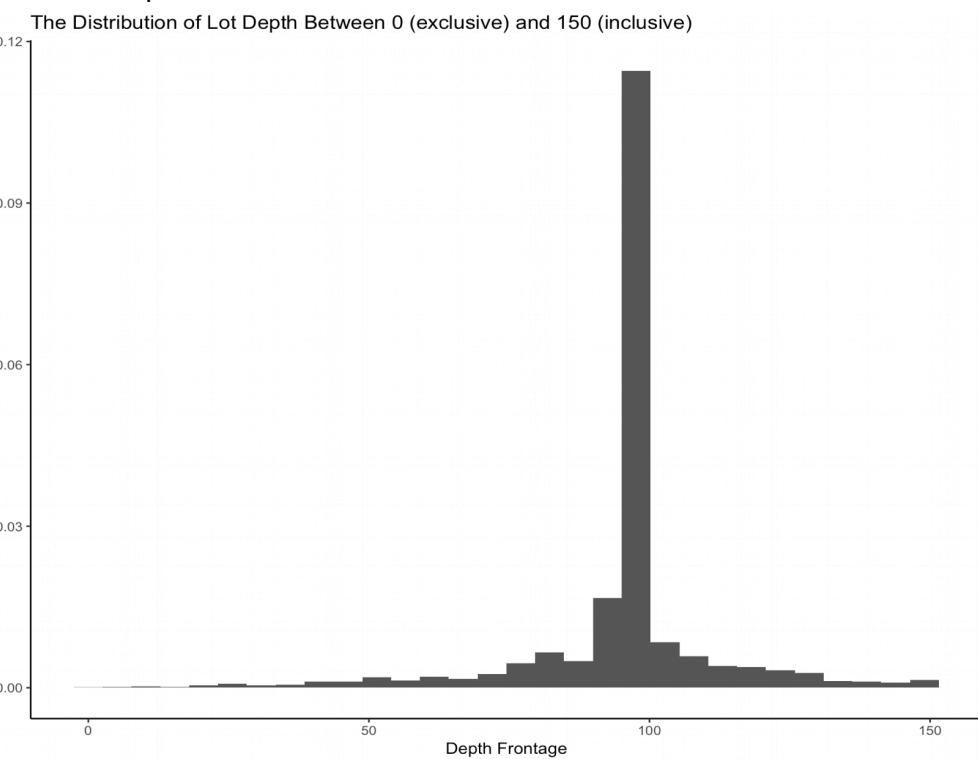
3.10 LTFRONT

Description: lot frontage in feet



3.11 LTDEPTH

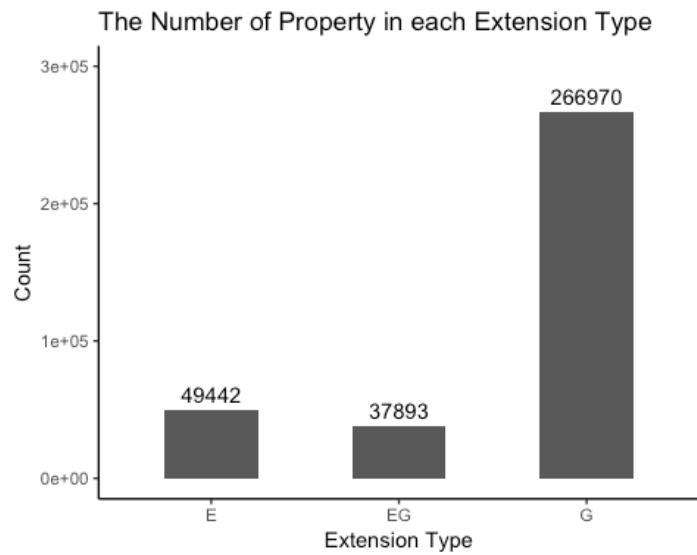
Description: lot Depth in feet



3.12 EXT

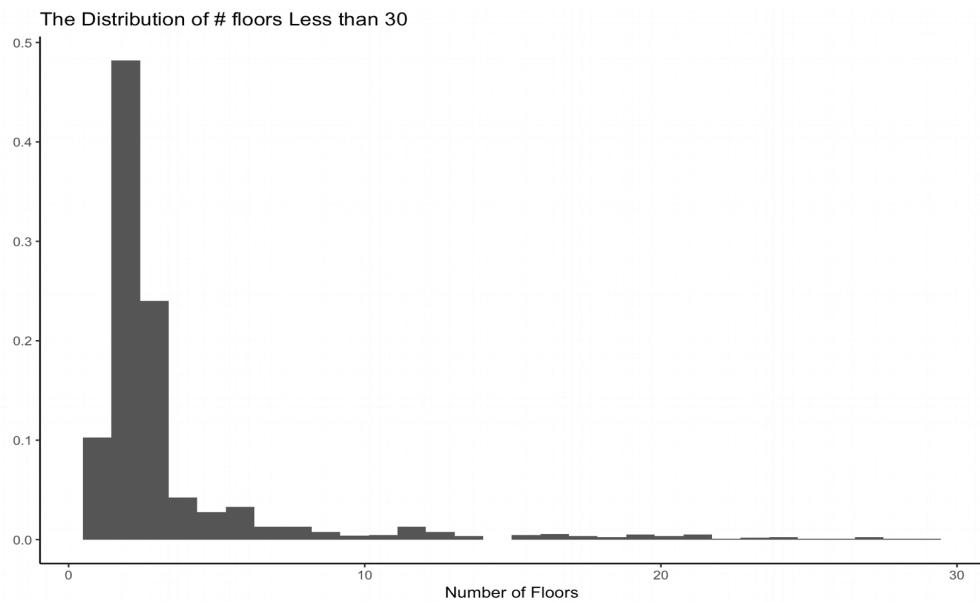
Description: extension indicator

Exempt Class	Description
E	Extension
EG	Garage
G	Extension and Garage



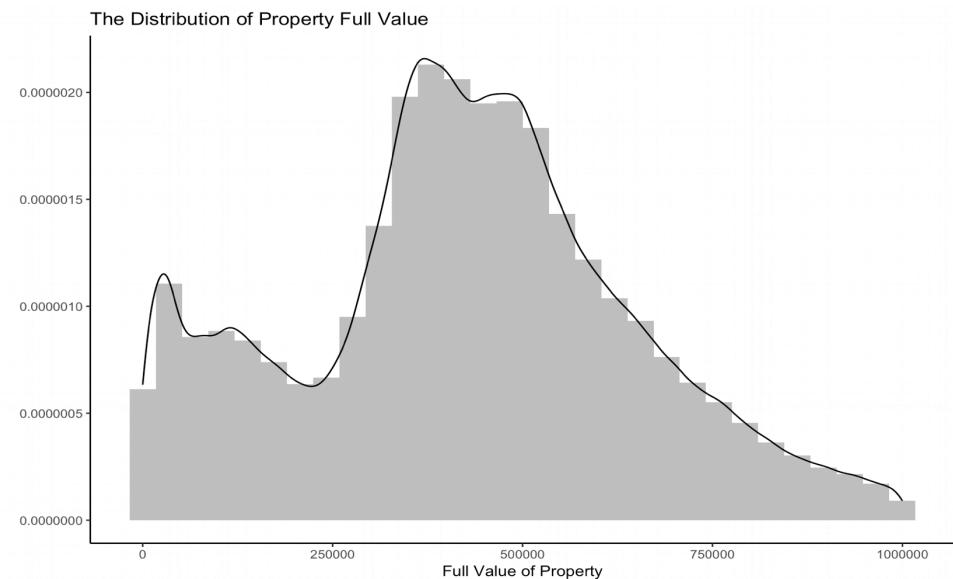
3.13 STORIES

Description: the number of stories of the building (# of Floors)



