

# Cleaning and Regressions

Import Packages + Read in Data

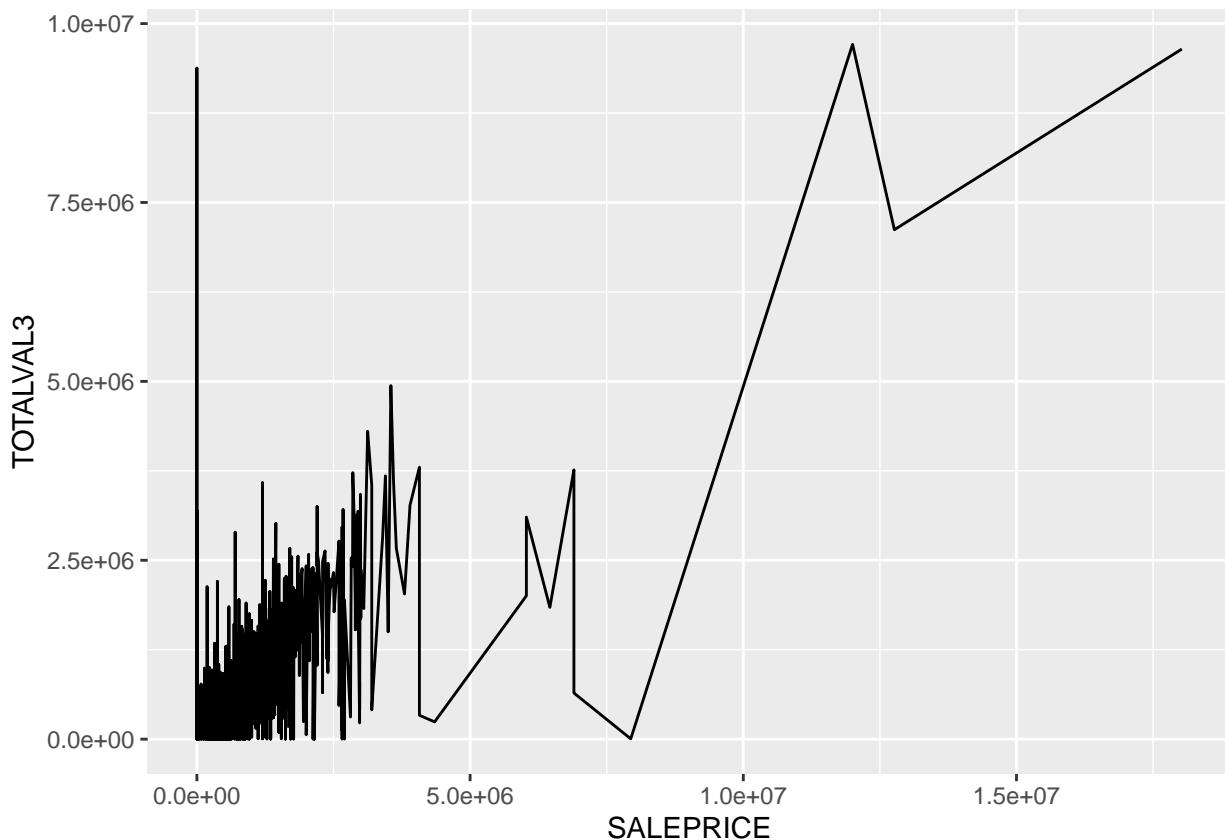
Create SFR Dataframe

```
## [1] 0  
## [1] 0  
## [1] 0  
## [1] 0
```

SFR data frame has 27,200 observations initially.

No observation repeat in any of the data frames according to the unique IDs we have recorded for them.

Clean SFR Dataframe



```
##      Mode    FALSE     TRUE  
## logical   26931     269  
##      Min.  1st Qu.   Median     Mean  3rd Qu.     Max.     NA's  
## -4691540  142500  216000  254734  322500 16393050        102  
##      Min.  1st Qu.   Median     Mean  3rd Qu.     Max.     NA's  
##       0.0  180.7  219.3     Inf  261.5     Inf      102
```

```

##      Mode    FALSE    TRUE
## logical  26331     869
##      Mode    FALSE    TRUE    NA's
## logical   528    26570    102
##      Mode    FALSE    TRUE
## logical  27182     18
##      Mode    FALSE    TRUE
## logical  27107     93

```

Here, we created several variables that will help us determine what a reasonable observation should be for a single-family residential property.

First we removed observations that were actually vacant properties. These properties were tagged as “Vacant Land” in the taxlot data. We removed 869 vacant properties, or 3%, from our dataset.

We found the difference between what we consider the most recent assessed value of the property and the sale price. In a perfect market (?), the sale price should be equal to the assessed value. However, due to factors such as imperfect information, sale price can be much higher or lower than the assessed value. Sale price is much higher than assessed value in situations where \_\_\_\_\_. Conversely, sale price is much lower than assessed value in transactions that are not considered “arms-length”. Arms-length transactions are assumed to have been completed in the market, and with market forces acting upon both the buyer and the seller. For example, if a homeowner sold their property at a discount to a family member, there is an outside influence on the transaction (the relationship between buyer and seller) that affects the sale price. Arms-length transactions are more of a concept than a strict cut-off, so we were able to be flexible with how we applied the definition to our dataset.

We chose to assign the property of an “arms-length transaction” to those properties whose sale price-to-assessed value ratio was at least 20%. In other words, we kept observations whose sale price was at most 20% lower than the assessed value. Our reasoning for this was to allow some flexibility with regard to homeowners with less information. Ultimately, this led to eliminating 528 observations, or 2% of our total data.

While the above process cleaned the bottom half of our data where sale price was too low, we still worried about including properties that sold for too high a price. To combat this, we eliminated the top 1% of observations with the highest sale prices. These properties were often owned by large investment or real estate firms who do not operate in the same market as the average homeowner (NOTE this is only applicable for SFR). Another reason for an inordinately high sale price is recording error. The top 1% is made up of 269 observations with an average sale price of \_\_\_\_\_.

Removing the most expensive properties helps combat including real estate company transactions, there are also myriad “land trusts” in Portland that hold land. TALK MORE ABOUT THIS!!!!!!! A key land trust is known as “Proud Ground”. TALK TALK TALK. We eliminated properties owned by Proud Ground (*italicize?*). Many of the Proud Ground properties were vacant. Eliminated 18 observations.

To conclude, we cleaned the data using four parameters: vacant properties, the top 1% of observations by sale price, observations whose sale price was less than 20% of its assessed value, and properties owned by the land trust “Proud Ground”. These checks eliminated 1,680 unique observations, or 6% of the original dataset.

LLC stands for “Limited Liability Company” and is a type of company

## Exploration

```

##          X1           AREA        STATE_ID          RNO
##  Min. : 1  Min. : 80.1  Length:25520  Length:25520
##  1st Qu.: 8557  1st Qu.: 4995.3  Class :character  Class :character
##  Median :17310  Median : 5339.3  Mode  :character  Mode  :character
##  Mean   :17185  Mean   : 7453.0

```

```

## 3rd Qu.:25782   3rd Qu.: 7978.5
## Max.     :34628   Max.    :587424.0
##
##          OWNER1           OWNERADDR           OWNERCITY
##  Length:25520      Length:25520      Length:25520
##  Class :character  Class :character  Class :character
##  Mode  :character  Mode  :character  Mode  :character
##
##          OWNERSTATE        SITEADDR           SITECITY
##  Length:25520      Length:25520      Length:25520
##  Class :character  Class :character  Class :character
##  Mode  :character  Mode  :character  Mode  :character
##
##          SITE_STATE        SITEZIP            PRPCD_DESC        YEARBUILT
##  Length:25520      Min.    :97034      Length:25520      Min.    : 0
##  Class :character  1st Qu.:97206      Class :character  1st Qu.:1926
##  Mode  :character  Median :97216      Mode  :character  Median :1951
##                      Mean   :97218      Mean   :1961
##                      3rd Qu.:97221      3rd Qu.:1975
##                      Max.   :97266      Max.   :9999
##                                     NA's   :11
##          FLOORS           UNITS            MKTVALYR3
##  Min.    :0.00000      Min.    : 0.000000      Length:25520
##  1st Qu.:0.00000      1st Qu.: 0.000000      Class :character
##  Median :0.00000      Median : 0.000000      Mode  :character
##  Mean   :0.00196      Mean   : 0.004626
##  3rd Qu.:0.00000      3rd Qu.: 0.000000
##  Max.   :3.00000      Max.   :11.000000
##  NA's   :11           NA's   :11
##          LANDVAL3        BLDGVAL3        TOTALVAL3        SALEDATE
##  Min.    : 0           Min.    : 0           Min.    : 0       Length:25520
##  1st Qu.:145000      1st Qu.:152805      1st Qu.:311628      Class :character
##  Median :187500      Median :214930      Median :406915      Mode  :character
##  Mean   :202951      Mean   :250675      Mean   :453628
##  3rd Qu.:233500      3rd Qu.:308148      3rd Qu.:541870
##  Max.   :1856000     Max.   :2441050     Max.   :3582530
##
##          SALEPRICE        A_T_SQFT        A_T_ACRES        FRONTAGE
##  Min.    : 24732      Min.    : 0           Min.    :0.0000      Mode:logical
##  1st Qu.:310000      1st Qu.: 5000      1st Qu.:0.1148      NA's:25520
##  Median :405000      Median : 5250      Median :0.1205
##  Mean   :452052      Mean   : 7165      Mean   :0.1645
##  3rd Qu.:545000      3rd Qu.: 7840      3rd Qu.:0.1800
##  Max.   :1495000     Max.   :355822      Max.   :8.1685
##
##          COUNTY           PROPERTYID        TLID
##  Length:25520      Length:25520      Length:25520
##  Class :character  Class :character  Class :character

```

```

##  Mode :character  Mode :character  Mode :character
##
##
##
##
##    Shape_Length      Shape_Area       saledate        CN_score
##  Min.   : 49.56   Min.   : 80.1  Length:25520   Min.   : 1.00
##  1st Qu.: 299.89  1st Qu.: 4995.3 Class  :character  1st Qu.:46.00
##  Median : 312.01  Median : 5339.3 Mode   :character  Median :61.00
##  Mean   : 352.60  Mean   : 7453.0                   Mean   :56.87
##  3rd Qu.: 373.95  3rd Qu.: 7978.5                   3rd Qu.:70.00
##  Max.   :3834.62  Max.   :587424.0                  Max.   :94.00
##
##          NBRNUM      MapLabel      percent_vacant      HIGH_SCH
##  Min.   : 0.00  Length:25520   Min.   :0.0000  Length:25520
##  1st Qu.:13.00  Class  :character  1st Qu.:0.3333  Class  :character
##  Median :34.00  Mode   :character  Median :0.6000  Mode   :character
##  Mean   :33.22                   Mean   :0.5933
##  3rd Qu.:55.00                   3rd Qu.:0.8571
##  Max.   :75.00                   Max.   :1.0000
##  NA's   :80                      NA's   :398
##
##    ELEM_SCH      dist_cityhall      dist_ugb      totalsqft
##  Length:25520   Min.   : 3084  Min.   : 27.12  Min.   : 0
##  Class  :character  1st Qu.:18532  1st Qu.:13204.81  1st Qu.: 1228
##  Mode   :character  Median :24064  Median :18987.50  Median : 1680
##                   Mean   :25573  Mean   :18870.40  Mean   : 1901
##                   3rd Qu.:31513  3rd Qu.:24816.09  3rd Qu.: 2321
##                   Max.   :52807  Max.   :34315.31  Max.   :44360
##                   NA's   :641
##
##    yearbuilt      avgheight      surfelev      minheight
##  Min.   :1008  Min.   : 0.00  Min.   : 0.0  Min.   : 0.000
##  1st Qu.:1925  1st Qu.:11.56  1st Qu.: 162.1 1st Qu.: 8.060
##  Median :1950  Median :13.48  Median : 234.9  Median : 8.790
##  Mean   :1950  Mean   :14.59  Mean   : 263.4  Mean   : 9.416
##  3rd Qu.:1968  3rd Qu.:16.77  3rd Qu.: 288.5  3rd Qu.:10.060
##  Max.   :2018  Max.   :74.25  Max.   :1254.2  Max.   :73.550
##  NA's   :1357  NA's   :2249  NA's   :1734  NA's   :8978
##
##    maxheight      volume      bldgtype      bldguse
##  Min.   : 0.00  Min.   :     0  Length:25520  Length:25520
##  1st Qu.:14.88  1st Qu.: 14112  Class  :character  Class  :character
##  Median :17.67  Median : 20304  Mode   :character  Mode   :character
##  Mean   :18.93  Mean   : 23119
##  3rd Qu.:22.09  3rd Qu.: 28038
##  Max.   :88.97  Max.   :258744
##  NA's   :8980  NA's   :2249
##
##    V1           AES SOLAR          ARA          ATT GAR
##  Min.   :0.0e+00  Min.   :0.00000  Min.   : 0.00  Min.   : 0
##  1st Qu.:0.0e+00  1st Qu.:0.00000  1st Qu.: 0.00  1st Qu.: 0
##  Median :0.0e+00  Median :0.00000  Median : 0.00  Median : 0
##  Mean   :4.7e-04  Mean   :0.01592  Mean   : 33.66  Mean   :1125
##  3rd Qu.:0.0e+00  3rd Qu.:0.00000  3rd Qu.: 0.00  3rd Qu.:2650
##  Max.   :1.2e+01  Max.   :4.00000  Max.   :8209.00  Max.   :8174
##  NA's   :12       NA's   :12       NA's   :12       NA's   :12
##
##    BLACKTOP      BOAT DOCK      BREEZEWAY      BRICK PAV

```

```

## Min. : 0.0 Min. :0.00000 Min. : 0.00 Min. : 0.00
## 1st Qu.: 0.0 1st Qu.:0.00000 1st Qu.: 0.00 1st Qu.: 0.00
## Median : 0.0 Median :0.00000 Median : 0.00 Median : 0.00
## Mean : 268.8 Mean :0.00047 Mean : 20.79 Mean : 92.32
## 3rd Qu.: 0.0 3rd Qu.:0.00000 3rd Qu.: 0.00 3rd Qu.: 0.00
## Max. :8439.0 Max. :3.00000 Max. :4289.00 Max. :7684.00
## NA's :12 NA's :12 NA's :12 NA's :12
## BSMT FINISHED BSMT GAR BSMT PARKING BSMT SEMIFINISHED
## Min. :0 Min. : 0.000 Min. :0 Min. :0
## 1st Qu.:0 1st Qu.: 0.000 1st Qu.:0 1st Qu.:0
## Median :0 Median : 0.000 Median :0 Median :0
## Mean :0 Mean : 1.621 Mean :0 Mean :0
## 3rd Qu.:0 3rd Qu.: 0.000 3rd Qu.:0 3rd Qu.:0
## Max. :0 Max. :4084.000 Max. :0 Max. :0
## NA's :12 NA's :12 NA's :12 NA's :12
## BSMT UNFINISHED BUILT-IN GARAGE CARPORT CARPORT ONLY
## Min. :0 Min. : 0.0 Min. : 0.0 Min. :0
## 1st Qu.:0 1st Qu.: 0.0 1st Qu.: 0.0 1st Qu.:0
## Median :0 Median : 0.0 Median : 0.0 Median :0
## Mean :0 Mean : 240.7 Mean : 106.4 Mean :0
## 3rd Qu.:0 3rd Qu.: 0.0 3rd Qu.: 0.0 3rd Qu.:0
## Max. :0 Max. :6546.0 Max. :6911.0 Max. :0
## NA's :12 NA's :12 NA's :12 NA's :12
## CONCRETE COV DECK COV PATIO COVERED PORCH
## Min. : 0 Min. : 0.0 Min. : 0.0 Min. : 0.0
## 1st Qu.:1189 1st Qu.: 0.0 1st Qu.: 0.0 1st Qu.: 0.0
## Median :3095 Median : 0.0 Median : 0.0 Median : 0.0
## Mean :2449 Mean : 138.5 Mean : 300.4 Mean : 378.2
## 3rd Qu.:3713 3rd Qu.: 0.0 3rd Qu.: 0.0 3rd Qu.: 0.0
## Max. :8331 Max. :8151.0 Max. :8565.0 Max. :8082.0
## NA's :12 NA's :12 NA's :12 NA's :12
## DECK DECK OR PATIO ONLY DET GAR DET GAR ONLY
## Min. : 0.0 Min. : 0.000 Min. : 0.0 Min. : 0.00
## 1st Qu.: 0.0 1st Qu.: 0.000 1st Qu.: 0.0 1st Qu.: 0.00
## Median : 0.0 Median : 0.000 Median : 0.0 Median : 0.00
## Mean : 698.8 Mean : 0.045 Mean : 644.9 Mean : 3.31
## 3rd Qu.: 955.0 3rd Qu.: 0.000 3rd Qu.:1189.0 3rd Qu.: 0.00
## Max. :12206.0 Max. :1142.000 Max. :8528.0 Max. :6563.00
## NA's :12 NA's :12 NA's :12 NA's :12
## DET ROOM DETACHED ROOM ONLY ENC PATIO ENC PORCH
## Min. : 0.00 Min. : 0.000 Min. : 0.00 Min. : 0.0
## 1st Qu.: 0.00 1st Qu.: 0.000 1st Qu.: 0.00 1st Qu.: 0.0
## Median : 0.00 Median : 0.000 Median : 0.00 Median : 0.0
## Mean : 25.05 Mean : 0.316 Mean : 13.93 Mean : 98.5
## 3rd Qu.: 0.00 3rd Qu.: 0.000 3rd Qu.: 0.00 3rd Qu.: 0.0
## Max. :4756.00 Max. :3753.000 Max. :4289.00 Max. :8426.0
## NA's :12 NA's :12 NA's :12 NA's :12
## ENC STOR FARM BLDG FARM BLDG ONLY FIN ATTIC
## Min. : 0.00 Min. : 0.000 Min. : 0.000 Min. : 0.0
## 1st Qu.: 0.00 1st Qu.: 0.000 1st Qu.: 0.000 1st Qu.: 0.0
## Median : 0.00 Median : 0.000 Median : 0.000 Median : 0.0
## Mean : 56.39 Mean : 7.473 Mean : 0.334 Mean : 763.6
## 3rd Qu.: 0.00 3rd Qu.: 0.000 3rd Qu.: 0.000 3rd Qu.: 0.0
## Max. :7576.00 Max. :10110.000 Max. :6880.000 Max. :7656.0

