PROPERTY ASSESSMENT FY2018 MODIFIED DATA KEY

GROUP 2 – TAX ASSESSOR'S DATA – PPUA 5262 MIDTERM TWO

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REF: City of Boston Assessing Department: Parcel Key Data

This document serves as a data dictionary for Property Assessment FY2018 dataset from City of Boston Tax Assessor's Department. This dataset, having a size of 45 MB, contains 172,841 rows and 75 columns related to a property's unique information such as ownership details, structure details, heating and air conditioning information, etc. It gives parcel/property ownership information together with value information to ensure fair assessment of taxable and non-taxable property of all types and classifications in the city of Boston. This dataset can be utilized to carry out analysis of different parcel valuation characteristics and analyze how different factors like amenities, zip code, etc. play a role in valuation of a property.

I. MODIFIED VARIABLES

Derived: FY2018 Property Assessments modified by Group 2

A. NEW AGGREGATE MEASURES CREATED

Name	Description	Field Length
neighborhood_land_usage	A count of number of properties of a particular land usage type in a given zip code (grouped by zip code, land usage type)	255
Average Land Value	Average value of parcels for different building styles across different streets	255
Multipurpose Land Area	Average area of non living area for different land uses across different streets	255
neighborhood_wealth	Neighborhood wealth indicator based on the gross tax divided by gross area for a particular land usage type in a given zip code (grouped by zip code, land usage type)	255
B. NEW RECORD LEVEL VARIABLES CREATED		
gross_tax_by_area	Gross tax divided by gross area, obtained by formula - GROSS_TAX/GROSS_AREA	255
multipurpose_Area	A value that describes area allotted to garage, balcony, and other non living space. Obtained from difference between GROSS_AREA and LIVING_AREA.	255
boston_tax_cleaned	A new data frame created after dropping columns having 'NA' in more than 90% of data.	255

boston_tax_cleaned1700	A new data frame created considering only those properties that contain a valid "YR_BUILT" (year 1700 onwards in this case and ignoring '0', 'NA' values)	255
ST_ ADDRESS	ST_NUM, ST_NAME, ST_NAME_SUF and ZIP CODE of parcel	255
MAIL_MATCH_ADDRESS	MAIL_ADDRESSEE, MAIL_ADDRESS and MAIL_ZIPCODE where tax bill is mailed	255
GROSS_TAX	Tax bill amount based on total assessed value multiplied by the tax rate (converted data type from character in original dataset to numeric)	13
GROSS_AREA_BUCKETS	Gross area has been split into 7 buckets with equal intervals using min and max values. This splits gross area into different buckets for better categorization of gross area.	35
GROSS_TAX_BUCKETS	Gross tax has been split into 7 buckets with equal intervals using min and max values. This splits gross tax into different buckets for better categorization of gross tax.	35
R_AC	Indicates if the structure has air conditioning (A/C): Central A/C Ductless A/C None Modified from single character to detailed description	15
OTHER_ROOMS	Gives counts of rooms in a property that are not bedrooms.	5
TAX_PER_FOOTAGE	Gives value of tax per square footage, obtained by formula - GROSS_TAX/LAND_SF	255
C. EXISTING VARIABLES REMOVED		
R_KITCH_STYLE3	Residential kitchen style: L Luxury M Modern N No Remodeling S Semi-Modern	1
S_NUM_BLDG	Number of buildings in condo main	10
S_BLDG_STYL	Building style of condo main: CV Conventional HR High Rise RE Row End DK Decker LR Low Rise RM Row Middle DX Duplex MR Mid Rise SD Semi-Detached FS Free Standing OT Other TH Townhouse	10
S_UNIT_RES	Number of residential units in the condo main	10
S_UNIT_COM	Number of commercial units in the condo main	10
S_UNIT_RC	Number of mixed use units in the condo main	10
S_EXT_FIN	Exterior finish of condo main: A Asbestos K Concrete U Aluminum B Brick/Stone M Vinyl V Brick/Stone Veneer C Cement Board O Other W Wood Shake F Frame/Clapboard P Asphalt G Glass S Stucco	1