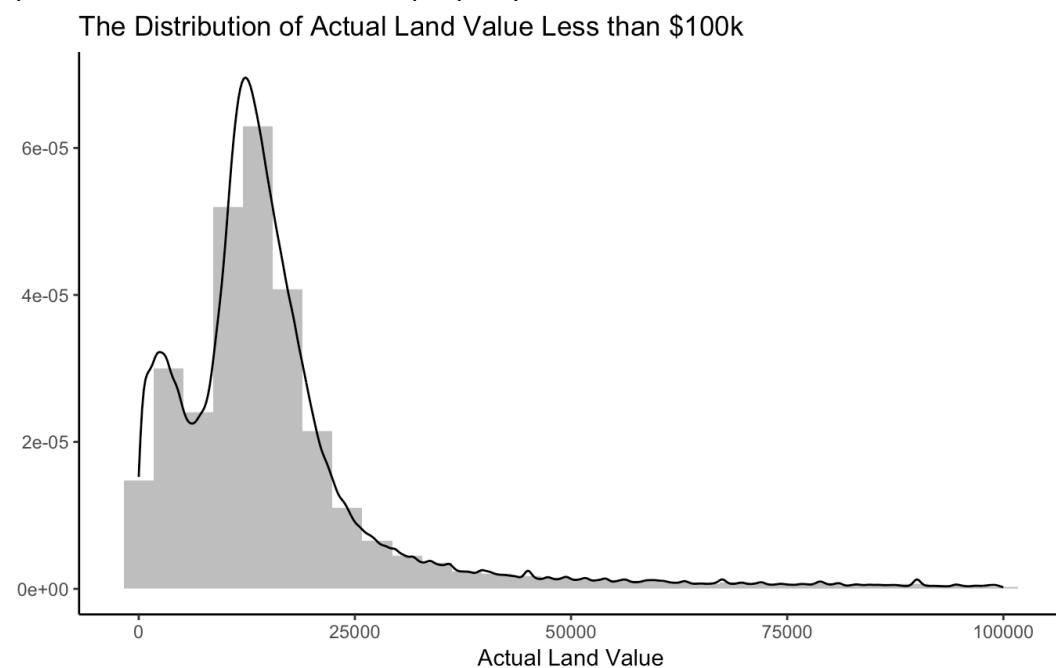
3.14 FULLVAL

Description: total market value of the property



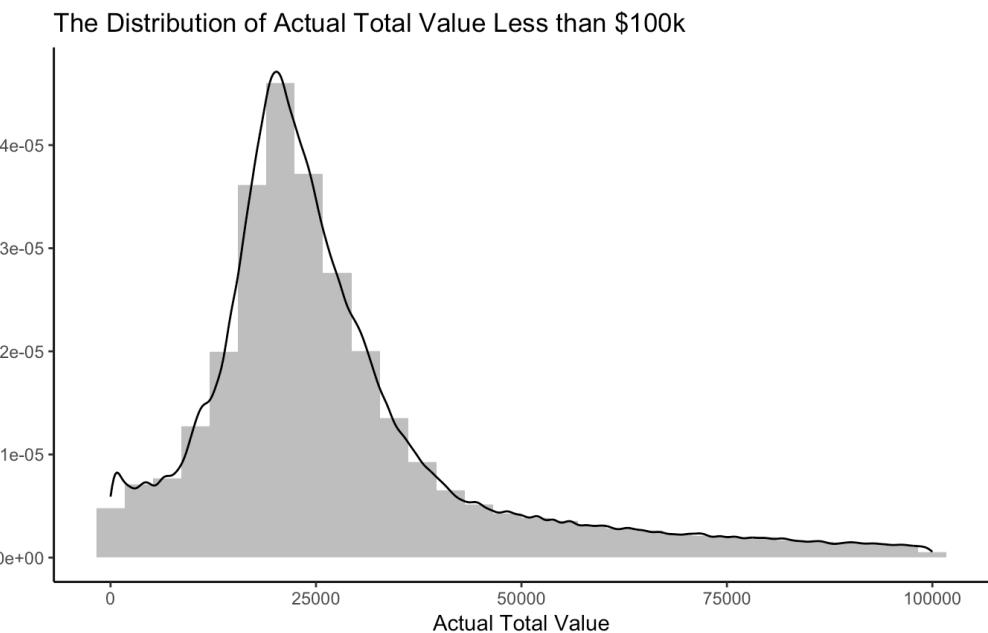
3.15 AVLAND

Description: actual land value of the property



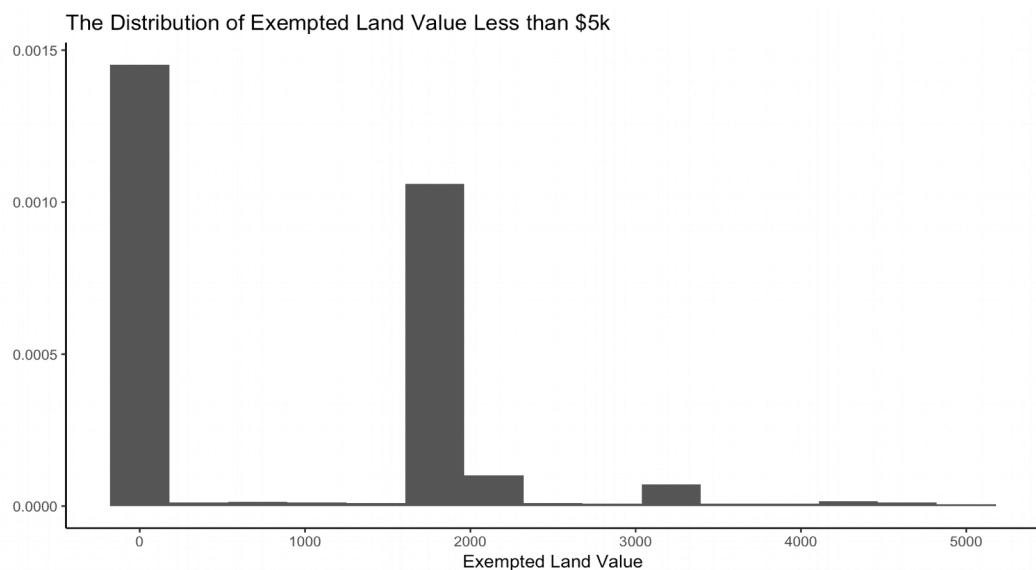