```

```

## NA's :12      NA's :12      NA's :12      NA's :12
## FIN BSMT     FIN LOWER LEVEL FIN SECOND    GEN SHOP MAIN
## Min. : 0.0   Min. : 0.00   Min. : 0.0   Min. : 0.0000
## 1st Qu.: 0.0  1st Qu.: 0.00  1st Qu.: 0.0  1st Qu.: 0.0000
## Median : 0.0  Median : 0.00  Median : 0.0  Median : 0.0000
## Mean : 885.3  Mean : 57.93  Mean : 594.3  Mean : 0.0589
## 3rd Qu.:1189.0 3rd Qu.: 0.00  3rd Qu.: 12.0 3rd Qu.: 0.0000
## Max. :8210.0  Max. :8162.00  Max. :10083.0  Max. :1502.0000
## NA's :12      NA's :12      NA's :12      NA's :12
## GEN SHOP MEZZANINE GEN SHOP OFFICE      GR HOUSE      MAIN
## Min. :0      Min. : 0.000  Min. : 0.000  Min. : 0
## 1st Qu.:0      1st Qu.: 0.000  1st Qu.: 0.000  1st Qu.: 223
## Median :0      Median : 0.000  Median : 0.000  Median : 706
## Mean :0      Mean : 0.149   Mean : 6.877   Mean : 1881
## 3rd Qu.:0      3rd Qu.: 0.000  3rd Qu.: 0.000  3rd Qu.: 4053
## Max. :0      Max. :3789.000  Max. :4276.000  Max. :12062
## NA's :12      NA's :12      NA's :12      NA's :12
## MFG'D HOME DBL MFG'D HOME SGL      MISC. IMPS OFFICE STRUCTURE
## Min. : 0.0000  Min. : 0.0000  Min. :0      Min. :0
## 1st Qu.: 0.0000 1st Qu.: 0.0000  1st Qu.:0      1st Qu.:0
## Median : 0.0000  Median : 0.0000  Median :0      Median :0
## Mean : 0.1113  Mean : 0.0197  Mean :0      Mean :0
## 3rd Qu.: 0.0000 3rd Qu.: 0.0000  3rd Qu.:0      3rd Qu.:0
## Max. :438.0000  Max. :502.0000  Max. :0      Max. :0
## NA's :12      NA's :12      NA's :12      NA's :12
## PAVING/CONCRETE ONLY      POOL      POOL HOUSE
## Min. : 0.000  Min. : 0.000  Min. : 0.000
## 1st Qu.: 0.000 1st Qu.: 0.000  1st Qu.: 0.000
## Median : 0.000  Median : 0.000  Median : 0.000
## Mean : 1.688   Mean : 0.141   Mean : 3.586
## 3rd Qu.: 0.000 3rd Qu.: 0.000  3rd Qu.: 0.000
## Max. :4277.000  Max. :3587.000  Max. :4253.000
## NA's :12      NA's :12      NA's :12
## SHED      SHED ONLY      SHOP      SHOP ONLY
## Min. : 0.0  Min. : 0.000  Min. : 0  Min. :0.e+00
## 1st Qu.: 0.0 1st Qu.: 0.000  1st Qu.: 0  1st Qu.:0.e+00
## Median : 0.0  Median : 0.000  Median : 0  Median :0.e+00
## Mean : 495.1  Mean : 0.946   Mean : 24  Mean :7.8e-05
## 3rd Qu.: 0.0  3rd Qu.: 0.000  3rd Qu.: 0  3rd Qu.:0.e+00
## Max. :12540.0  Max. :4096.000  Max. :7705  Max. :2.0e+00
## NA's :12      NA's :12      NA's :12      NA's :12
## SURFACE PARKING SURFACE PARKING ONLY TENNIS COURT ONLY
## Min. :0      Min. :0      Min. : 0.000
## 1st Qu.:0      1st Qu.:0      1st Qu.: 0.000
## Median :0      Median :0      Median : 0.000
## Mean :0      Mean :0      Mean : 0.288
## 3rd Qu.:0      3rd Qu.:0      3rd Qu.: 0.000
## Max. :0      Max. :0      Max. :4254.000
## NA's :12      NA's :12      NA's :12
## TENNIS CT      UNF ATTIC      UNF BSMT      UNF LOWER LEVEL
## Min. : 0.000  Min. : 0.00  Min. : 0  Min. : 0.00
## 1st Qu.: 0.000 1st Qu.: 0.00  1st Qu.: 0  1st Qu.: 0.00
## Median : 0.000  Median : 0.00  Median : 0  Median : 0.00
## Mean : 1.468   Mean : 46.41  Mean :1108  Mean : 5.07

```

```

## 3rd Qu.: 0.000 3rd Qu.: 0.00 3rd Qu.:3070 3rd Qu.: 0.00
## Max. :4277.000 Max. :7135.00 Max. :8508 Max. :4179.00
## NA's :12 NA's :12 NA's :12 NA's :12
## UNF MAIN UNF SECOND UNFINISHED AREAS f_baths
## Min. : 0.000 Min. : 0.000 Min. : 0.000 Min. : 0.000
## 1st Qu.: 0.000 1st Qu.: 0.000 1st Qu.: 0.000 1st Qu.: 1.000
## Median : 0.000 Median : 0.000 Median : 0.000 Median : 2.000
## Mean : 0.154 Mean : 1.189 Mean : 1.307 Mean : 1.798
## 3rd Qu.: 0.000 3rd Qu.: 0.000 3rd Qu.: 0.000 3rd Qu.: 2.000
## Max. :3932.000 Max. :4027.000 Max. :4004.000 Max. :14.000
## NA's :12 NA's :12 NA's :12 NA's :422
## h_baths fireplace n_fireplaces ADUDummy
## Min. :0.0000 Length:25520 Min. :1.000 Min. :0.00000
## 1st Qu.:0.0000 Class :character 1st Qu.:1.000 1st Qu.:0.00000
## Median :0.0000 Mode :character Median :1.000 Median :0.00000
## Mean :0.3207 Mean :1.034 Mean :0.01686
## 3rd Qu.:1.0000 3rd Qu.:1.000 3rd Qu.:0.00000
## Max. :6.0000 Max. :3.000 Max. :1.00000
## NA's :422 NA's :7008 NA's :11
## pct_canopy_cov total_canopy_cov taxlot_area conECSI
## Min. :0.0000 Min. : 0.0 Min. : 80.1 Min. :0e+00
## 1st Qu.:0.1414 1st Qu.: 734.2 1st Qu.: 4996.2 1st Qu.:0e+00
## Median :0.2597 Median : 1497.2 Median : 5405.1 Median :0e+00
## Mean :0.2945 Mean : 2677.9 Mean : 7511.2 Mean :2e-04
## 3rd Qu.:0.4120 3rd Qu.: 2759.8 3rd Qu.: 8000.2 3rd Qu.:0e+00
## Max. :1.0000 Max. :468129.8 Max. :587424.0 Max. :1e+00
## NA's :463 NA's :463 NA's :463 NA's :1966
## conLUST conHist conHistLdm conNatAm
## Min. :0e+00 Min. :0.0000 Min. :0e+00 Min. :0
## 1st Qu.:0e+00 1st Qu.:0.0000 1st Qu.:0e+00 1st Qu.:0
## Median :0e+00 Median :0.0000 Median :0e+00 Median :0
## Mean :2e-04 Mean :0.0281 Mean :7e-04 Mean :0
## 3rd Qu.:0e+00 3rd Qu.:0.0000 3rd Qu.:0e+00 3rd Qu.:0
## Max. :1e+00 Max. :1.0000 Max. :1e+00 Max. :0
## NA's :1966 NA's :1966 NA's :1966 NA's :1966
## conAirHgt conHeliprt conNoise conGW
## Min. :0.0000 Min. :0 Min. :0.000 Min. :0e+00
## 1st Qu.:0.0000 1st Qu.:0 1st Qu.:0.000 1st Qu.:0e+00
## Median :0.0000 Median :0 Median :0.000 Median :0e+00
## Mean :0.1965 Mean :0 Mean :0.011 Mean :7e-04
## 3rd Qu.:0.0000 3rd Qu.:0 3rd Qu.:0.000 3rd Qu.:0e+00
## Max. :1.0000 Max. :0 Max. :1.000 Max. :1e+00
## NA's :1966 NA's :1966 NA's :1966 NA's :1966
## conLSHA conSLIDO conSlp25 conInstit
## Min. :0.0000 Min. :0.0000 Min. :0.000 Min. :0
## 1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.000 1st Qu.:0
## Median :0.0000 Median :0.0000 Median :0.000 Median :0
## Mean :0.1972 Mean :0.0182 Mean :0.075 Mean :0
## 3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.000 3rd Qu.:0
## Max. :1.0000 Max. :1.0000 Max. :1.000 Max. :0
## NA's :1966 NA's :1966 NA's :1966 NA's :1966
## conPrvCom conPubOwn conSewer conStorm
## Min. :0 Min. :0e+00 Min. :0.0000 Min. :0.0000
## 1st Qu.:0 1st Qu.:0e+00 1st Qu.:0.0000 1st Qu.:0.0000

```

```

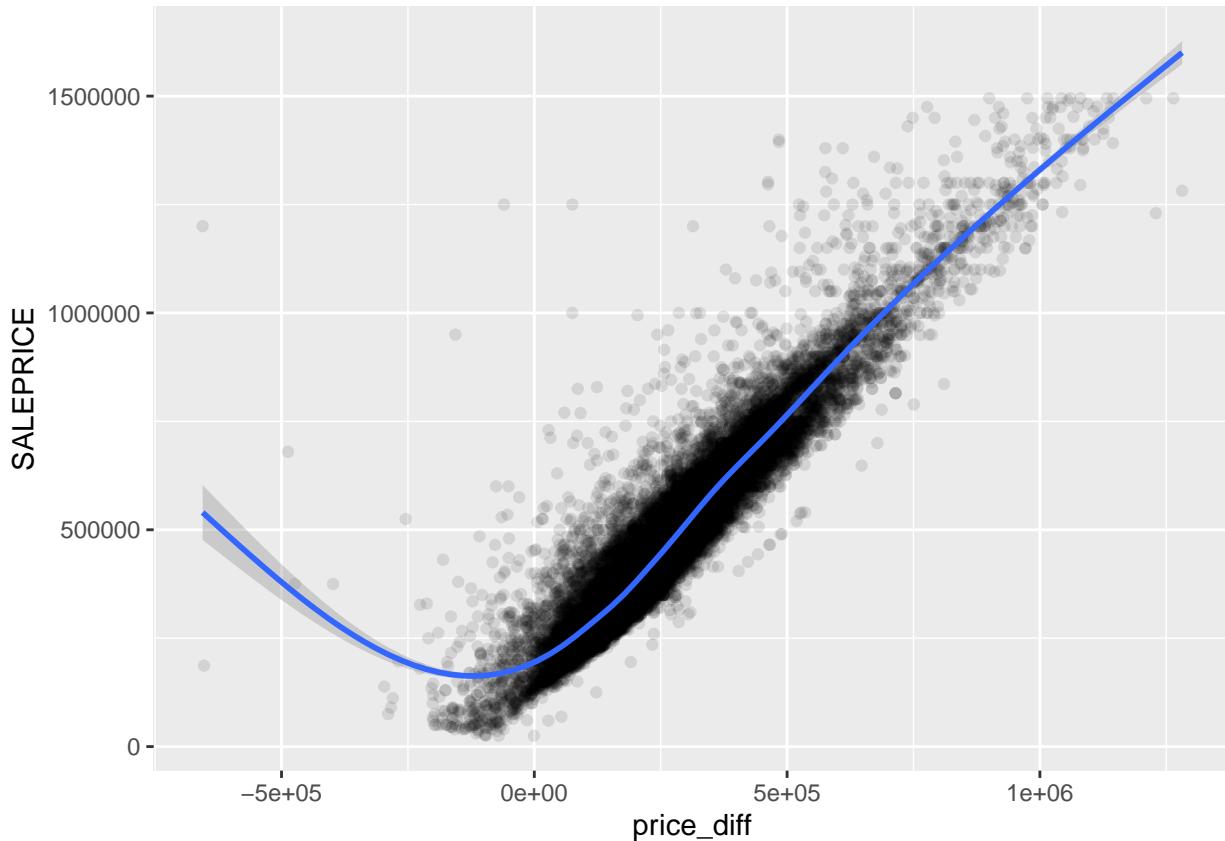
## Median :0      Median :0e+00   Median :0.0000  Median :0.0000
## Mean   :0      Mean   :8e-04   Mean   :0.0051  Mean   :0.0842
## 3rd Qu.:0      3rd Qu.:0e+00  3rd Qu.:0.0000  3rd Qu.:0.0000
## Max.  :1      Max.  :1e+00   Max.  :1.0000  Max.  :1.0000
## NA's   :1966   NA's   :1966   NA's   :1966   NA's   :1966
## conTranCap    conTranInt   conTranSub   conWater
## Min.  :0.0000  Min.  :0.0000  Min.  :0.00  Min.  :0.0000
## 1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.00 1st Qu.:0.0000
## Median :0.0000  Median :0.0000  Median :0.00  Median :0.0000
## Mean   :0.0713  Mean   :0.0863  Mean   :0.35  Mean   :0.0377
## 3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:1.00 3rd Qu.:0.0000
## Max.  :1.0000  Max.  :1.0000  Max.  :1.00  Max.  :1.0000
## NA's   :1966   NA's   :1966   NA's   :1966   NA's   :1966
## conView      conCovrly    conPovrly    conFldway
## Min.  :0      Min.  :0.0000  Min.  :0.0000  Min.  :0.0000
## 1st Qu.:0      1st Qu.:0.0000 1st Qu.:0.0000 1st Qu.:0.0000
## Median :0      Median :0.0000  Median :0.0000  Median :0.0000
## Mean   :0      Mean   :0.0476  Mean   :0.0196  Mean   :0.0018
## 3rd Qu.:0      3rd Qu.:0.0000 3rd Qu.:0.0000 3rd Qu.:0.0000
## Max.  :0      Max.  :1.0000  Max.  :1.0000  Max.  :1.0000
## NA's   :1966   NA's   :1966   NA's   :1966   NA's   :1966
## conWetland    conFld100   pct_conFld100  pct_conPovrly
## Min.  :0e+00  Min.  :0.0000  Min.  :0.000000  Min.  :0.00e+00
## 1st Qu.:0e+00 1st Qu.:0.0000 1st Qu.:0.000000 1st Qu.:0.00e+00
## Median :0e+00  Median :0.0000  Median :0.000000  Median :0.00e+00
## Mean   :9e-04  Mean   :0.0094  Mean   :0.004467  Mean   :3.92e-05
## 3rd Qu.:0e+00 3rd Qu.:0.0000 3rd Qu.:0.000000 3rd Qu.:0.00e+00
## Max.  :1e+00  Max.  :1.0000  Max.  :1.000000  Max.  :1.00e+00
## NA's   :1966   NA's   :1966
## pct_conCovrly  pct_conWetland pct_conFldway  ZONE_aug2016
## Min.  :0.000000  Min.  :0      Min.  :0.0000000  Length:25520
## 1st Qu.:0.000000 1st Qu.:0      1st Qu.:0.0000000  Class :character
## Median :0.000000  Median :0      Median :0.0000000  Mode  :character
## Mean   :0.008268  Mean   :0      Mean   :0.0002351
## 3rd Qu.:0.000000 3rd Qu.:0      3rd Qu.:0.0000000
## Max.  :1.000000  Max.  :0      Max.  :1.0000000
##
## ZONE_DESC_aug2016 ZONE_feb2014      ZONE_aug2014
## Length:25520      Length:25520      Length:25520
## Class :character  Class :character  Class :character
## Mode  :character  Mode  :character  Mode  :character
##
## ZONE_feb2015      ZONE_aug2015      ZONE_feb2016
## Length:25520      Length:25520      Length:25520
## Class :character  Class :character  Class :character
## Mode  :character  Mode  :character  Mode  :character
##
## ZONE_feb2018      ZONE_DESC_feb2018 ZONE_aug2017

```

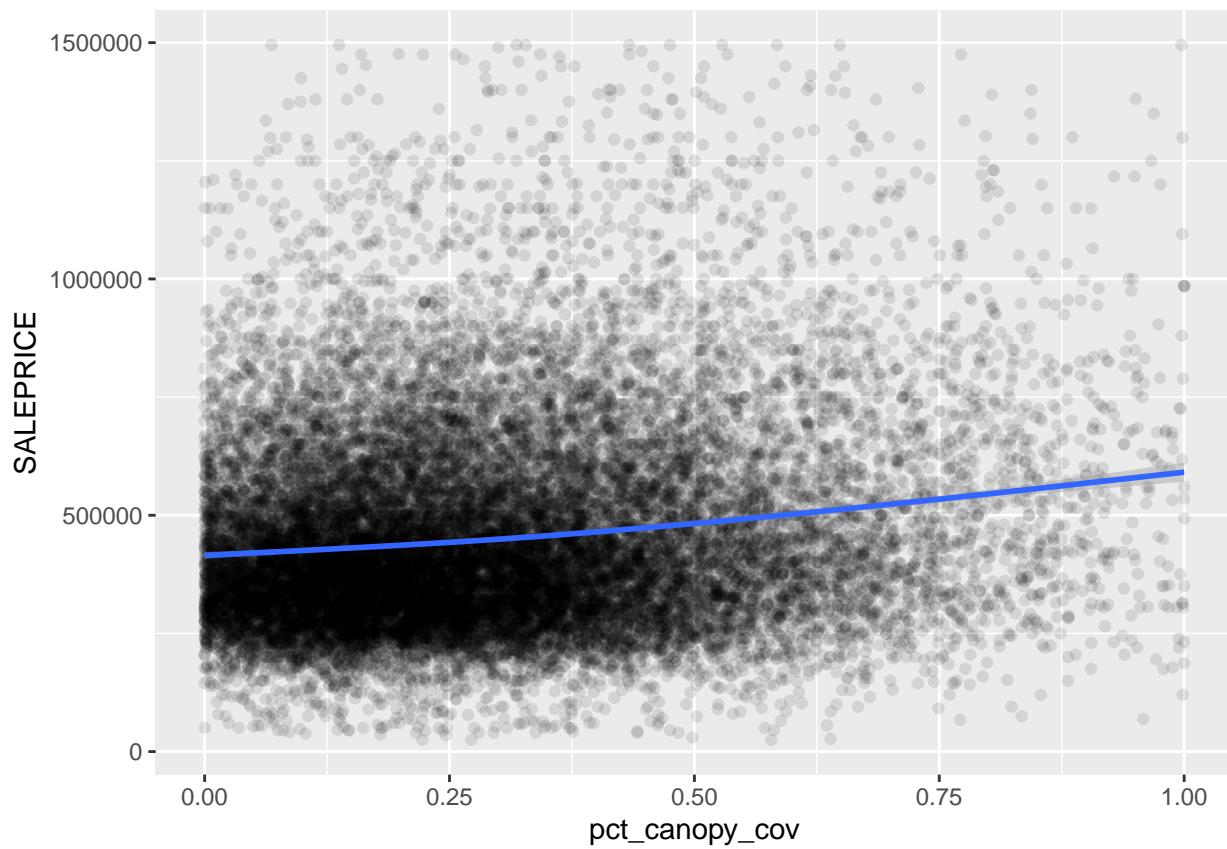
```

##  Length:25520      Length:25520      Length:25520
##  Class :character  Class :character  Class :character
##  Mode  :character  Mode  :character  Mode  :character
##
## 
## 
## 
## 
##  ZONE_aug2018      ZONE_DESC_aug2018   sale_zone
##  Length:25520      Length:25520      Length:25520
##  Class :character  Class :character  Class :character
##  Mode  :character  Mode  :character  Mode  :character
##
## 
## 
## 
## 
##  Zone Description  prop_type      top_1        price_diff
##  Length:25520      Length:25520      Mode :logical  Min.  :-656000
##  Class :character  Class :character  FALSE:25520   1st Qu.: 148000
##  Mode  :character  Mode  :character                    Median : 217500
##                                         Mean   : 249101
##                                         3rd Qu.: 319000
##                                         Max.   :1281393
##
## 
##  price_ratio      vacant_dummy    llc_flag      proud_flag
##  Min.   : 20.18    Mode :logical    Mode :logical  Mode :logical
##  1st Qu.:183.91    FALSE:25520     FALSE:25069    FALSE:25520
##  Median :219.90                    TRUE :451
##  Mean   :   Inf
##  3rd Qu.:259.74
##  Max.   :   Inf
##
##  trust_flag       arms_length
##  Mode :logical    Mode:logical
##  FALSE:25438     TRUE:25520
##  TRUE  :82
##
## 
## 
## 
## [1] "price_diff"
## `geom_smooth()` using method = 'gam' and formula 'y ~ s(x, bs = "cs")'

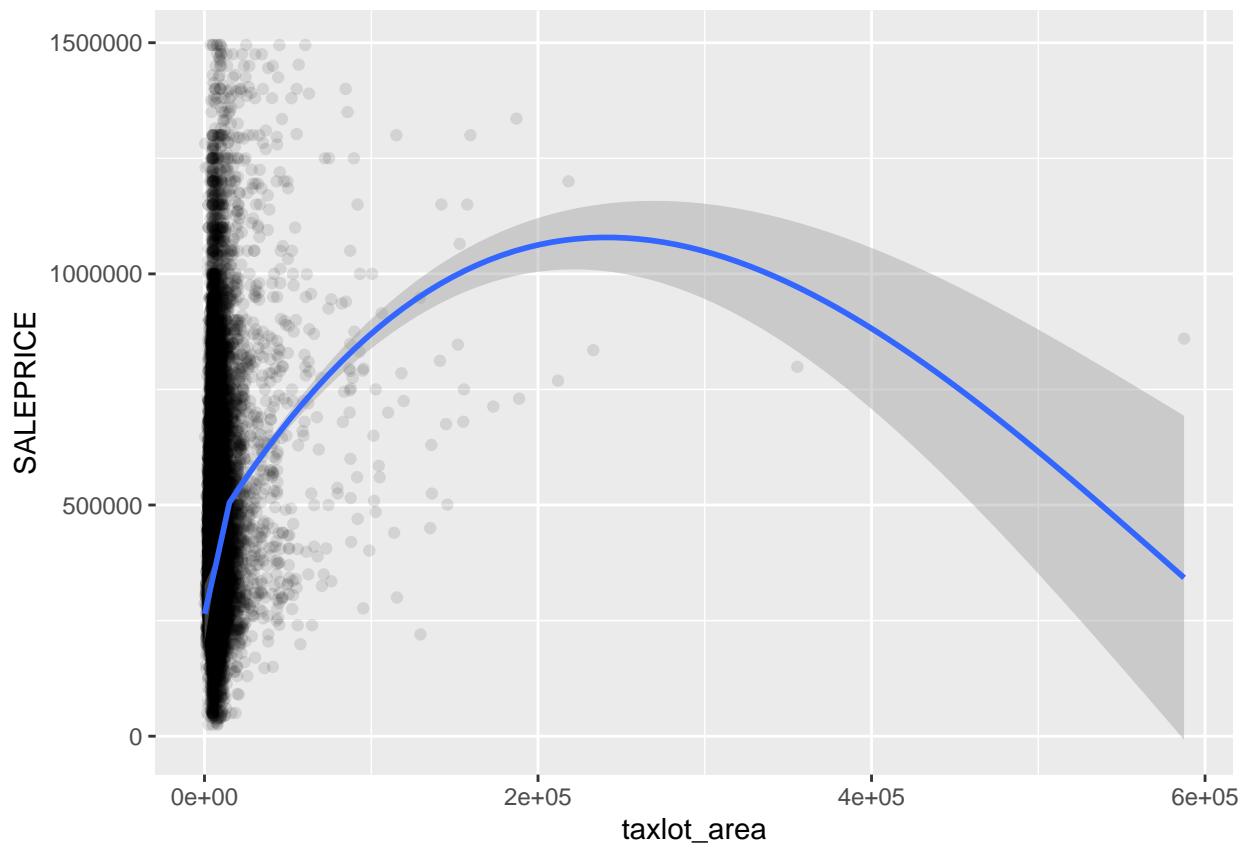
```