S_EXT_CND	Condo main exterior condition: A Average E Excellent F Fair G Good P Poor	1
U_BTH_STYLE3	Condo unit bath style: L Luxury M Modern N No Remodeling S Semi-Modern	1

II. EXISTING VARIABLES

Ref: PARCEL DATA KEY//City of Boston Assessing Department - Removed Variables Above Included Below

Name	Description	Field Length
PID	Unique 10-digit parcel number. First 2 digits are the ward, digits 3 to 7 are the parcel, and digits 8 to 10 are the sub-parcel	10
CM_ID	10-digit parcel number of Condo Main, which houses all related condo units	10
GIS_ID	See "PID"	10
ST_NUM	Street number of parcel	10
ST_NAME	Street name of parcel	50
ST_NAME_SUF	Street name suffix of parcel	20
UNIT_NUM	Specific condominium number within a housing complex	20
ZIPCODE	Zip code of parcel	5
PTYPE	State class code (see property occupancy codes page)	10
LU	Type of Property (land use) A Residential 7 or more units AH Agricultural/Horticultural C Commercial CC Commercial condominium Residential condominium unit Commercial land CM Condominium main (physical structure housing all related condo units with no assessed value) CP Condo parking E Tax-exempt EA Tax-exempt (121A) I Industrial R1 Residential 1-family CD R2 Residential 2-family CL R3 Residential 3-family R4 Residential 4 or more family RC Mixed use (res. and comm.) RL Residential land	2
OWN_OCC	One-character code indicating if owner receives residential exemption as an owner-occupied property	1
OWNER	Primary owner of property as of January 1 preceding the start of the fiscal year	50
MAIL_ADDRESSEE	Care of recipient	50
MAIL_ADDRESS	Street address where tax bill is mailed	50
MAIL_CS	City and state where tax bill is mailed	50
MAIL_ZIPCODE	Zip code where tax bill is mailed	5
AV_LAND	Total assessed land value	13

Name	Description	Field Length
AV_TOTAL	Total assessed value for property	13
GROSS_TAX	Tax bill amount based on total assessed value multiplied by the tax rate	13
LAND_SF	Parcel's land area in square feet (legal area)	6
YR_BUILT	Year property was built	4
YR_REMOD	Year property was last remodeled	4
GROSS_AREA	Gross floor area for commercial properties	8
LIVING_AREA	Living area square footage of the property	8
AV_BLDG	Total assessed building value	13
NUM_FLOORS	# of levels in the structure located on the parcel	10
STRUCTURE_CLASS	Structural classification of commercial building: A Struct Steel B Reinforced Concrete C Brick/Concrete D Wood/Frame E Metal R Residential	1
R_BLDG_STYL	Residential building style: BL Bi-Level BW Bungalow CL Colonial CN Contemporary CP Cape CV Conventional DK Decker DX Duplex L Tri-Level OT Other RE Row End RM Row Middle RN Ranch RR Raised Ranch SL Split Level TF Two-Family Stack TD Tudor SD Semi-Detached VT Victorian	10
R_ROOF_TYP	Structure roof type: F Flat G Gable H Hip L Gambrel M Mansard O Other S Shed	10
R_EXT_FIN	Structure exterior finish: A Asbestos B Brick/Stone C Cement Board F Frame/Clapboard G Glass K Concrete M Vinyl O Other P Asphalt S Stucco U Aluminum V Brick/Stone Veneer W Wood Shake	10
R_TOTAL_RMS	Total number of rooms in the structure	10
R_BDRMS	Total number of bedrooms in the structure	10
R_FULL_BTH	Total number of full baths in the structure	10
R_HALF_BTH	Total number of half baths in the structure	10
R_BTH_STYLE	Residential bath style L Luxury N No Remodeling M Modern S Semi-Modern	1
R_BTH_STYLE2	Residential bath style - bathroom #2: L Luxury N No Remodeling M Modern S Semi-Modern	1