3.16 AVTOT

Description: actual total value of the property



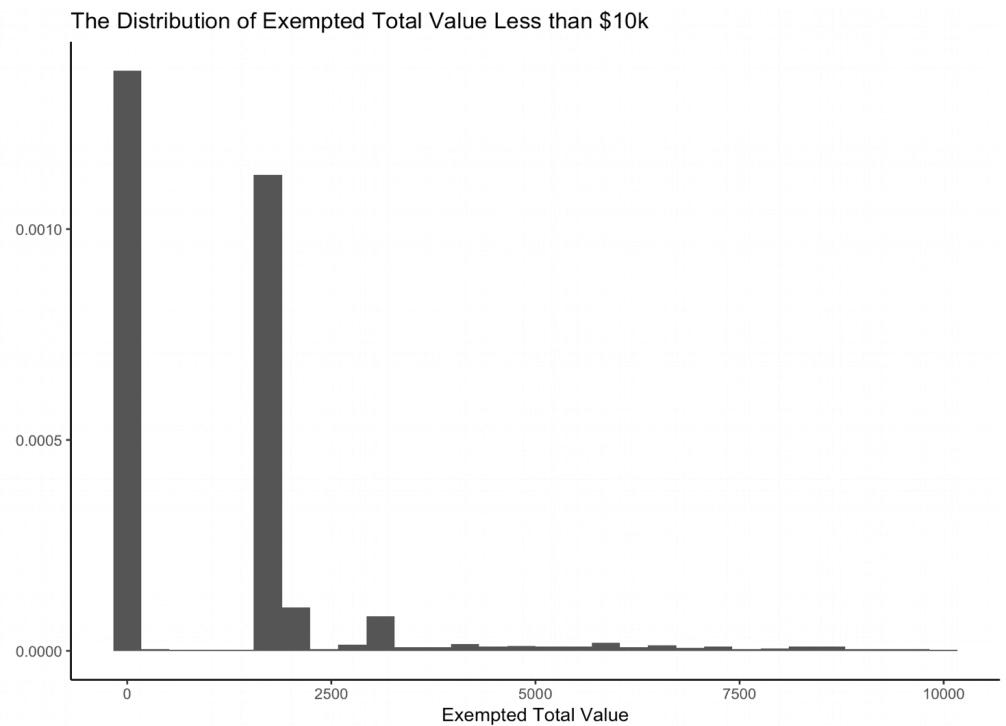
3.17 EXLAND

Description: actual exempt land value of the property



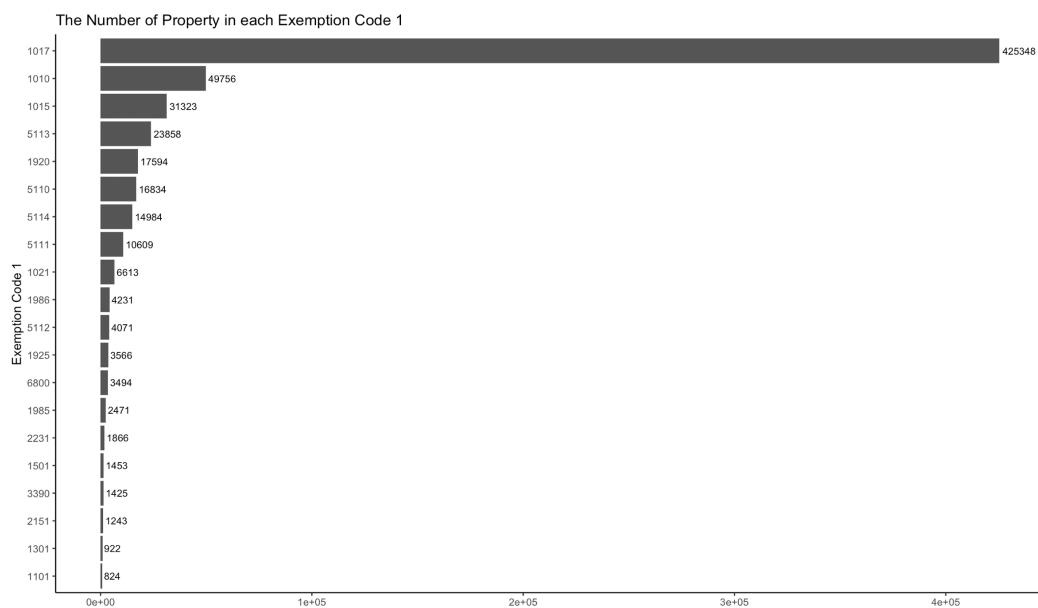
3.18 EXTOT