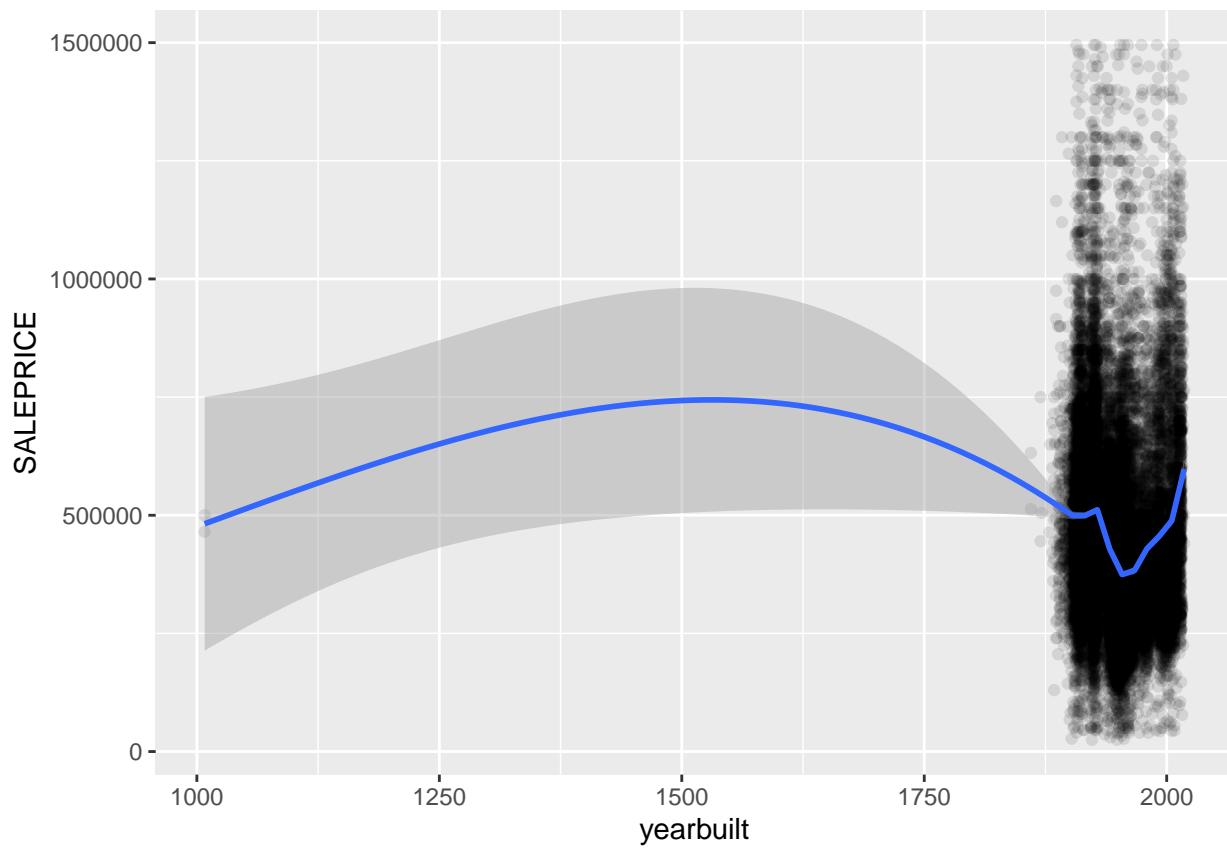
```
## [1] "pct_canopy_cov"  
## `geom_smooth()` using method = 'gam' and formula 'y ~ s(x, bs = "cs")'  
## Warning: Removed 463 rows containing non-finite values (stat_smooth).  
## Warning: Removed 463 rows containing missing values (geom_point).
```



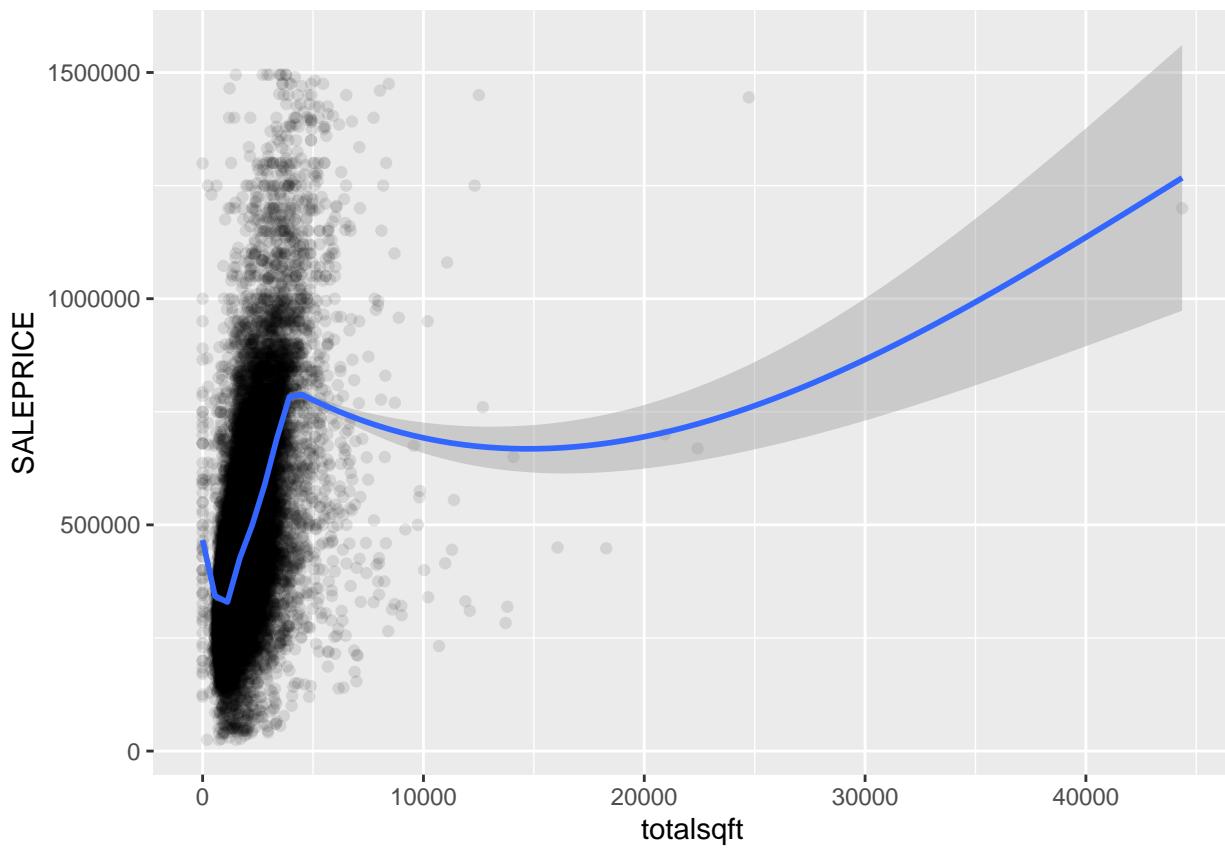
```
## [1] "taxlot_area"  
## `geom_smooth()` using method = 'gam' and formula 'y ~ s(x, bs = "cs")'  
## Warning: Removed 463 rows containing non-finite values (stat_smooth).  
## Warning: Removed 463 rows containing missing values (geom_point).
```



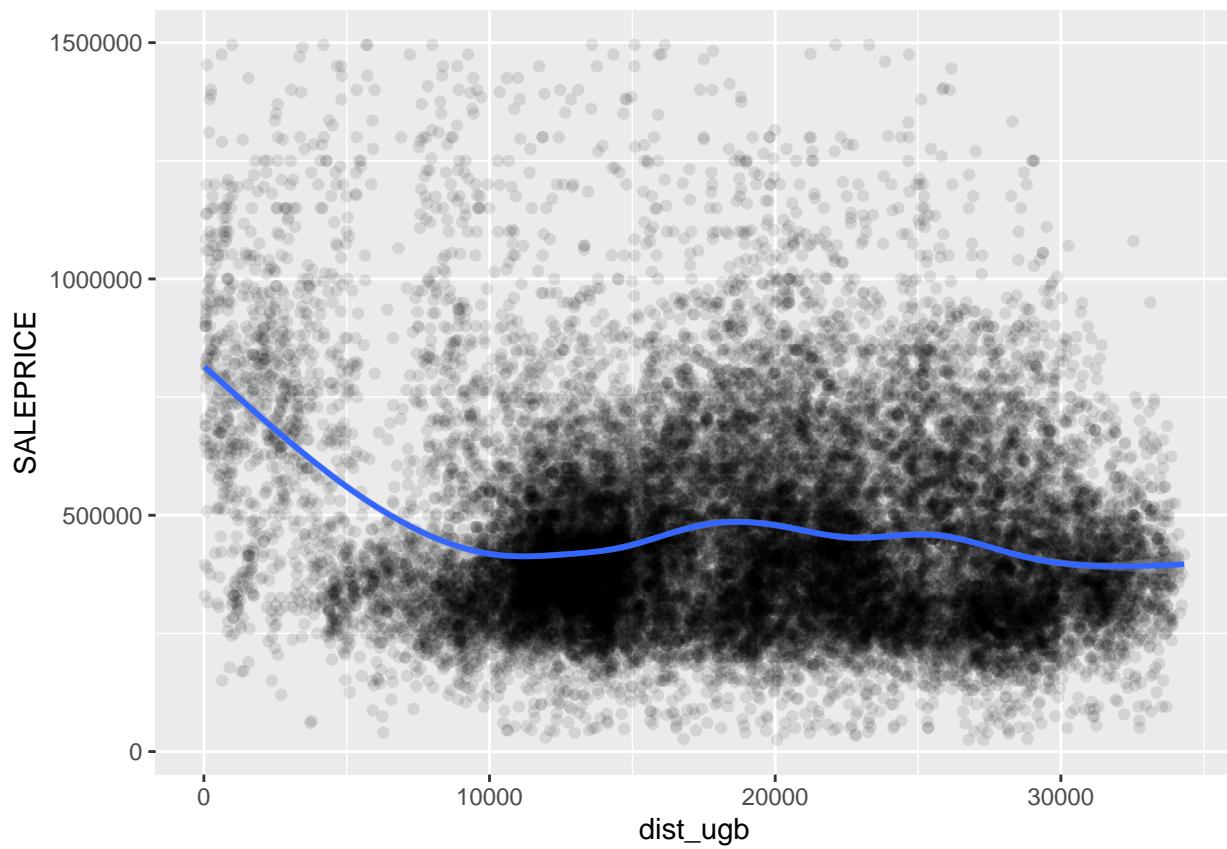
```
## [1] "yearbuilt"  
## `geom_smooth()` using method = 'gam' and formula 'y ~ s(x, bs = "cs")'  
## Warning: Removed 1357 rows containing non-finite values (stat_smooth).  
## Warning: Removed 1357 rows containing missing values (geom_point).
```



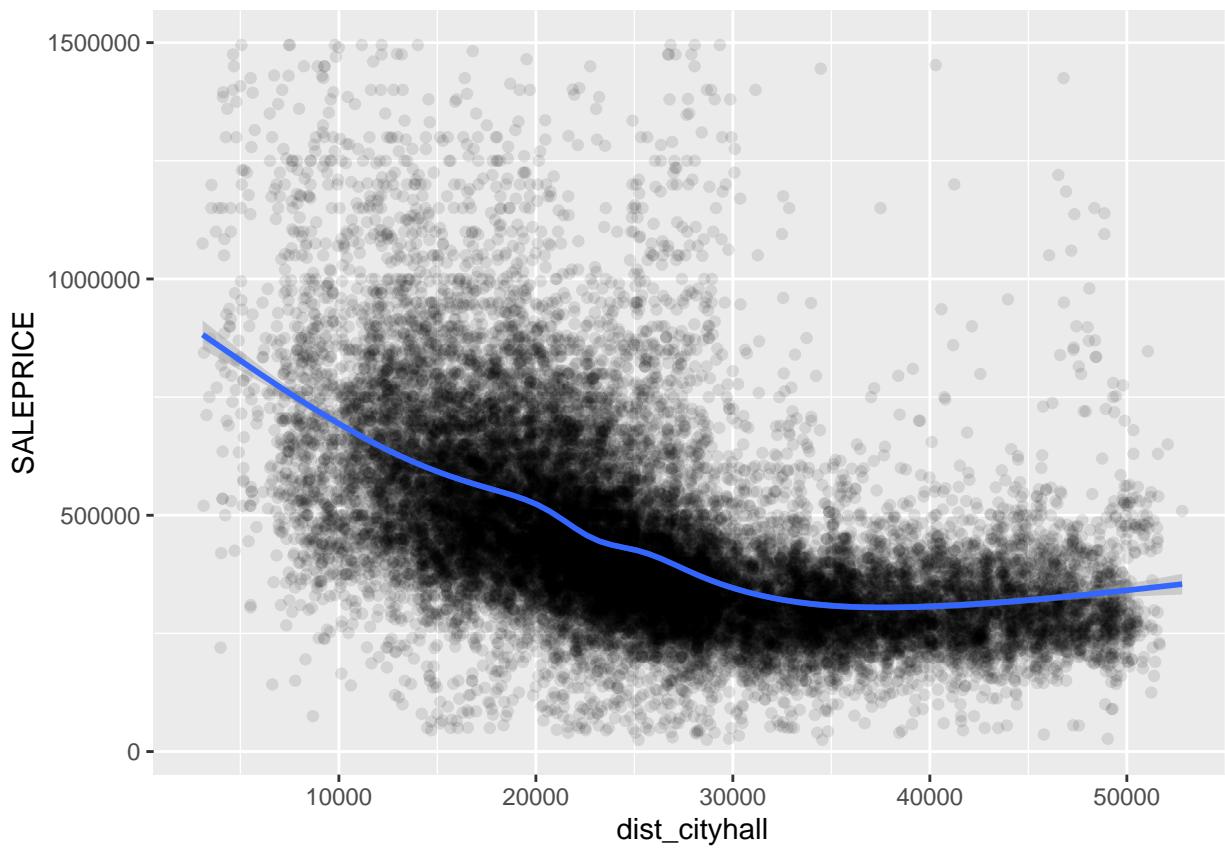
```
## [1] "totalsqft"
## `geom_smooth()` using method = 'gam' and formula 'y ~ s(x, bs = "cs")'
## Warning: Removed 641 rows containing non-finite values (stat_smooth).
## Warning: Removed 641 rows containing missing values (geom_point).
```



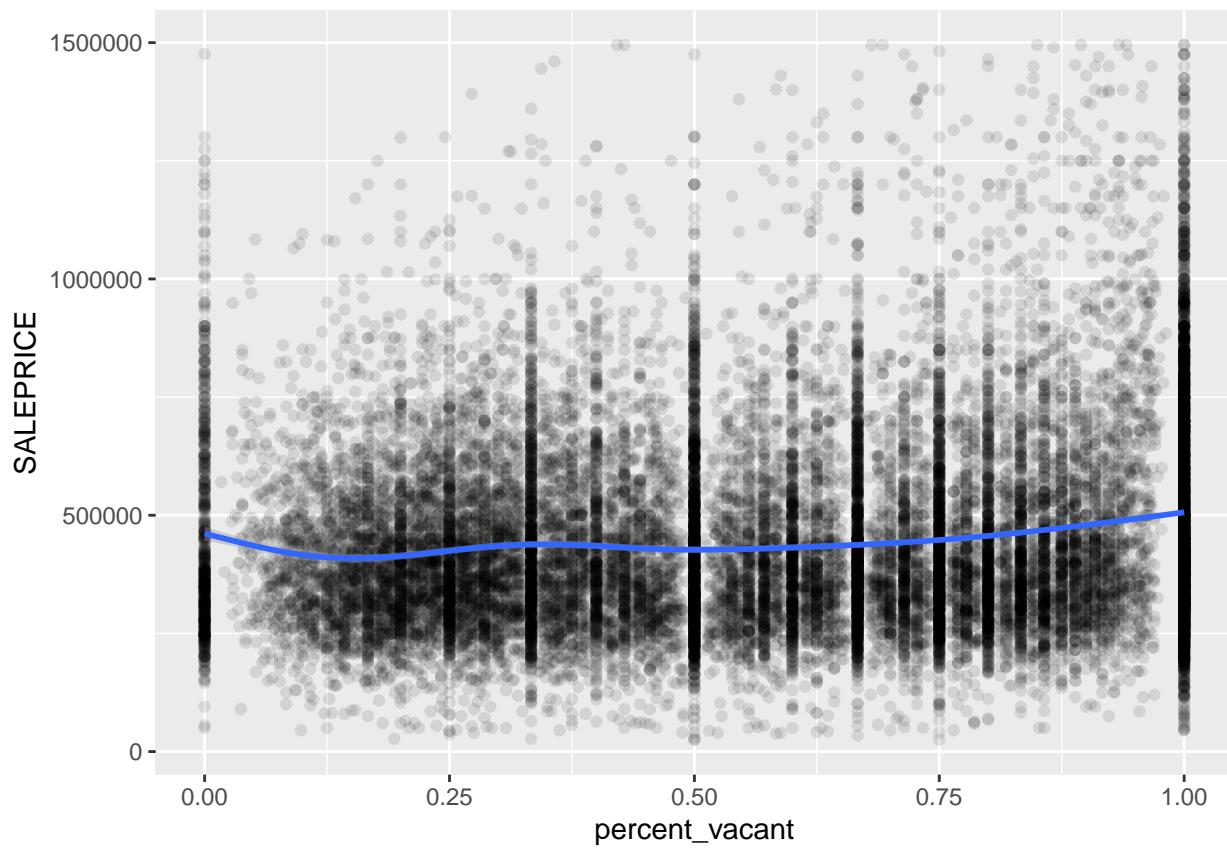
```
## [1] "dist_ugb"  
## `geom_smooth()` using method = 'gam' and formula 'y ~ s(x, bs = "cs")'
```