Name	Description	Field Length
R_BTH_STYLE3	Residential bath style - bathroom #3: L Luxury M Modern N No Remodeling S Semi-Modern	1
R_KITCH	Total number of kitchens in the structure	10
R_KITCH_STYLE	Residential kitchen style: L Luxury M Modern N No Remodeling S Semi-Modern	1
R_KITCH_STYLE2	Residential kitchen style - kitchen #2: L Luxury M Modern N No Remodeling S Semi-Modern	1
R_KITCH_STYLE3	Residential kitchen style - kitchen #3: L Luxury M Modern N No Remodeling S Semi-Modern	1
R_HEAT_TYP	Structure heat type: E Electric O Other W Hot Water F Forced Air P Heat Pump N None S Space Heater	10
R_AC	Indicates if the structure has air conditioning (A/C): C Central A/C D Ductless A/C N None	1
R_FPLACE	Total number of fireplaces in the structure	10
R_EXT_CND	Residential exterior condition: A Average E Excellent F Fair G Good P Poor	1
R_OVRALL_CND	Residential overall condition: A Average E Excellent F Fair G Good P Poor	1
R_INT_CND	Residential interior condition: A Average E Excellent F Fair G Good P Poor	1
R_INT_FIN	Residential interior finish: E Elaborate N Normal S Substandard	1
R_VIEW	Residential view: A Average E Excellent F Fair G Good P Poor S Special	1
S_UNIT_RES	Number of residential units in the condo main	10
U_BASE_FLOOR	Base floor of condo unit	10
U_NUM_PARK	Number of parking spaces	10
S_UNIT_RC	Number of mixed use units in the condo main	10
R_KITCH	Total number of kitchens in the structure	10
R_BDRMS	Total number of bedrooms in the structure	10

Name	Description	Field Length
S_BLDG_STYL	Building style of condo main: CV Conventional HR High Rise RE Row End DK Decker LR Low Rise RM Row Middle DX Duplex MR Mid Rise SD Semi-Detached FS Free Standing OT Other TH Townhouse	10
S_EXT_FIN	Exterior finish of condo main: D Asbestos K Concrete U Aluminum E Brick/Stone M Vinyl V Brick/Stone Veneer F Cement Board O Other W Wood Shake H Frame/Clapboard P Asphalt I Glass S Stucco	1
S_EXT_CND	Condo main exterior condition: A Average E Excellent F Fair G Good P Poor	1
U_BASE_FLOOR	Base floor of condo unit	10
U_NUM_PARK	Number of parking spaces	10
U_CORNER	Indicates if unit is located in the corner of the building (Y/N)	1
U_ORIENT	Orientation of condo unit within the building: A Rear above E End T Through B Rear below F Front/Street C Face courtyard M Middle	1
U_TOT_RMS	Total number of rooms in condo unit A Average E Excellent F Fair G Good P Poor	10
U_BDRMS	Total number of bedrooms in condo unit	10
U_FULL_BTH	Total number of full baths in condo unit	10
U_HALF_BTH	Total number of half baths in condo unit	10
U_BTH_STYLE	Condo unit bath style: L Luxury M Modern N No Remodeling S Semi-Modern	1
U_BTH_STYLE2	Condo unit bath style - bathroom #2: L Luxury M Modern N No Remodeling S Semi-Modern	1
U_BTH_STYLE3	Condo unit bath style - bathroom #3: L Luxury M Modern N No Remodeling S Semi-Modern	1
U_KITCH_TYP	Type of kitchen in condo unit: F Full eat-in O One person N None P Pull/Alcove	1

Name	Description	Field Length
U_FPLACE	Number of fireplaces in the unit (if any)	2
U_INT_FIN	Condo unit interior finish: E Elaborate N Normal S Substandard	1
U_INT_CND	Condo unit interior condition: A Average E Excellent Poor F Fair G Good	1
U_VIEW	Condo unit view: A Average E Excellent Poor F Fair G Good	1