Description: actual exempt total value of the property



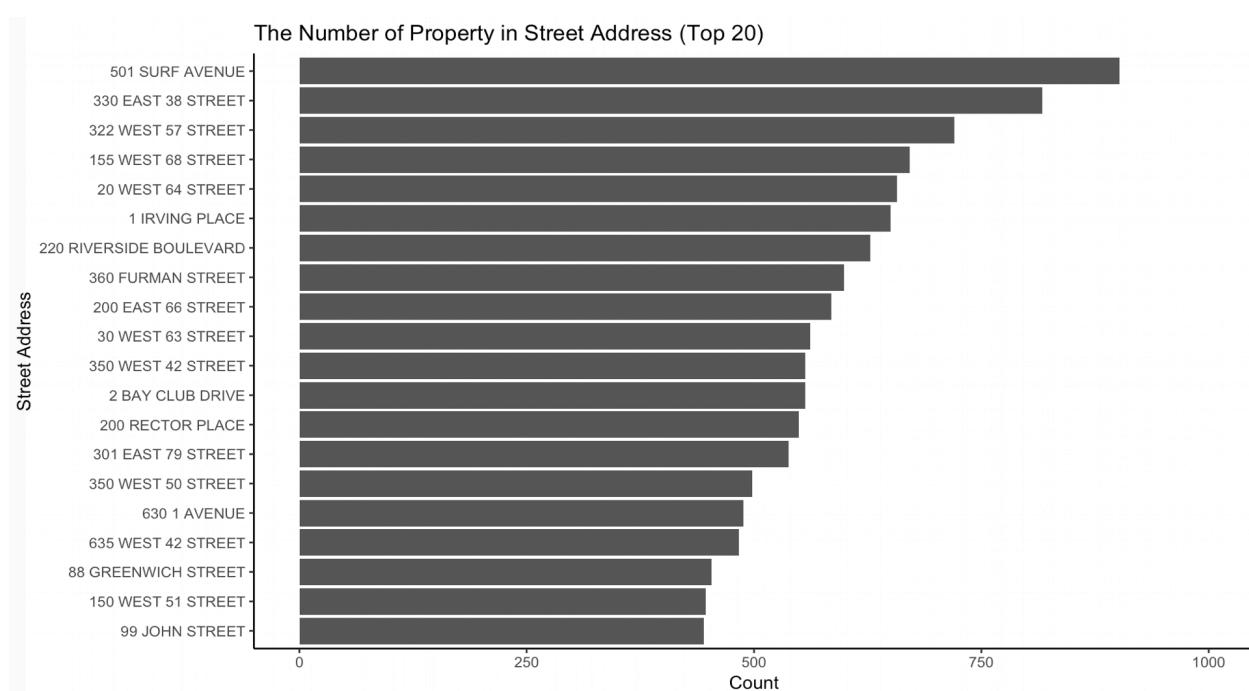
3.19 EXCD1

Description: exemption code 1



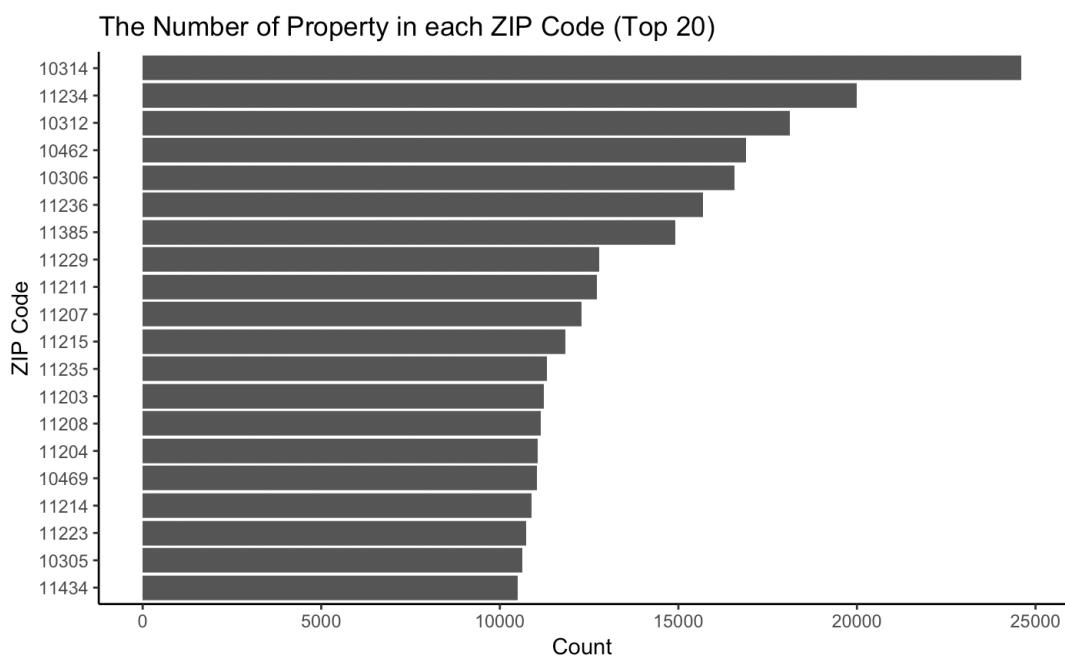
3.20 STADDR

Description: Street address of the property



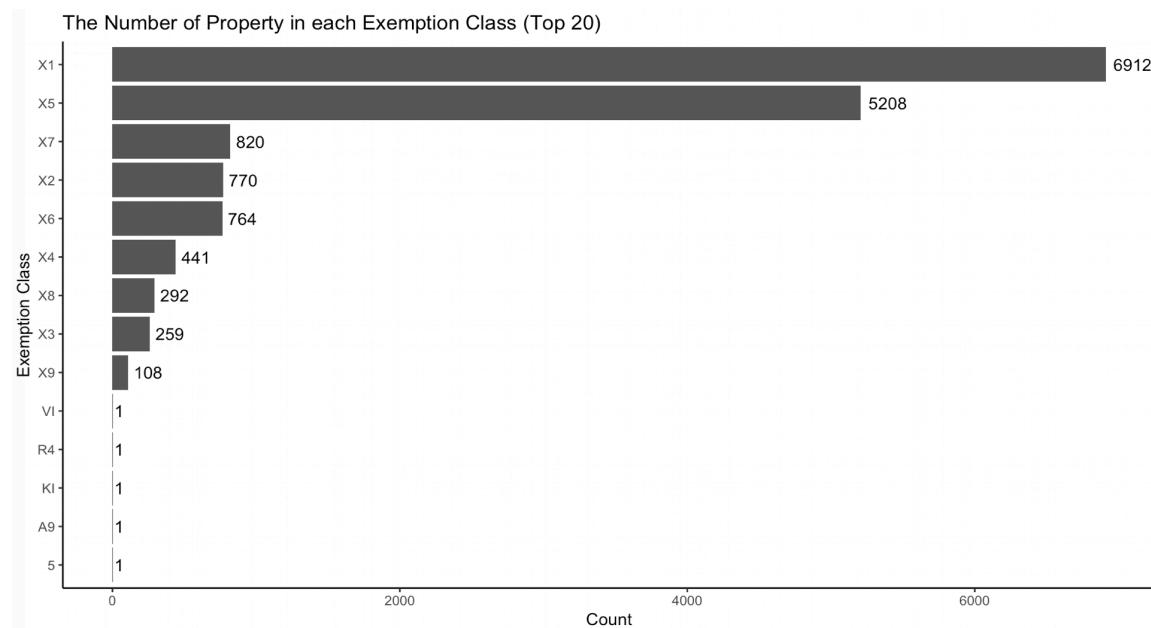