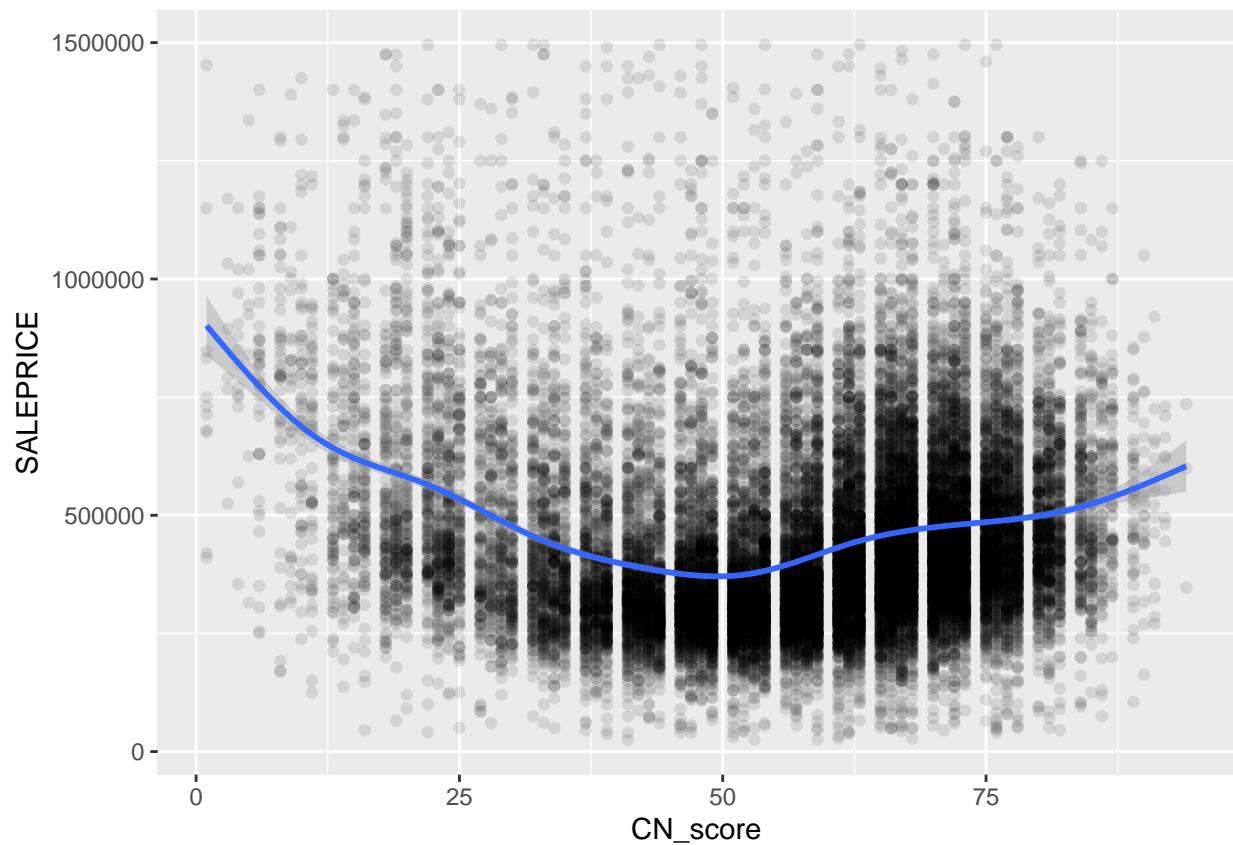
```
## [1] "dist_cityhall"  
## `geom_smooth()` using method = 'gam' and formula 'y ~ s(x, bs = "cs")'
```



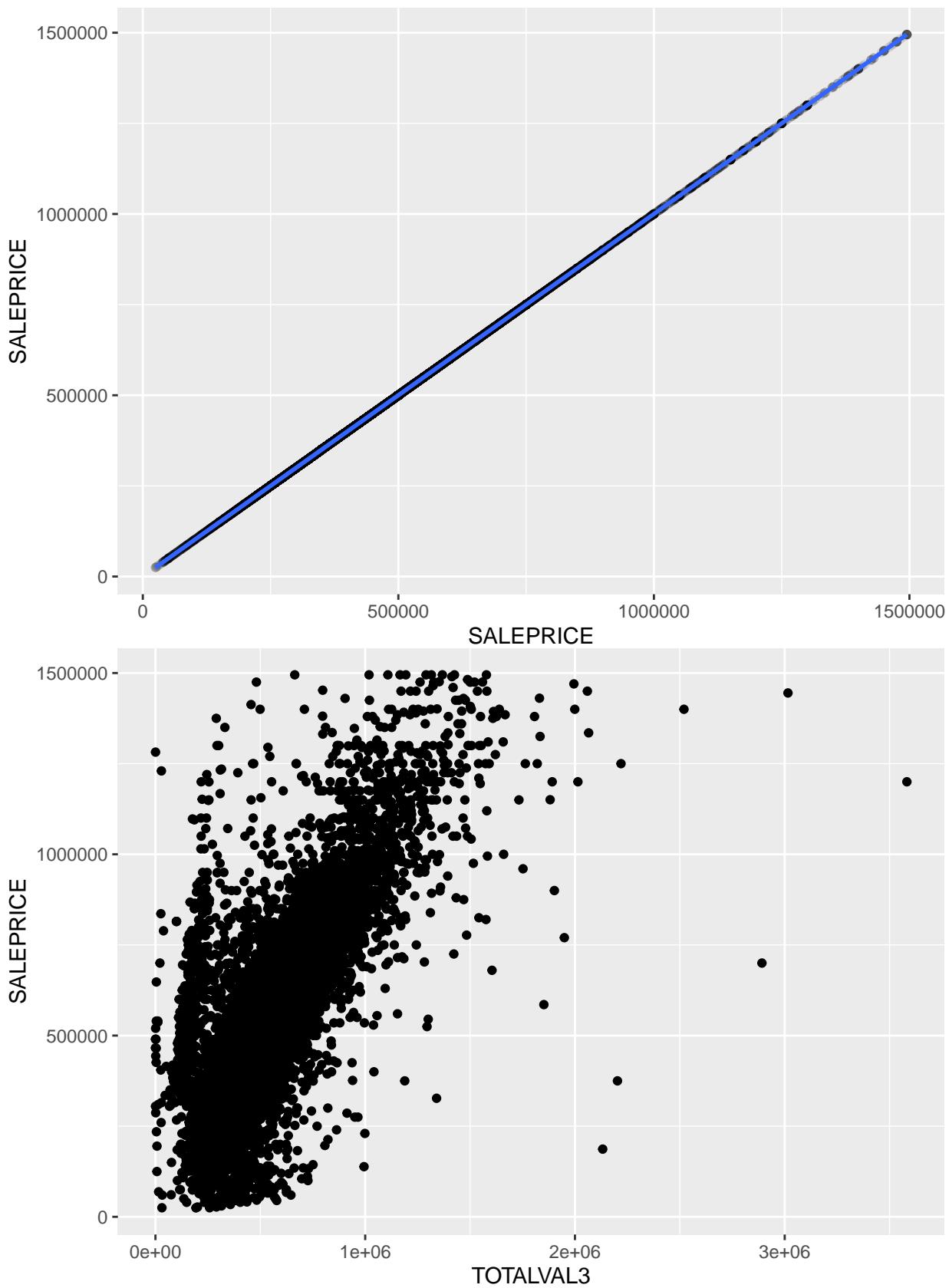
```
## [1] "percent_vacant"  
## `geom_smooth()` using method = 'gam' and formula 'y ~ s(x, bs = "cs")'  
## Warning: Removed 398 rows containing non-finite values (stat_smooth).  
## Warning: Removed 398 rows containing missing values (geom_point).
```



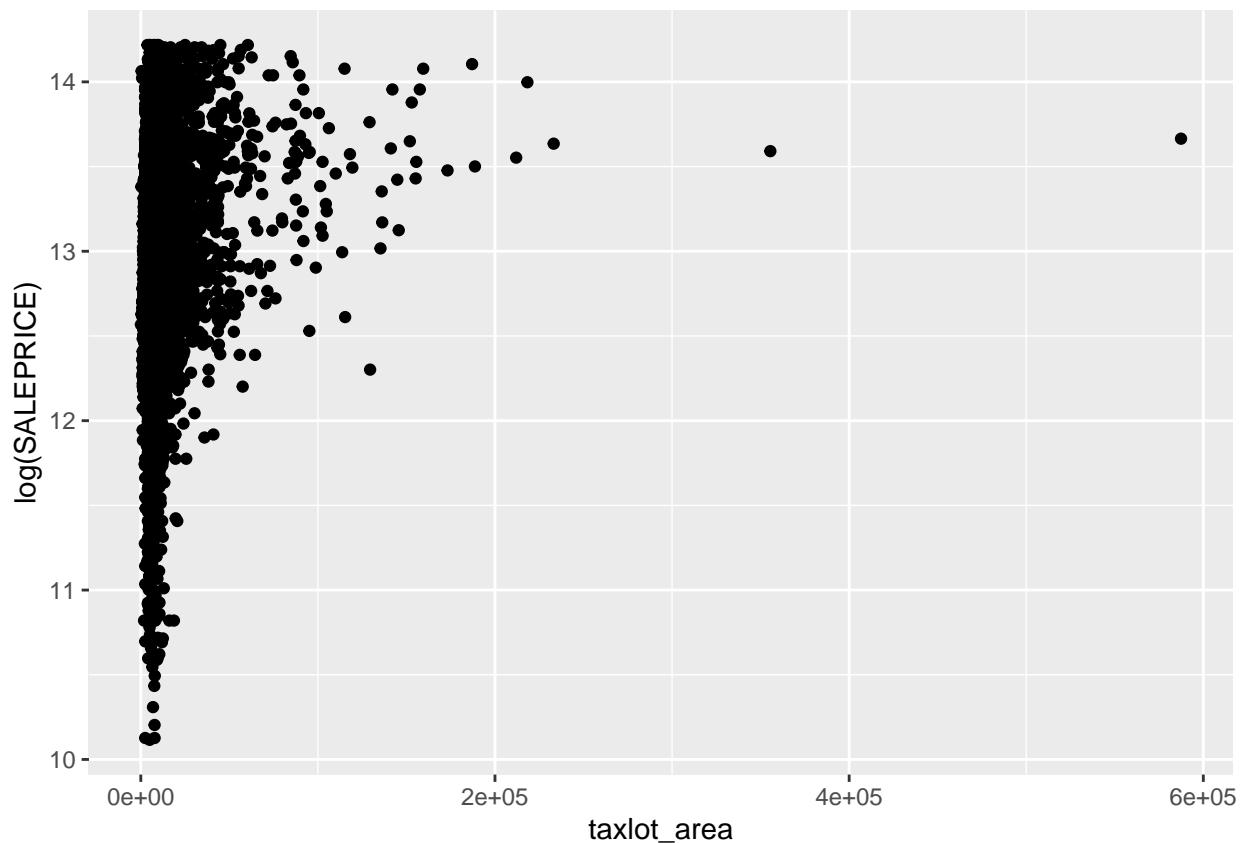
```
## [1] "CN_score"  
## `geom_smooth()` using method = 'gam' and formula 'y ~ s(x, bs = "cs")'
```

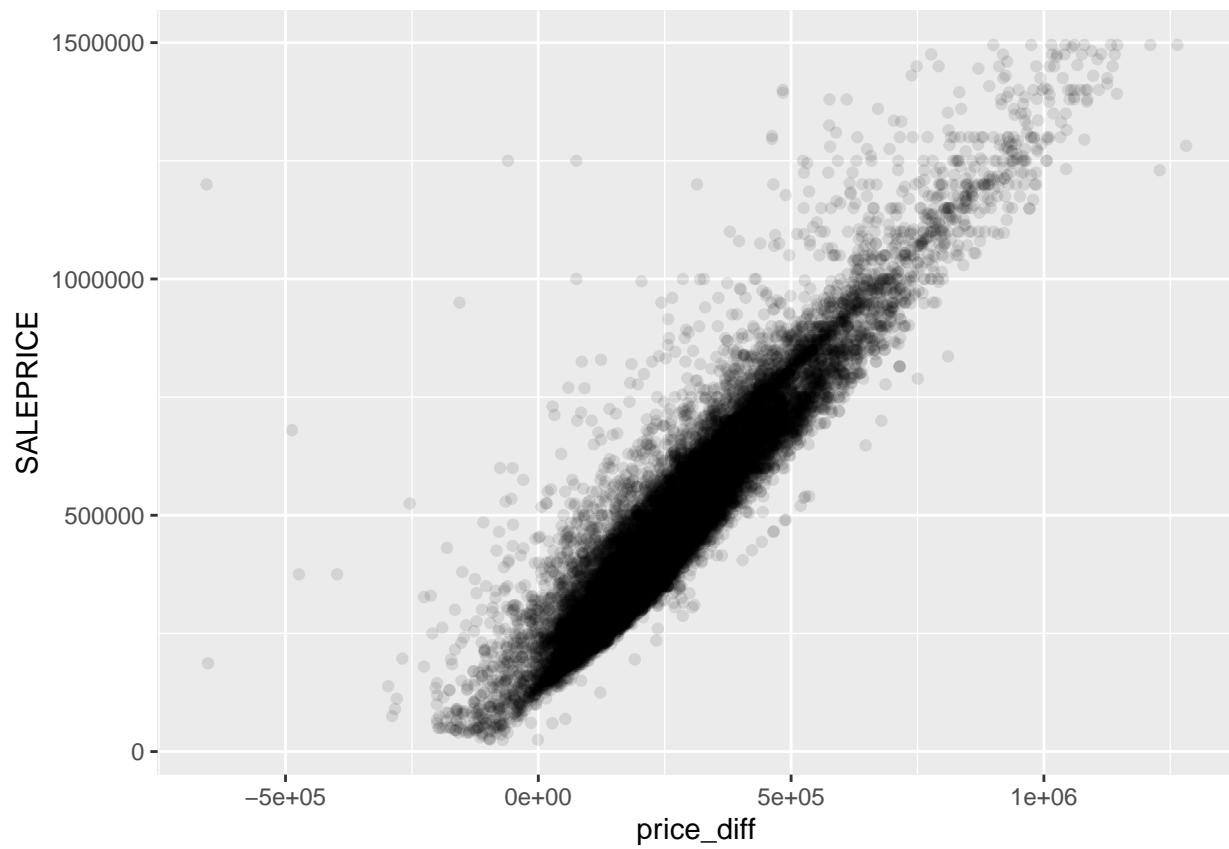


```
## [1] "SALEPRICE"  
## `geom_smooth()` using method = 'gam' and formula 'y ~ s(x, bs = "cs")'
```