3.21 ZIP

Description: postal zip code of the property



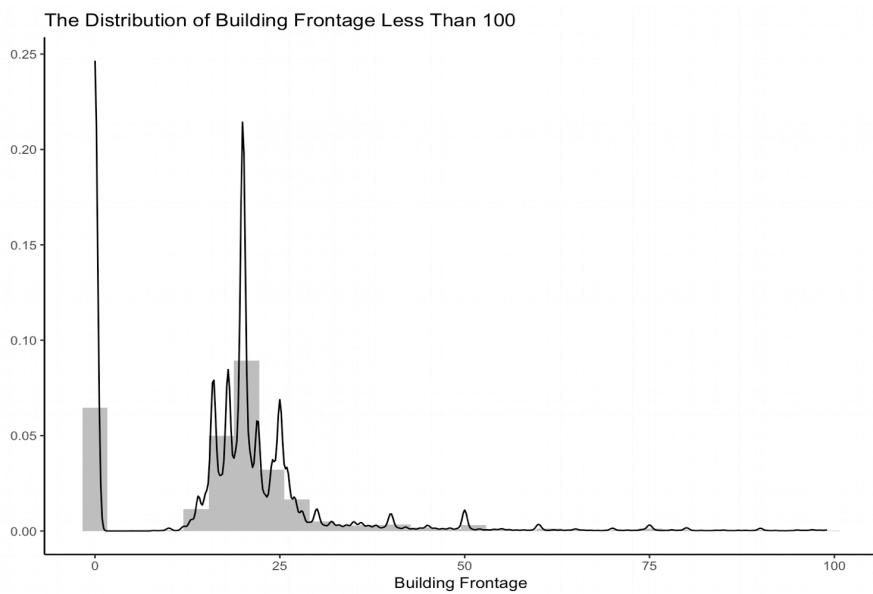
3.22 EXMPTCL

Description: Exempt Class of the property



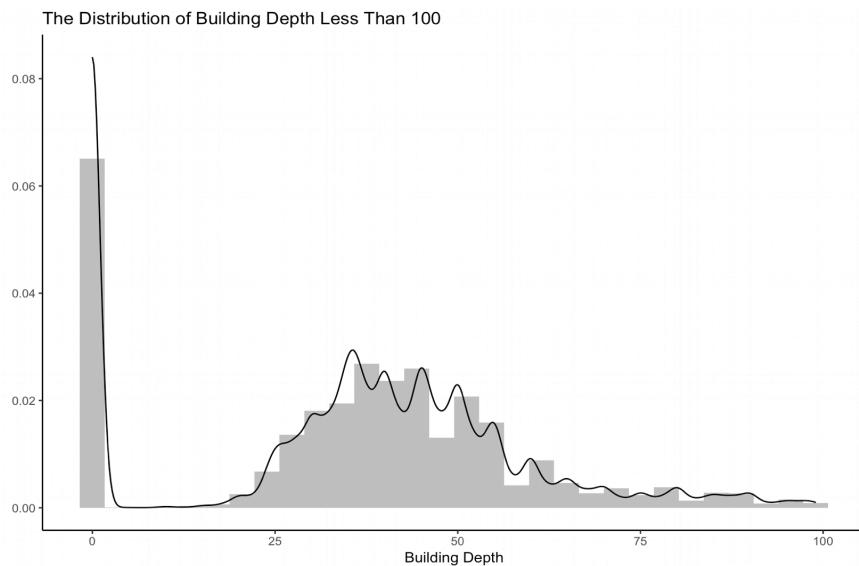
3.23 BLDFRONT