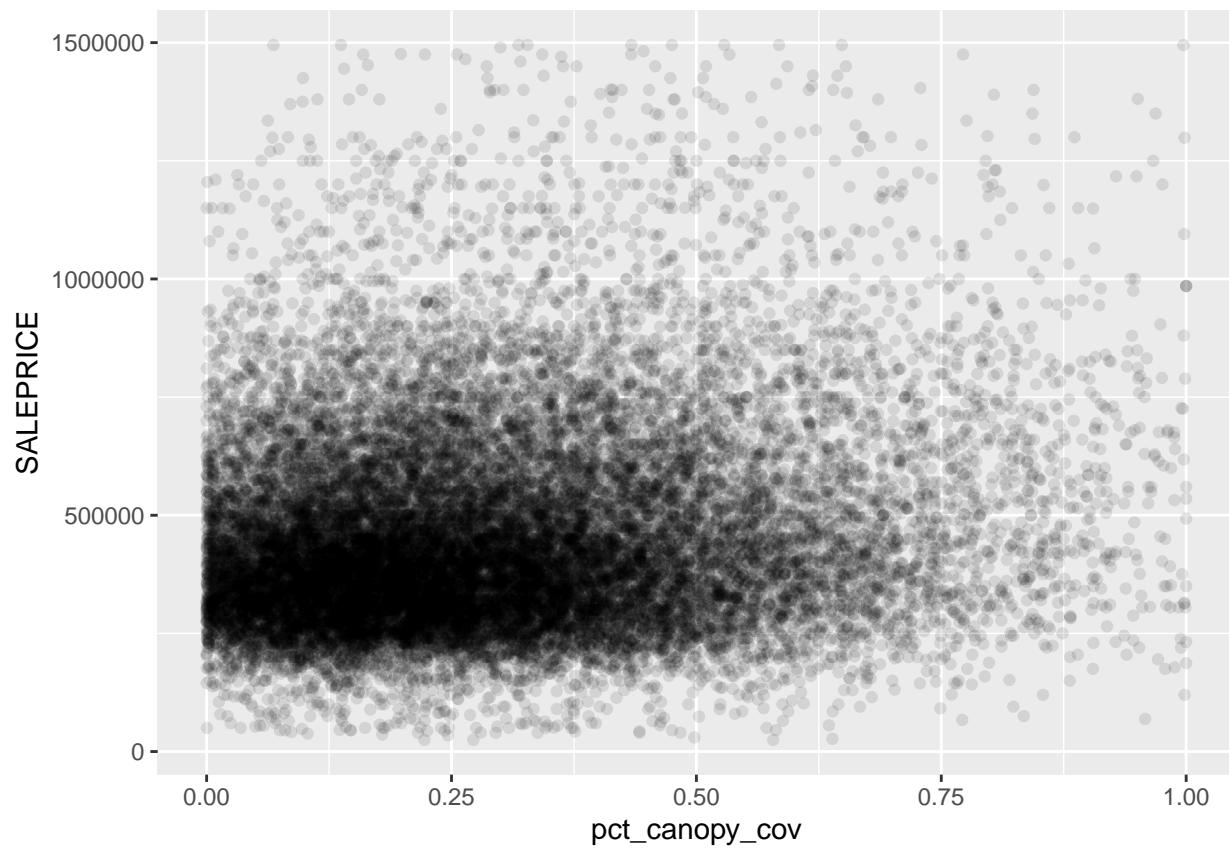


## Warning: Removed 463 rows containing missing values (geom\_point).

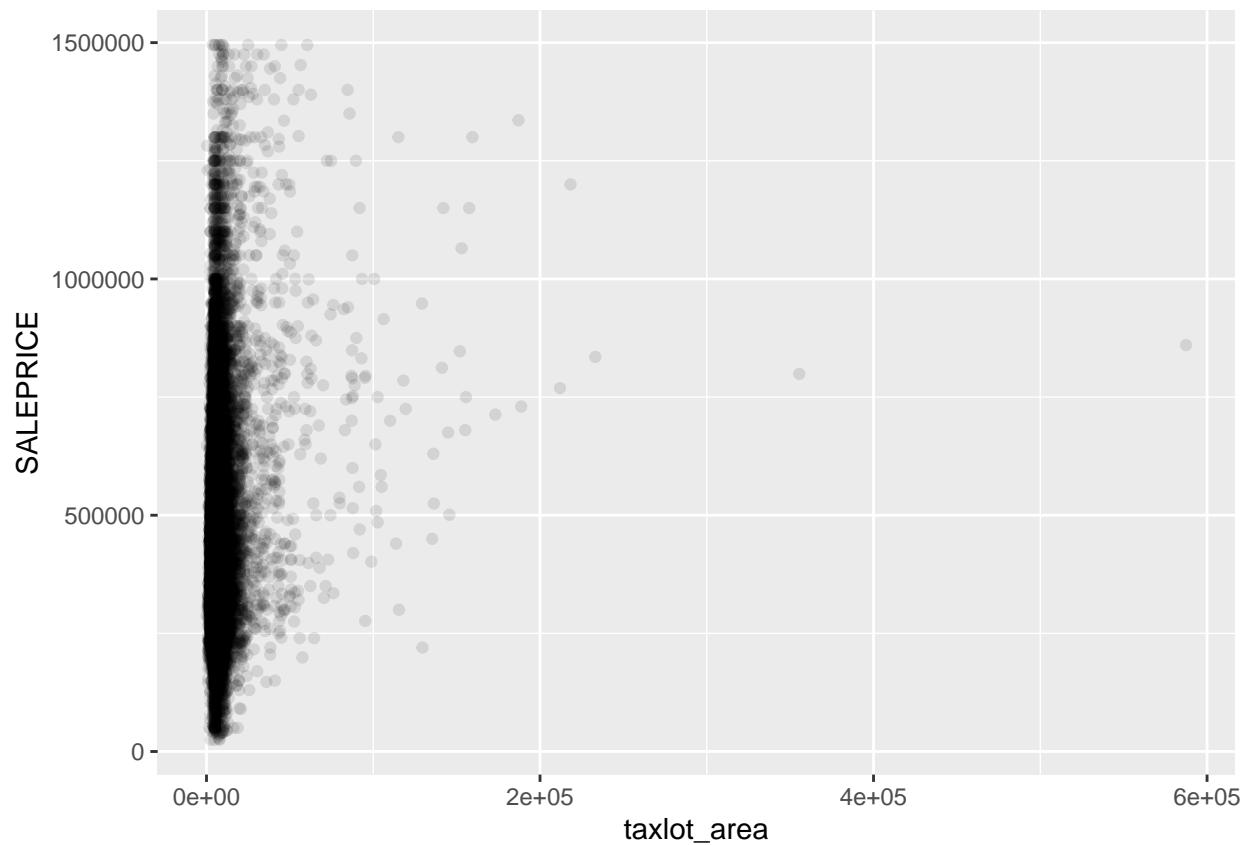




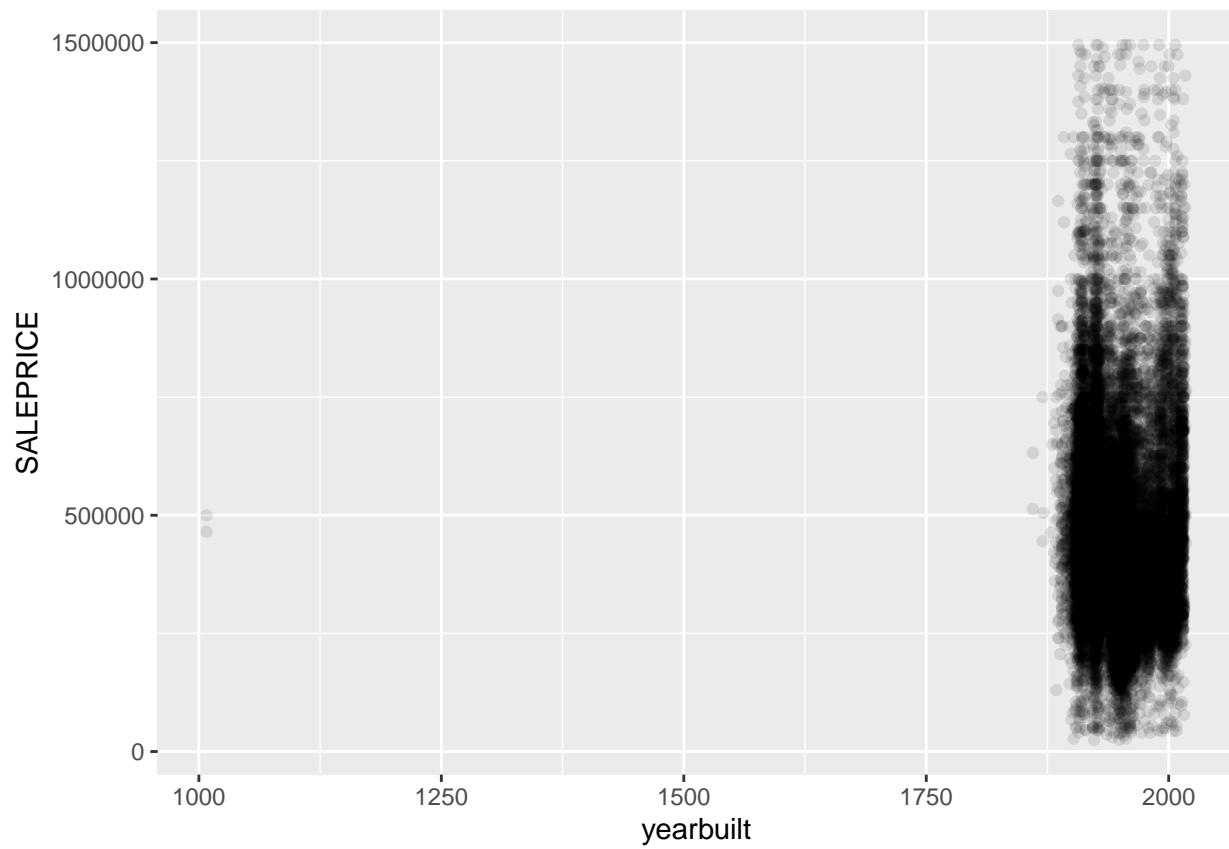
```
## [1] "pct_canopy_cov"  
## Warning: Removed 463 rows containing missing values (geom_point).
```



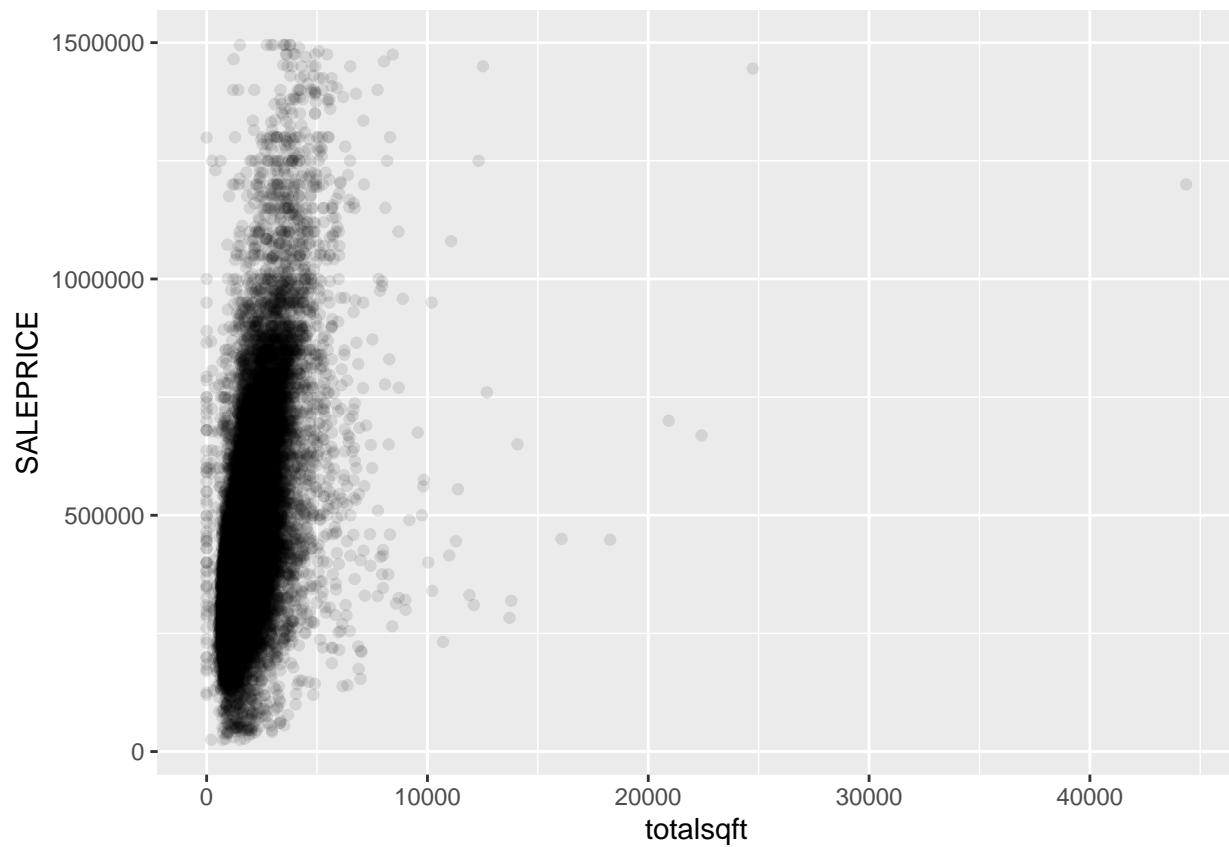
```
## [1] "taxlot_area"  
## Warning: Removed 463 rows containing missing values (geom_point).
```



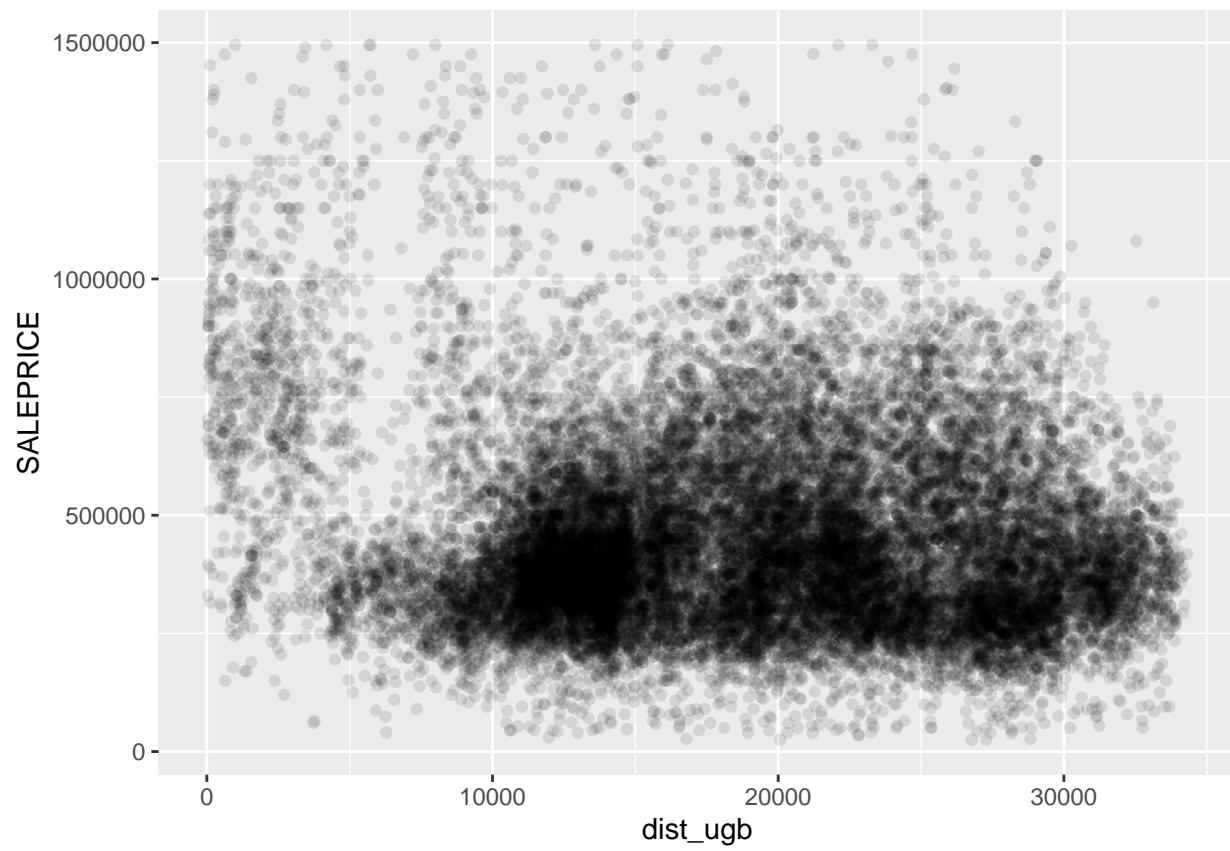
```
## [1] "yearbuilt"  
## Warning: Removed 1357 rows containing missing values (geom_point).
```



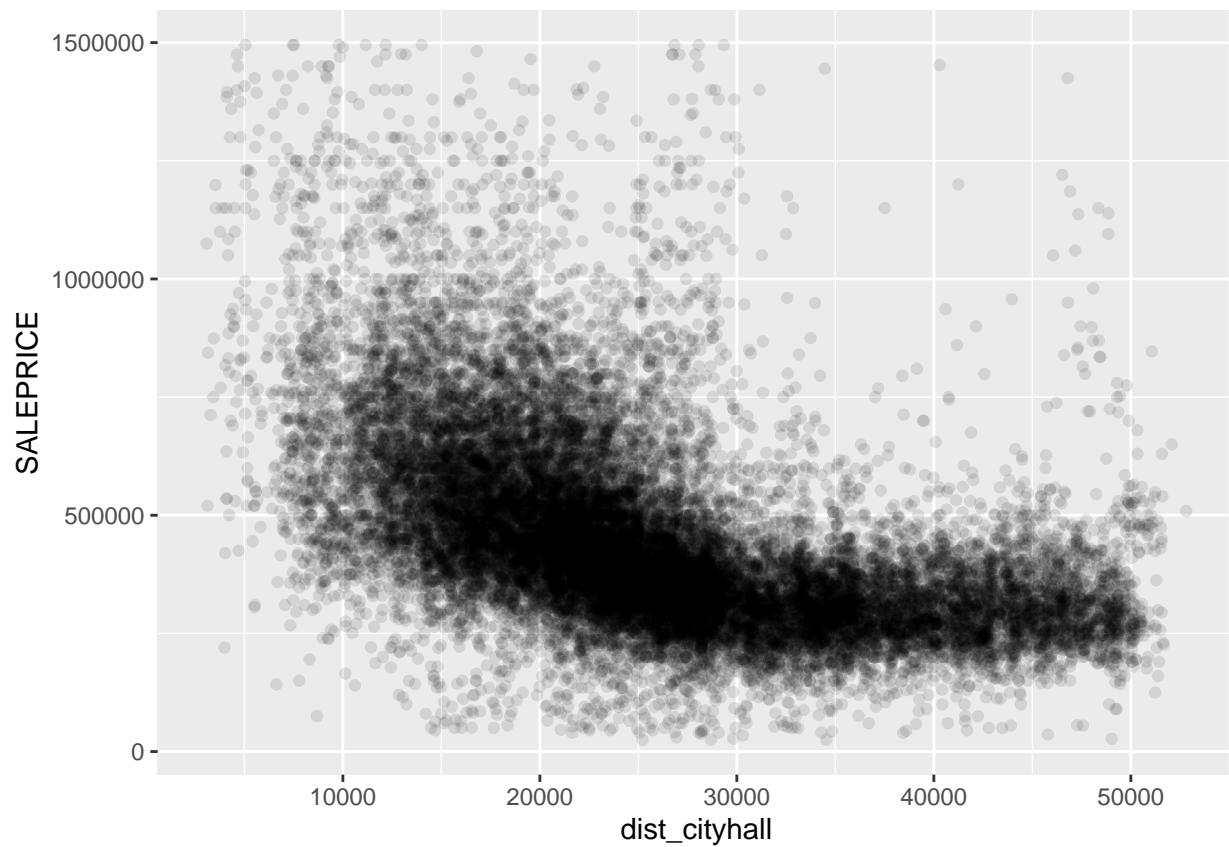
```
## [1] "totalsqft"  
## Warning: Removed 641 rows containing missing values (geom_point).
```



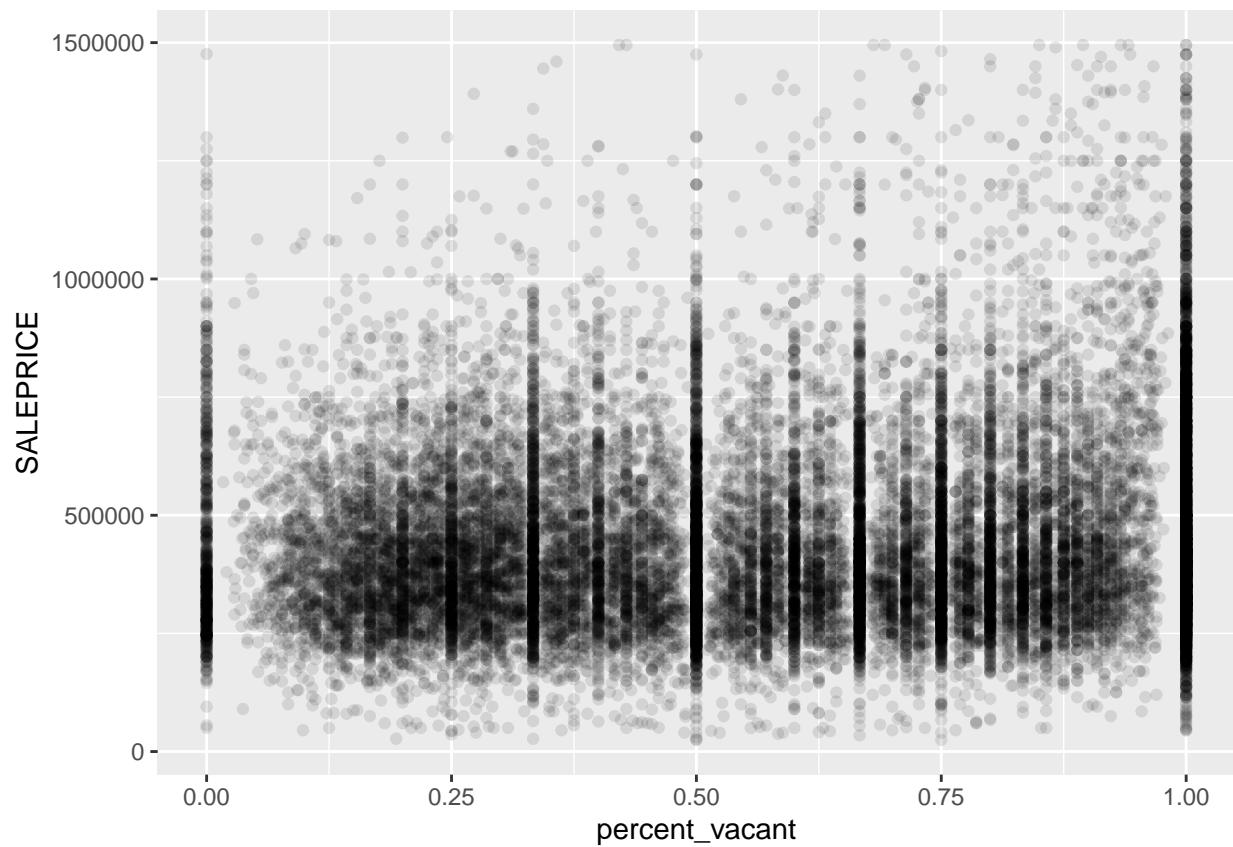
```
## [1] "dist_ugb"
```



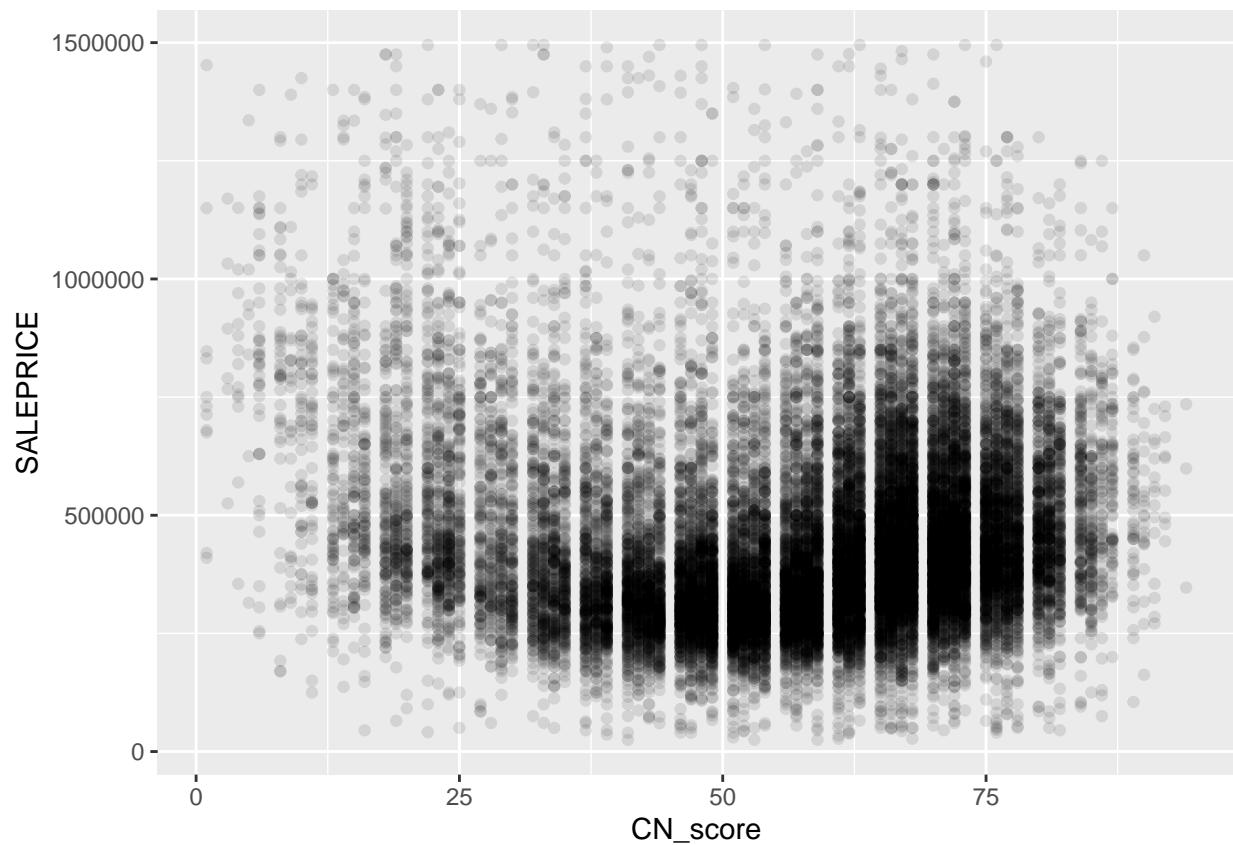
```
## [1] "dist_cityhall"
```



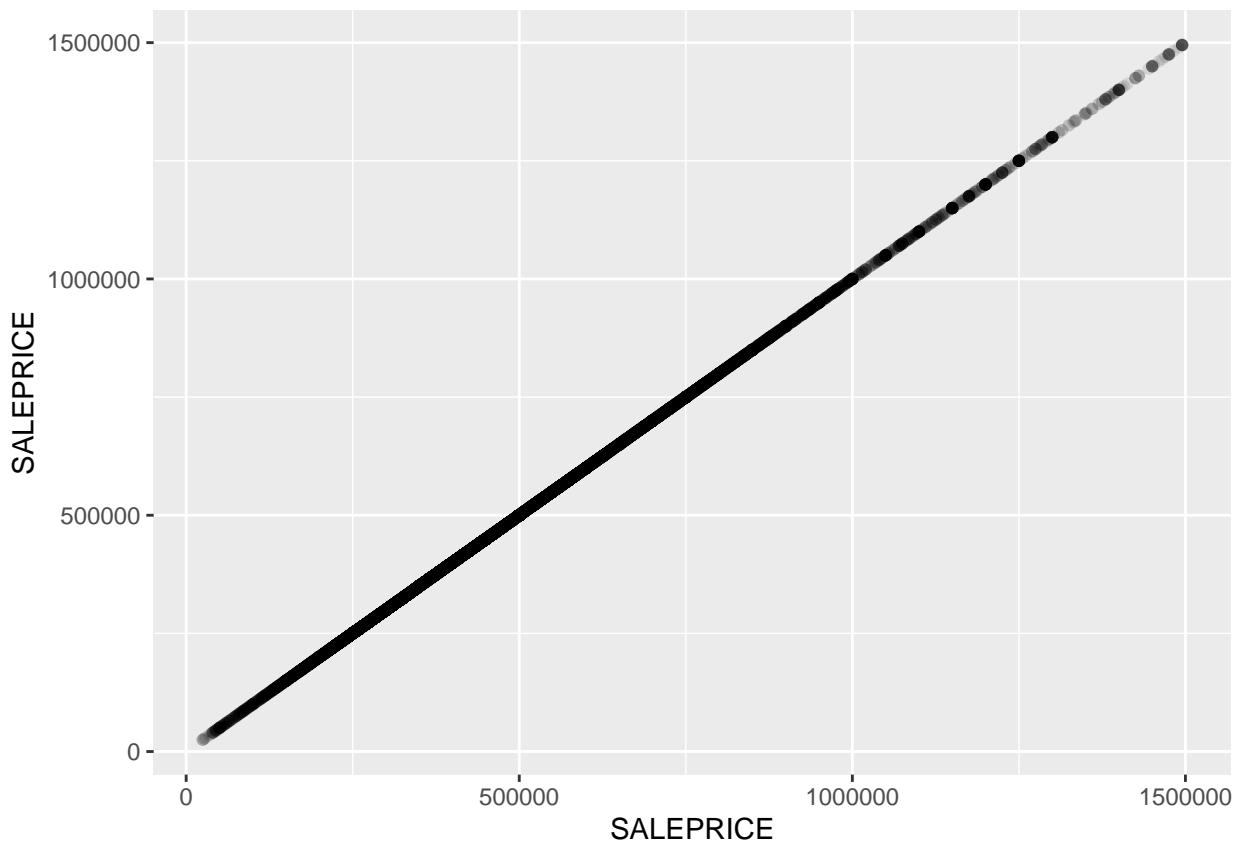
```
## [1] "percent_vacant"  
## Warning: Removed 398 rows containing missing values (geom_point).
```



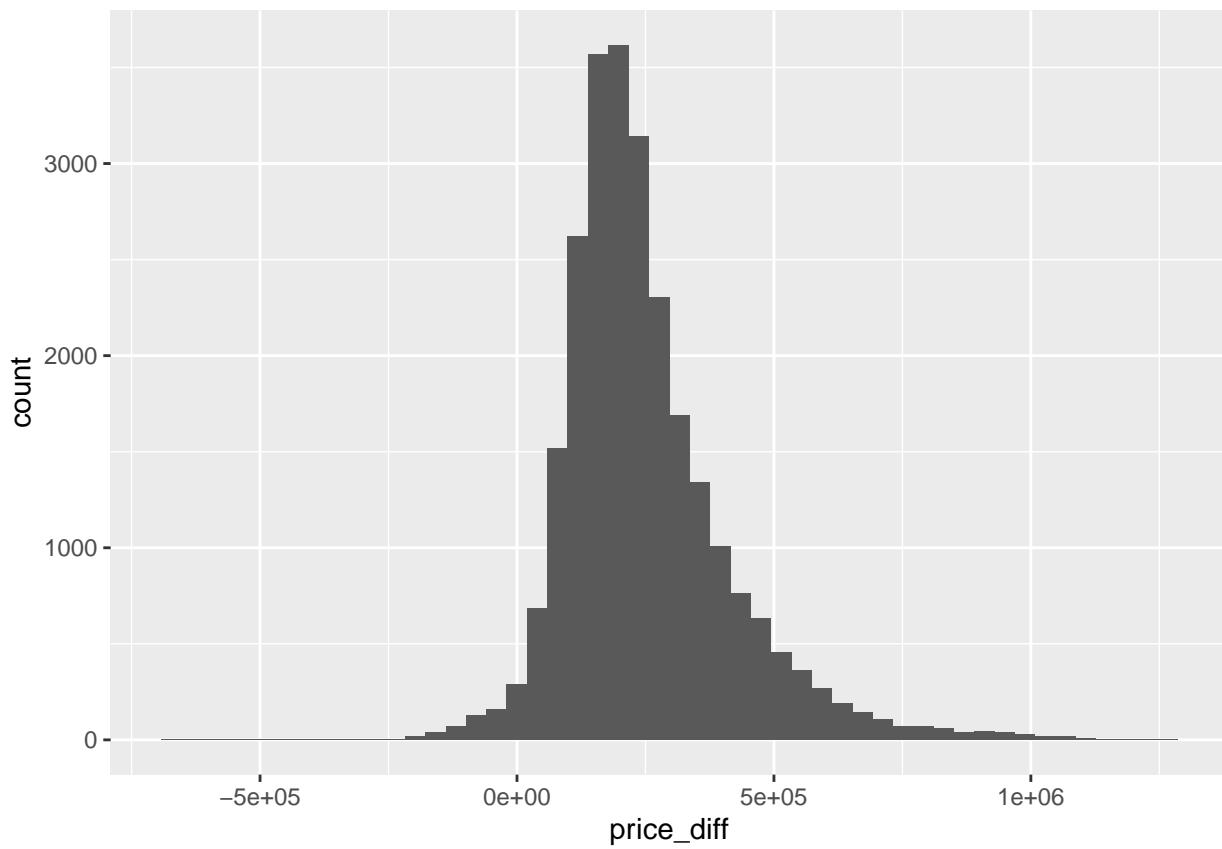
```
## [1] "CN_score"
```



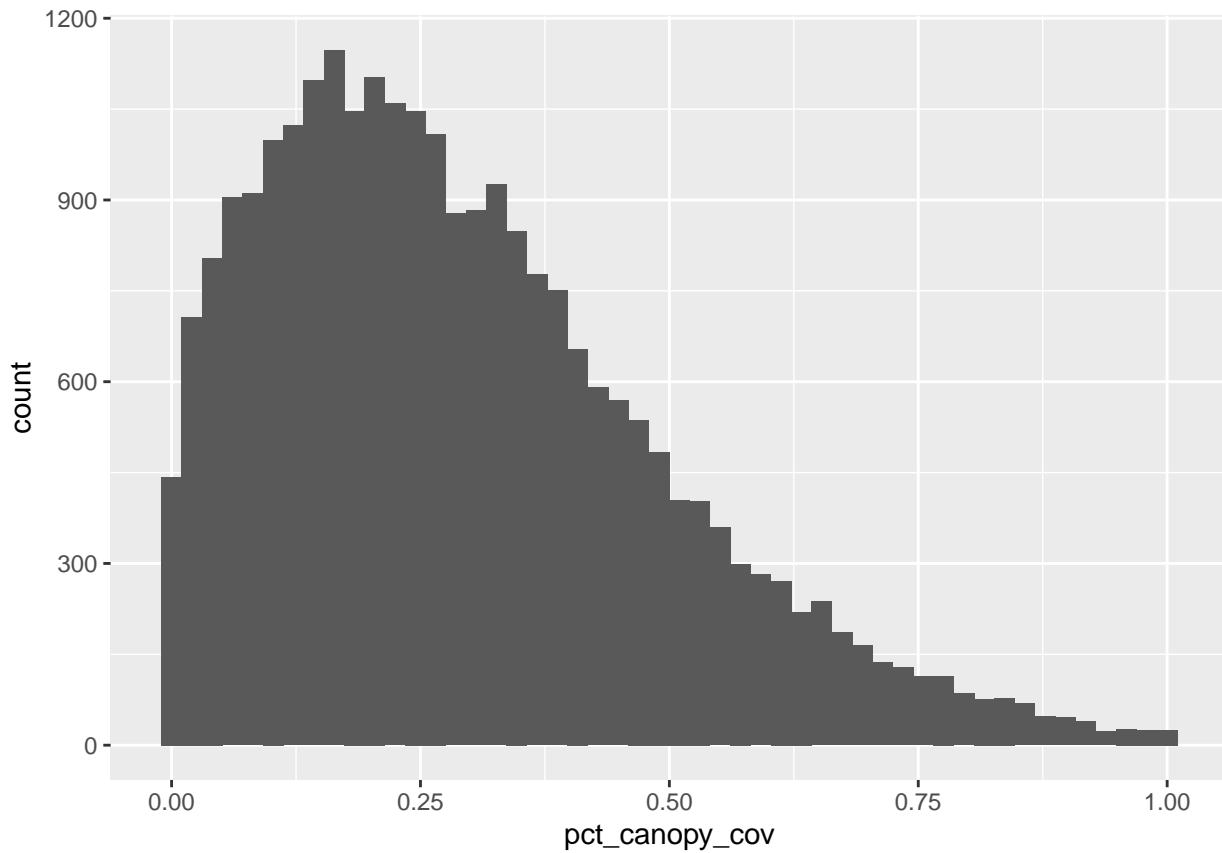
```
## [1] "SALEPRICE"
```



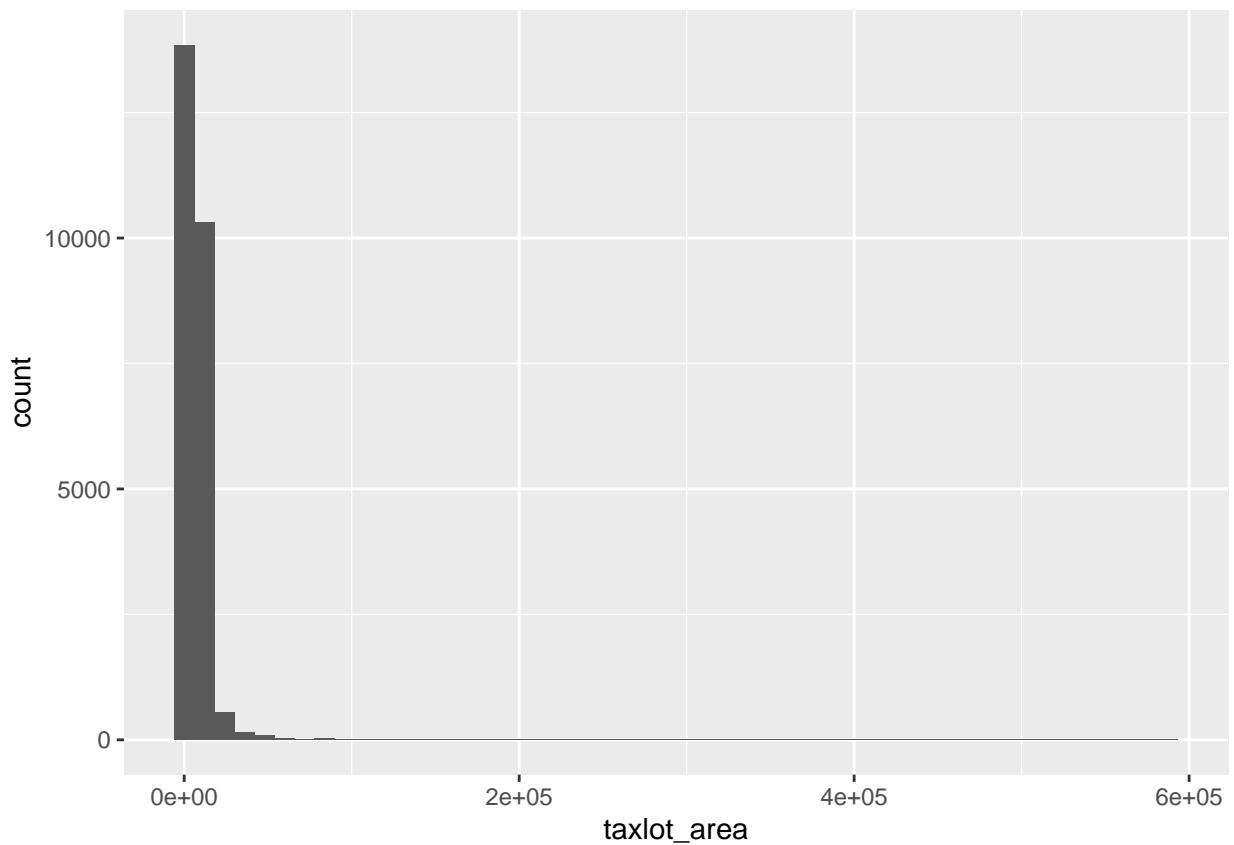
```
## [1] "price_diff"
```



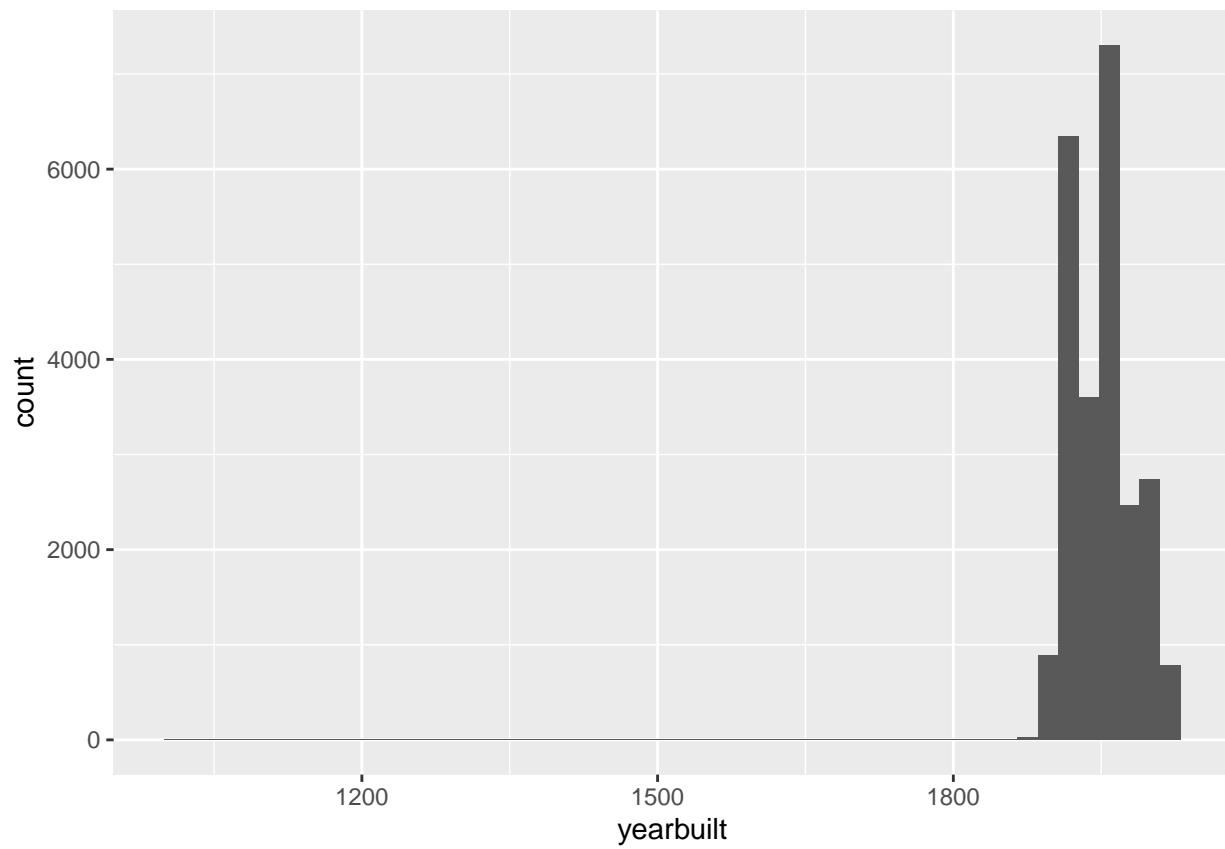
```
## [1] "pct_canopy_cov"  
## Warning: Removed 463 rows containing non-finite values (stat_bin).
```