Description: building frontage in feet



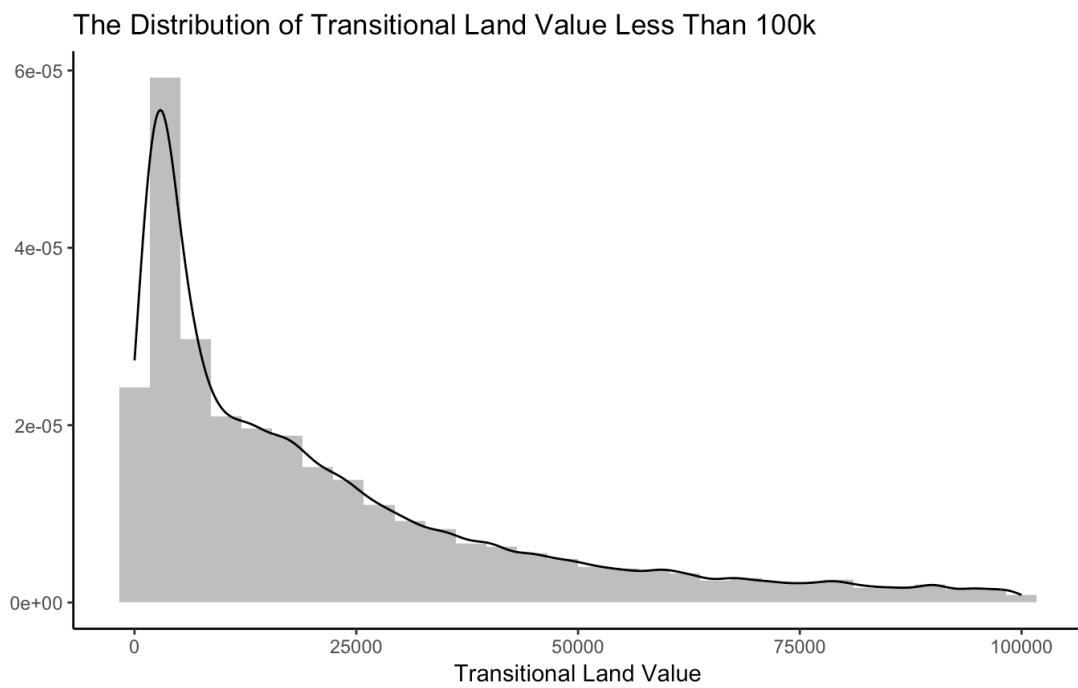
3.24 BLDDEPTH

Description: building depth in feet



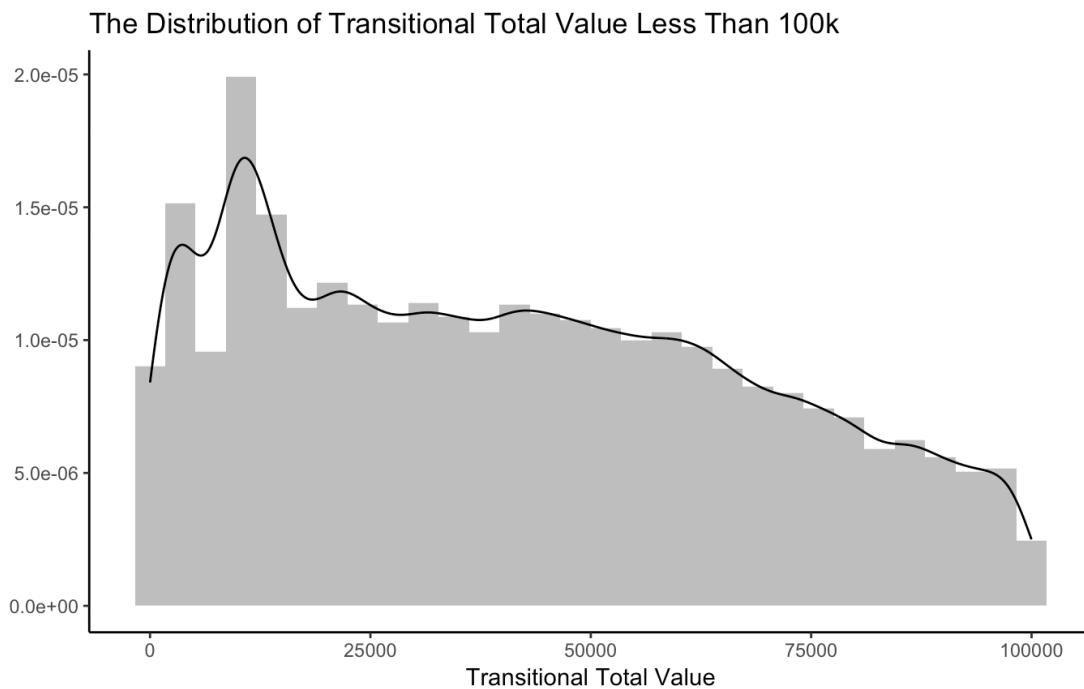
3.25 AVLAND2

Description: transitional land value of the property