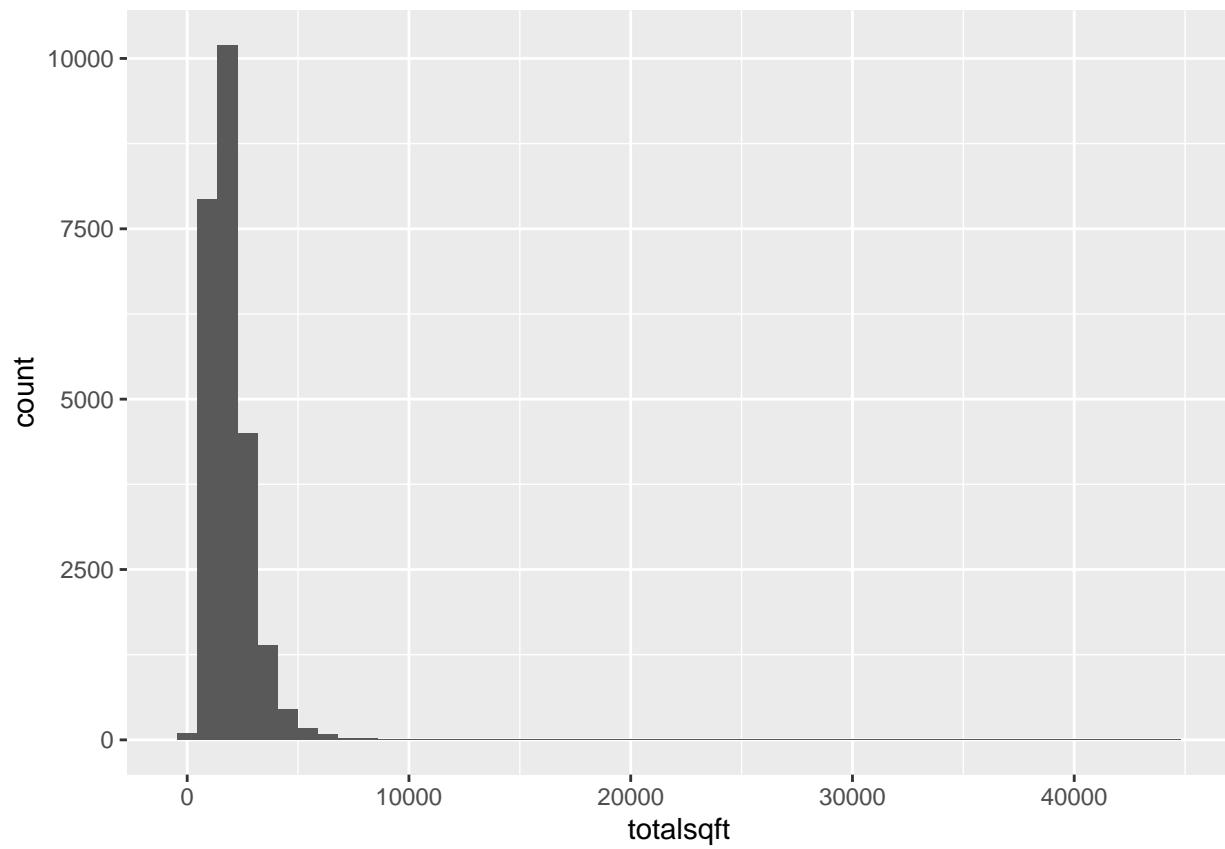
```
## [1] "taxlot_area"  
## Warning: Removed 463 rows containing non-finite values (stat_bin).
```



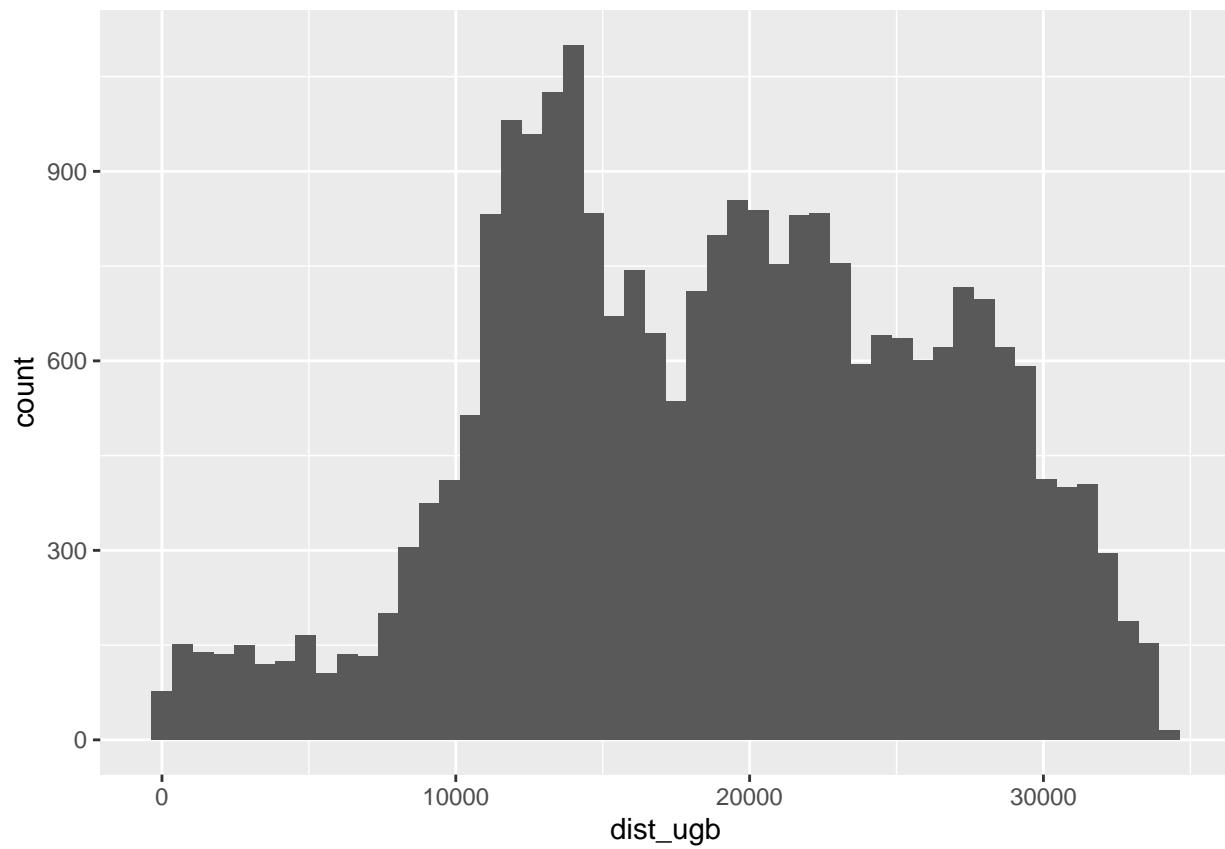
```
## [1] "yearbuilt"  
## Warning: Removed 1357 rows containing non-finite values (stat_bin).
```



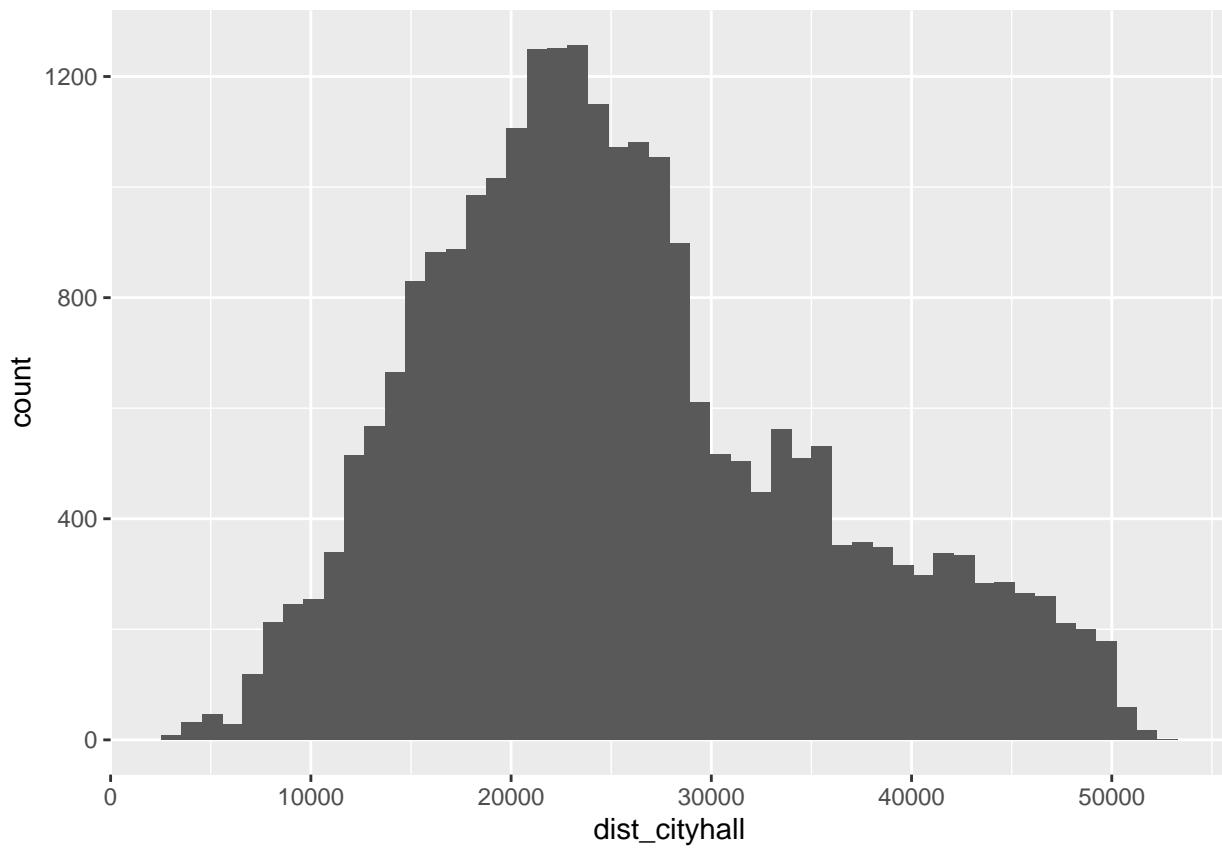
```
## [1] "totalsqft"
## Warning: Removed 641 rows containing non-finite values (stat_bin).
```



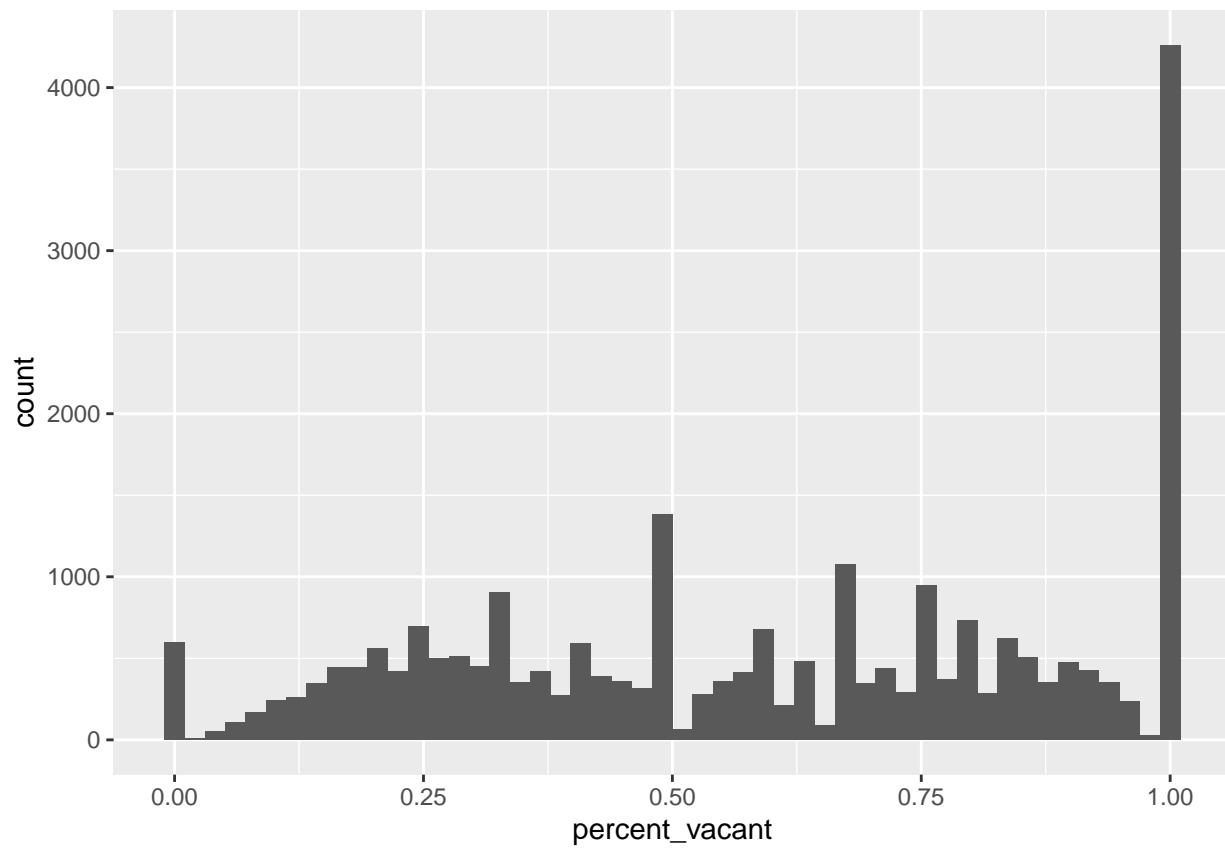
```
## [1] "dist_ugb"
```



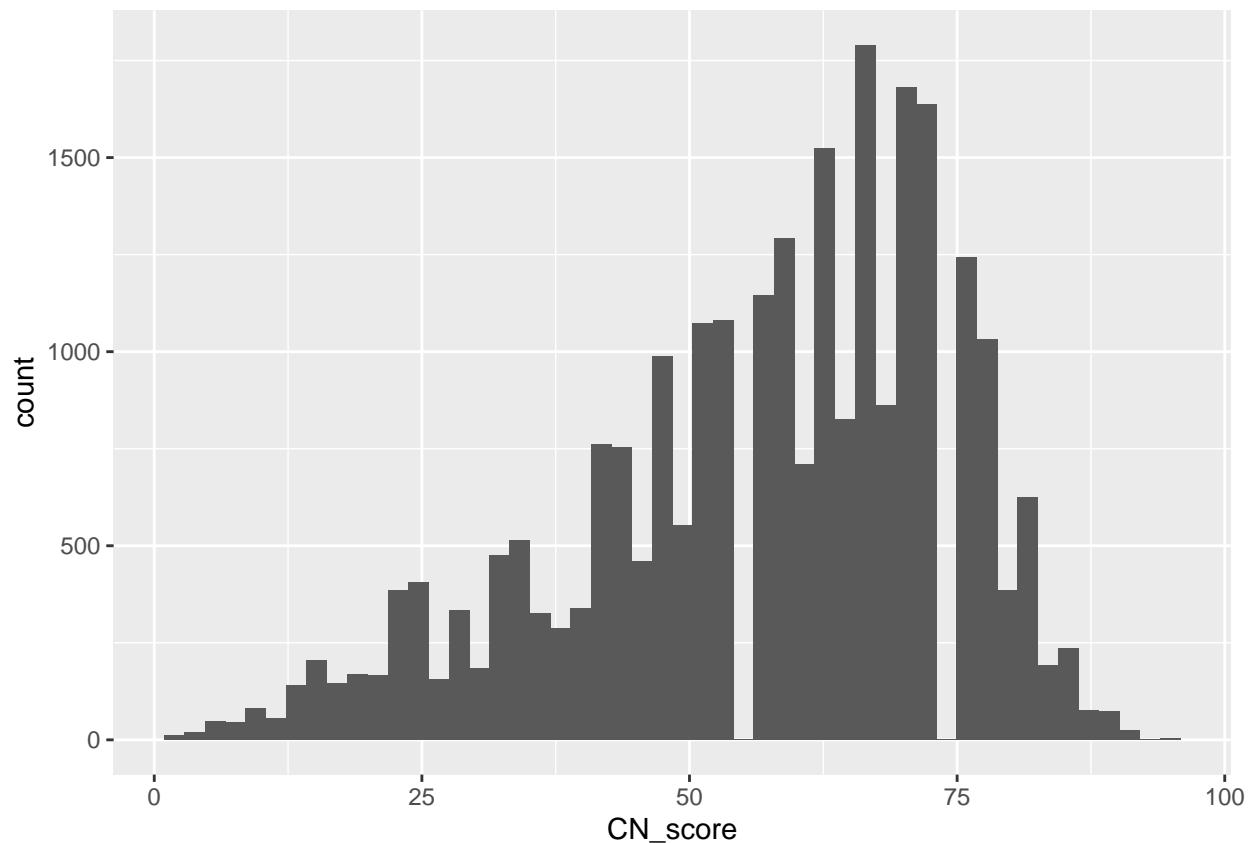
```
## [1] "dist_cityhall"
```



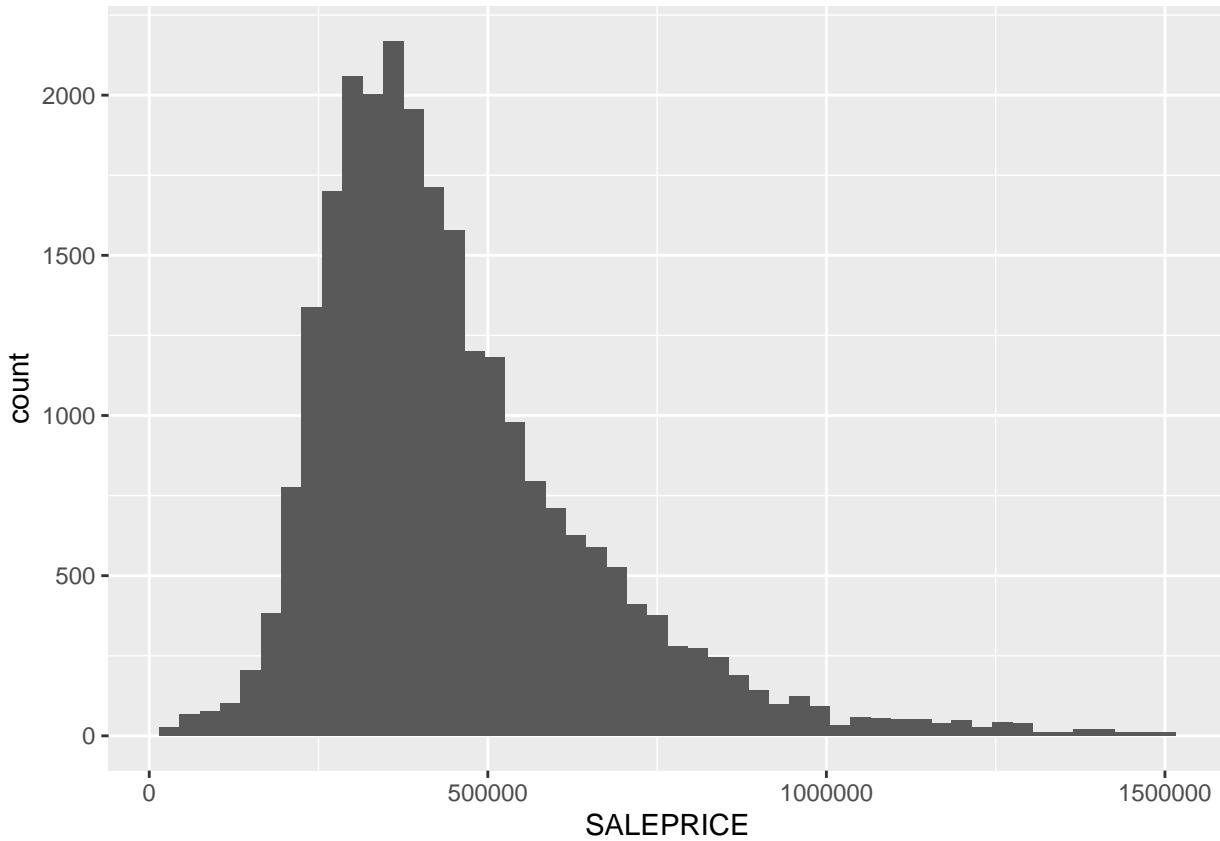
```
## [1] "percent_vacant"  
## Warning: Removed 398 rows containing non-finite values (stat_bin).
```



```
## [1] "CN_score"
```



```
## [1] "SALEPRICE"
```



SALE PRICE – nicely right skewed with a peak around 400,000

Fireplaces – having 2 fireplaces could tease out some info about median level houses

Full Baths – as number of full baths increases, sale price increases.

Taxlot Area – a couple of outliers **i need to excise**. no trend with just sale price, need to try log sale price. **not sure how to interpret**. right skewed but kinda ugly

Percent Canopy Cover – useless blob. There's a concentration of data less than 50% canopy cover, but that might just be science. **not sure how to interpret**. extremely right skewed

Price Difference – perfectly linear, beautiful, im gonna cry. As the gap between sale price and assessed value becomes larger, sale price becomes larger. tells you absolutely nothing. more right skewed

Total Value Yr 3 – roughly linear with a steep positive slope.