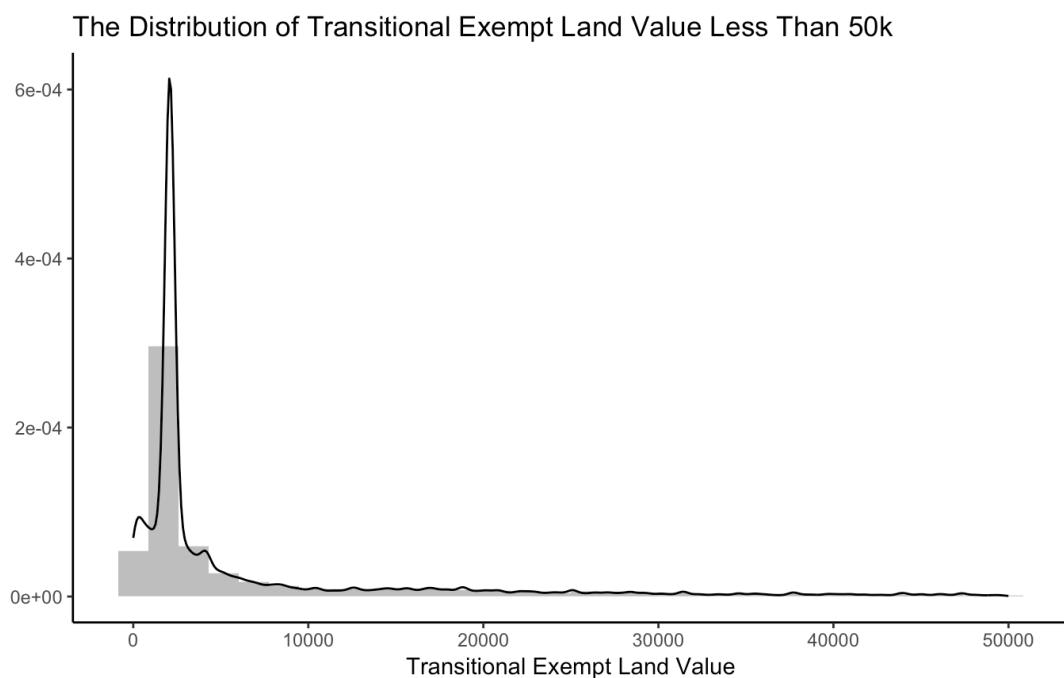
3.26 AVTOT2

Description: transitional total value of the property



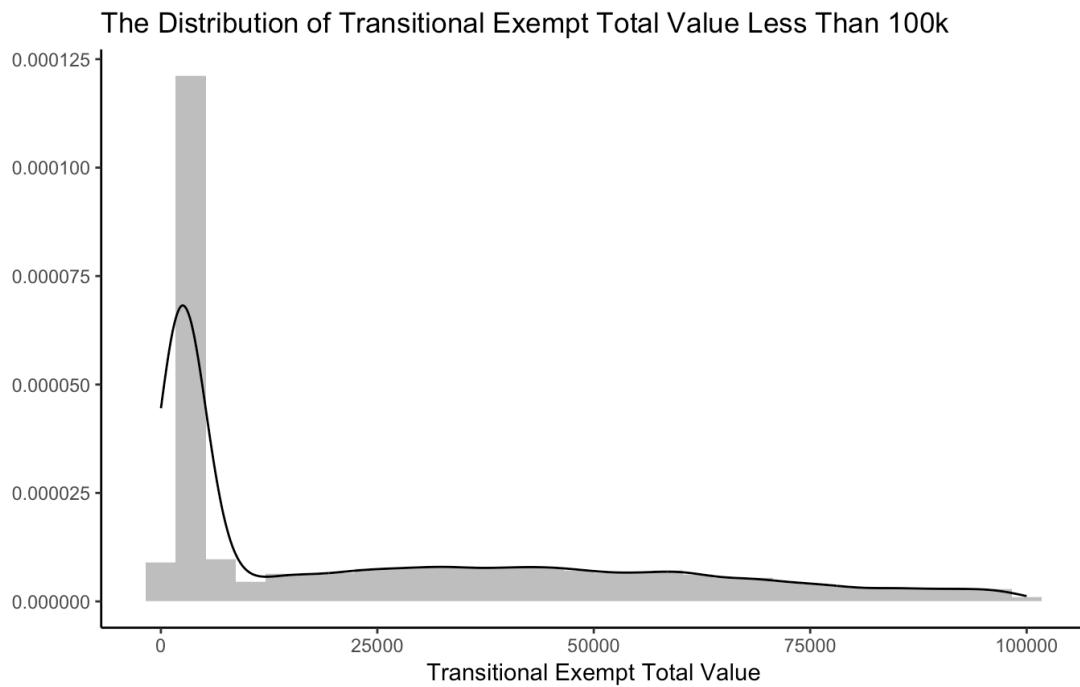
3.27 EXLAND2

Description: transitional exempt land value of the property



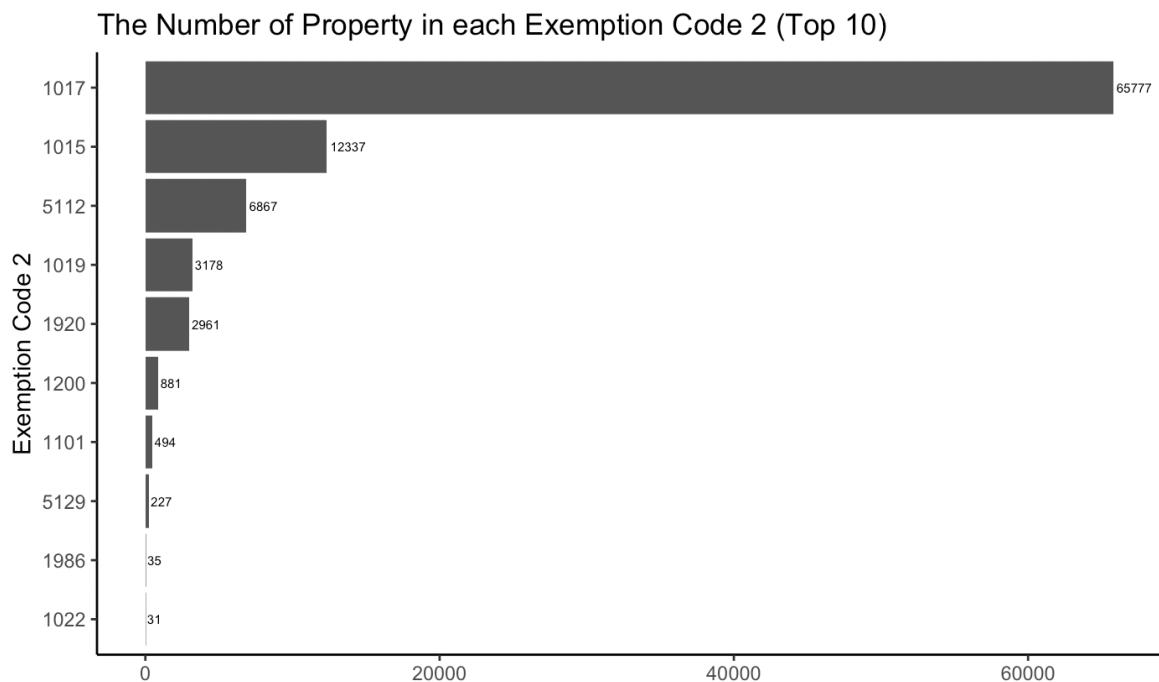
3.28 EXTOT2

Description: transitional exempt total value of the property



3.29 EXCD2

Description: exemption code 2



3.30 PERIOD

Description: assessment period when the file was created

3.31 YEAR

Description: Assessment year

3.32 VALTYPE