**Year Built** – not distinct, but older and newer houses tend to be more expensive

Total Sqft – sorta linear, right skewed

**Distance to City Hall** – super cool negative exponential trend!!!! I'M SO EXCITED. As distance increases, sale price decreases at a decreasing rate. most people like 15,000-25,000 units (?) away from city centre

Percent Vacant – nothing, surprisingly, weird peak at 100%

**Complete Neighborhoods Score** – kind of an exponential? **need help** left skewed

Distance to UGB – most people live 1000-3000 units (?) away from the UGB

A Look at the Dataset

number of rows, column, type of each control (struc, neighbor, etc), number of constraints, etc

edited: 3/5 12:07am The cleaned dataset has

look at class to make sure everything's right null/missing values vs zeros means and medians, max and min for each var

## Regressions

```
##  
## Call:  
## lm(formula = sfr_lin, data = dat1)  
##  
## Residuals:  
##      Min       1Q   Median       3Q      Max  
## -6177775  -57387    1728    57488   745904  
##  
## Coefficients: (7 not defined because of singularities)  
##  
##             Estimate  
## (Intercept) 1.391e+06  
## f_baths      6.478e+04  
## h_baths      4.632e+04  
## n_fireplaces 4.817e+03  
## yearbuilt    -4.532e+02  
## totalsqft     6.386e+01  
## I(totalsqft^2) -3.457e-03  
## taxlot_area   2.169e+00  
## FLOORS        NA  
## surfelev      1.095e+02  
## percent_vacant -4.657e+02  
## dist_cityhall -5.684e+00  
## HIGH_SCHCLEVELAND HS -2.262e+04  
## HIGH_SCHDAVID DOUGLAS HS -2.777e+04  
## HIGH_SCHFRANKLIN HS -2.921e+04  
## HIGH_SCHGRANT HS -7.393e+03  
## HIGH_SCHGRANT-JEFF -6.608e+04  
## HIGH_SCHLINCOLN HS -1.244e+05  
## HIGH_SCHMADISON HS -7.714e+04  
## HIGH_SCHMADISON-JEFF -9.279e+04  
## HIGH_SCHPARKROSE HS -1.866e+04  
## HIGH_SCHREYNOLDS HS -5.780e+03  
## HIGH_SCHRIVERDALE HS 2.508e+05  
## HIGH_SCHROOS-JEFF -1.056e+05  
## HIGH_SCHROOSEVELT CAMPUS -1.067e+05  
## HIGH_SCHSUNSET HS -7.885e+04  
## HIGH_SCHWILSON HS -2.097e+05  
## MapLabelArbor Lodge -3.581e+04  
## MapLabelArdenwald-Johnson Creek -1.368e+05  
## MapLabelArgay Terrace -1.838e+05  
## MapLabelArlington Heights 1.442e+05  
## MapLabelArnold Creek 7.609e+04  
## MapLabelAshcreek 3.273e+04  
## MapLabelBeaumont-Wilshire -7.357e+03  
## MapLabelBoise -5.078e+04  
## MapLabelBrentwood-Darlington -1.854e+05  
## MapLabelBridlemile 8.155e+03  
## MapLabelBrooklyn Action Corps -1.475e+05
```

|  |            |
|--|------------|
| ## MapLabelBuckman Community Association                 | -6.030e+04 |
| ## MapLabelCathedral Park                                | 2.436e+03  |
| ## MapLabelCentennial Community Association              | -1.658e+05 |
| ## MapLabelCollins View                                  | 4.491e+04  |
| ## MapLabelConcordia                                     | -3.644e+04 |
| ## MapLabelCreston-Kenilworth                            | -1.379e+05 |
| ## MapLabelCrestwood                                     | 9.751e+03  |
| ## MapLabelCully Association of Neighbors                | -1.189e+05 |
| ## MapLabelEast Columbia                                 | -1.619e+05 |
| ## MapLabelEastmoreland                                  | 7.546e+04  |
| ## MapLabelEliot   | -1.398e+05 |
| ## MapLabelFar Southwest                                 | 5.299e+04  |
| ## MapLabelForest Park                                   | 6.464e+04  |
| ## MapLabelFoster-Powell                                 | -1.363e+05 |
| ## MapLabelGlenfair                                      | -1.943e+05 |
| ## MapLabelGoose Hollow Foothills League                 | 1.293e+05  |
| ## MapLabelGrant Park                                    | 5.900e+04  |
| ## MapLabelHayden Island Neighborhood Network            | 4.002e+04  |
| ## MapLabelHayhurst                                      | 3.380e+04  |
| ## MapLabelHazelwood                                     | -1.833e+05 |
| ## MapLabelHealy Heights                                 | 1.269e+05  |
| ## MapLabelHillsdale                                     | 4.560e+04  |
| ## MapLabelHillside                                      | 1.635e+05  |
| ## MapLabelHollywood                                     | 6.869e+03  |
| ## MapLabelHomestead                                     | -4.220e+04 |
| ## MapLabelHosford-Abernethy Neighborhood District Assn. | -3.607e+04 |
| ## MapLabelHumboldt                                      | -4.334e+04 |
| ## MapLabelIrvington Community Association               | 3.104e+04  |
| ## MapLabelKenton  | -5.612e+04 |
| ## MapLabelKerns   | 1.467e+03  |
| ## MapLabelKing  | -9.545e+04 |
| ## MapLabelLaurelhurst                                   | 4.513e+04  |
| ## MapLabelLents   | -1.823e+05 |
| ## MapLabelLinnnton                                      | 2.259e+04  |
| ## MapLabelMadison South                                 | -1.313e+05 |
| ## MapLabelMaplewood                                     | 4.666e+04  |
| ## MapLabelMarkham                                       | -8.733e+02 |
| ## MapLabelMarshall Park                                 | 5.475e+04  |
| ## MapLabelMC Unclaimed #13                              | 1.393e+05  |
| ## MapLabelMill Park                                     | -1.895e+05 |
| ## MapLabelMontavilla                                    | -1.107e+05 |
| ## MapLabelMt. Scott-Arleta                              | -1.291e+05 |
| ## MapLabelMt. Tabor                                     | -1.599e+04 |
| ## MapLabelMultnomah                                     | 4.012e+04  |
| ## MapLabelNorth Tabor                                   | -7.700e+04 |
| ## MapLabelNorthwest District Association                | 2.645e+05  |
| ## MapLabelNorthwest Heights                             | 9.294e+04  |
| ## MapLabelOverlook                                      | -2.359e+04 |
| ## MapLabelParkrose                                      | -1.914e+05 |
| ## MapLabelParkrose Heights Association of Neighbors     | -2.109e+05 |
| ## MapLabelPiedmont                                      | -5.740e+04 |
| ## MapLabelPleasant Valley                               | -1.746e+05 |
| ## MapLabelPortsmouth                                    | -5.118e+04 |
| ## MapLabelPowellhurst-Gilbert                           | -1.751e+05 |

|   |            |
|---|------------|
| ## MapLabelReed                                 | -8.397e+04 |
| ## MapLabelRichmond                             | -4.497e+04 |
| ## MapLabelRose City Park                       | -5.580e+04 |
| ## MapLabelRoseway                              | -8.849e+04 |
| ## MapLabelRussell                              | -1.888e+05 |
| ## MapLabelSabin Community Association          | -1.834e+04 |
| ## MapLabelSellwood-Moreland Improvement League | -3.509e+04 |
| ## MapLabelSouth Burlingame                     | 2.857e+04  |
| ## MapLabelSouth Portland                       | 1.581e+05  |
| ## MapLabelSouth Tabor                          | -9.545e+04 |
| ## MapLabelSouthwest Hills Residential League   | 1.088e+05  |
| ## MapLabelSt. Johns                            | -4.389e+04 |
| ## MapLabelSullivan's Gulch                     | -1.411e+05 |
| ## MapLabelSumner Association of Neighbors      | -1.887e+05 |
| ## MapLabelSunderland Association of Neighbors  | -1.254e+05 |
| ## MapLabelSunnyside                            | -2.602e+04 |
| ## MapLabelSylvan-Highlands                     | -1.544e+04 |
| ## MapLabelUniversity Park                      | -2.693e+04 |
| ## MapLabelVernon                               | -6.202e+03 |
| ## MapLabelWest Portland Park                   | NA         |
| ## MapLabelWilkes Community Group               | -1.822e+05 |
| ## MapLabelWoodland Park                        | -2.050e+05 |
| ## MapLabelWoodlawn                             | -6.111e+04 |
| ## MapLabelWoodstock                            | -9.991e+04 |
| ## CN_score                                     | -3.945e+02 |
| ## dist_ugb                                     | -1.259e+00 |
| ## conECI                                       | 1.314e+05  |
| ## conLUST                                      | -4.640e+03 |
| ## conHist                                      | 4.023e+04  |
| ## conHistLdm                                   | 7.030e+04  |
| ## conNatAm                                     | NA         |
| ## conAirHgt                                    | 1.779e+04  |
| ## conHeliprt                                   | NA         |
| ## conNoise                                     | 7.007e+03  |
| ## conGW  | 6.767e+04  |
| ## conLSHA                                      | 4.083e+03  |
| ## conSLIDO                                     | -2.157e+04 |
| ## conSlp25                                     | 1.061e+04  |
| ## conInstit                                    | NA         |
| ## conPrvCom                                    | 3.235e+05  |
| ## conPubOwn                                    | -3.591e+04 |
| ## conSewer                                     | 1.911e+04  |
| ## conStorm                                     | -1.003e+04 |
| ## conTranCap                                   | -5.548e+03 |
| ## conTranInt                                   | -6.263e+03 |
| ## conTranSub                                   | -1.091e+04 |
| ## conWater                                     | -9.798e+03 |
| ## conView                                      | NA         |
| ## conCovrly                                    | -2.004e+02 |
| ## conPovrly                                    | -2.220e+04 |
| ## conFldway                                    | 7.868e+03  |
| ## conWetland                                   | -7.849e+04 |
| ## conFld100                                    | -3.953e+03 |
| ## pct_conFld100                                | 9.225e+02  |

|   |                    |
|---|--------------------|
| ## pct_conPovrly                            | -1.591e+03         |
| ## pct_conCovrly                            | 2.292e+04          |
| ## pct_conWetland                           | NA                 |
| ## pct_conFldway                            | 2.333e+04          |
| ## pct_canopy_cov                           | -2.905e+04         |
| ##  | Std. Error t value |
| ## (Intercept)                              | 8.940e+04 15.558   |
| ## f_baths                                  | 1.521e+03 42.602   |
| ## h_baths                                  | 1.918e+03 24.153   |
| ## n_fireplaces                             | 4.707e+03 1.023    |
| ## yearbuilt                                | 4.354e+01 -10.409  |
| ## totalsqft                                | 2.126e+00 30.038   |
| ## I(totalsqft^2)                           | 2.072e-04 -16.685  |
| ## taxlot_area                              | 1.329e-01 16.324   |
| ## FLOORS                                   | NA NA              |
| ## surfelev                                 | 1.414e+01 7.745    |
| ## percent_vacant                           | 3.740e+03 -0.125   |
| ## dist_cityhall                            | 4.662e-01 -12.194  |
| ## HIGH_SCHCLEVELAND HS                     | 1.734e+04 -1.304   |
| ## HIGH_SCHDAVID DOUGLAS HS                 | 1.060e+04 -2.619   |
| ## HIGH_SCHFRANKLIN HS                      | 1.563e+04 -1.869   |
| ## HIGH_SCHGRANT HS                         | 1.842e+04 -0.401   |
| ## HIGH_SCHGRANT-JEFF                       | 2.704e+04 -2.444   |
| ## HIGH_SCHLINCOLN HS                       | 2.903e+04 -4.286   |
| ## HIGH_SCHMADISON HS                       | 1.704e+04 -4.527   |
| ## HIGH_SCHMADISON-JEFF                     | 2.031e+04 -4.570   |
| ## HIGH_SCHPARKROSE HS                      | 1.580e+04 -1.181   |
| ## HIGH_SCHREYNOLDS HS                      | 1.567e+04 -0.369   |
| ## HIGH_SCHRIVERDALE HS                     | 8.283e+04 3.028    |
| ## HIGH_SCHROOS-JEFF                        | 2.857e+04 -3.696   |
| ## HIGH_SCHROOSEVELT CAMPUS                 | 3.227e+04 -3.305   |
| ## HIGH_SCHSUNSET HS                        | 4.374e+04 -1.803   |
| ## HIGH_SCHWILSON HS                        | 2.267e+04 -9.248   |
| ## MapLabelArbor Lodge                      | 2.622e+04 -1.366   |
| ## MapLabelArdenwald-Johnson Creek          | 2.830e+04 -4.833   |
| ## MapLabelArgay Terrace                    | 2.386e+04 -7.702   |
| ## MapLabelArlington Heights                | 2.882e+04 5.004    |
| ## MapLabelArnold Creek                     | 1.342e+04 5.668    |
| ## MapLabelAshcreek                         | 1.203e+04 2.720    |
| ## MapLabelBeaumont-Wilshire                | 1.140e+04 -0.645   |
| ## MapLabelBoise                            | 3.418e+04 -1.485   |
| ## MapLabelBrentwood-Darlington             | 1.823e+04 -10.173  |
| ## MapLabelBridlemile                       | 2.246e+04 0.363    |
| ## MapLabelBrooklyn Action Corps            | 2.104e+04 -7.009   |
| ## MapLabelBuckman Community Association    | 2.225e+04 -2.710   |
| ## MapLabelCathedral Park                   | 3.345e+04 0.073    |
| ## MapLabelCentennial Community Association | 2.203e+04 -7.526   |
| ## MapLabelCollins View                     | 1.480e+04 3.035    |
| ## MapLabelConcordia                        | 1.493e+04 -2.441   |
| ## MapLabelCreston-Kenilworth               | 1.821e+04 -7.571   |
| ## MapLabelCrestwood                        | 1.375e+04 0.709    |
| ## MapLabelCully Association of Neighbors   | 1.397e+04 -8.512   |
| ## MapLabelEast Columbia                    | 3.144e+04 -5.151   |
| ## MapLabelEastmoreland                     | 1.874e+04 4.027    |

|  |           |         |
|--|-----------|---------|
| ## MapLabelEliot   | 5.289e+04 | -2.644  |
| ## MapLabelFar Southwest                                 | 1.472e+04 | 3.601   |
| ## MapLabelForest Park                                   | 2.649e+04 | 2.440   |
| ## MapLabelFoster-Powell                                 | 1.862e+04 | -7.320  |
| ## MapLabelGlenfair                                      | 2.820e+04 | -6.890  |
| ## MapLabelGoose Hollow Foothills League                 | 3.388e+04 | 3.815   |
| ## MapLabelGrant Park                                    | 1.301e+04 | 4.535   |
| ## MapLabelHayden Island Neighborhood Network            | 4.121e+04 | 0.971   |
| ## MapLabelHayhurst                                      | 1.334e+04 | 2.534   |
| ## MapLabelHazelwood                                     | 1.905e+04 | -9.625  |
| ## MapLabelHealy Heights                                 | 4.192e+04 | 3.028   |
| ## MapLabelHillsdale                                     | 1.283e+04 | 3.553   |
| ## MapLabelHillside                                      | 2.623e+04 | 6.233   |
| ## MapLabelHollywood                                     | 2.594e+04 | 0.265   |
| ## MapLabelHomestead                                     | 3.229e+04 | -1.307  |
| ## MapLabelHosford-Abernethy Neighborhood District Assn. | 1.824e+04 | -1.978  |
| ## MapLabelHumboldt                                      | 2.560e+04 | -1.693  |
| ## MapLabelIrvington Community Association               | 1.347e+04 | 2.303   |
| ## MapLabelKenton  | 2.916e+04 | -1.924  |
| ## MapLabelKerns   | 2.905e+04 | 0.050   |
| ## MapLabelKing  | 1.937e+04 | -4.928  |
| ## MapLabelLaurelhurst                                   | 1.179e+04 | 3.828   |
| ## MapLabelLents   | 1.762e+04 | -10.346 |
| ## MapLabelLinnton                                       | 3.190e+04 | 0.708   |
| ## MapLabelMadison South                                 | 1.508e+04 | -8.706  |
| ## MapLabelMaplewood                                     | 1.497e+04 | 3.117   |
| ## MapLabelMarkham                                       | 1.317e+04 | -0.066  |
| ## MapLabelMarshall Park                                 | 1.638e+04 | 3.343   |
| ## MapLabelMC Unclaimed #13                              | 9.772e+04 | 1.426   |
| ## MapLabelMill Park                                     | 1.999e+04 | -9.478  |
| ## MapLabelMontavilla                                    | 1.465e+04 | -7.554  |
| ## MapLabelMt. Scott-Arleta                              | 1.877e+04 | -6.881  |
| ## MapLabelMt. Tabor                                     | 1.584e+04 | -1.009  |
| ## MapLabelMultnomah                                     | 1.218e+04 | 3.294   |
| ## MapLabelNorth Tabor                                   | 1.654e+04 | -4.654  |
| ## MapLabelNorthwest District Association                | 2.903e+04 | 9.112   |
| ## MapLabelNorthwest Heights                             | 2.330e+04 | 3.988   |
| ## MapLabelOverlook                                      | 2.700e+04 | -0.874  |
| ## MapLabelParkrose                                      | 2.433e+04 | -7.866  |
| ## MapLabelParkrose Heights Association of Neighbors     | 2.367e+04 | -8.908  |
| ## MapLabelPiedmont                                      | 2.562e+04 | -2.240  |
| ## MapLabelPleasant Valley                               | 2.126e+04 | -8.215  |
| ## MapLabelPortsmouth                                    | 3.055e+04 | -1.675  |
| ## MapLabelPowellhurst-Gilbert                           | 2.013e+04 | -8.698  |
| ## MapLabelReed  | 2.089e+04 | -4.020  |
| ## MapLabelRichmond                                      | 1.649e+04 | -2.728  |
| ## MapLabelRose City Park                                | 1.104e+04 | -5.053  |
| ## MapLabelRoseway                                       | 1.391e+04 | -6.362  |
| ## MapLabelRussell                                       | 2.370e+04 | -7.968  |
| ## MapLabelSabin Community Association                   | 1.216e+04 | -1.508  |
| ## MapLabelSellwood-Moreland Improvement League          | 1.789e+04 | -1.961  |
| ## MapLabelSouth Burlingame                              | 1.520e+04 | 1.880   |
| ## MapLabelSouth Portland                                | 1.925e+04 | 8.213   |
| ## MapLabelSouth Tabor                                   | 1.743e+04 | -5.476  |

|  |             |        |
|--|-------------|--------|
| ## MapLabelSouthwest Hills Residential League  | 2.236e+04   | 4.863  |
| ## MapLabelSt. Johns                           | 3.059e+04   | -1.435 |
| ## MapLabelSullivan's Gulch                    | 2.411e+04   | -5.854 |
| ## MapLabelSumner Association of Neighbors     | 2.738e+04   | -6.894 |
| ## MapLabelSunderland Association of Neighbors | 6.873e+04   | -1.825 |
| ## MapLabelSunnyside                           | 1.822e+04   | -1.428 |
| ## MapLabelSylvan-Highlands                    | 2.639e+04   | -0.585 |
| ## MapLabelUniversity Park                     | 3.063e+04   | -0.879 |
| ## MapLabelVernon                              | 2.176e+04   | -0.285 |
| ## MapLabelWest Portland Park                  | NA          | NA     |
| ## MapLabelWilkes Community Group              | 2.498e+04   | -7.294 |
| ## MapLabelWoodland Park                       | 3.246e+04   | -6.316 |
| ## MapLabelWoodlawn                            | 2.359e+04   | -2.591 |
| ## MapLabelWoodstock                           | 1.896e+04   | -5.270 |
| ## CN_score                                    | 1.218e+02   | -3.238 |
| ## dist_ugb                                    | 5.828e-01   | -2.160 |
| ## conECI                                      | 1.116e+05   | 1.178  |
| ## conLUST                                     | 8.001e+04   | -0.058 |
| ## conHist                                     | 7.447e+03   | 5.401  |
| ## conHistLdm                                  | 3.141e+04   | 2.238  |
| ## conNatAm                                    | NA          | NA     |
| ## conAirHgt                                   | 5.433e+03   | 3.275  |
| ## conHeliprt                                  | NA          | NA     |
| ## conNoise                                    | 1.072e+04   | 0.654  |
| ## conGW                                       | 6.006e+04   | 1.127  |
| ## conLSHA                                     | 4.874e+03   | 0.838  |
| ## conSLIDO                                    | 6.644e+03   | -3.246 |
| ## conSlp25                                    | 4.558e+03   | 2.328  |
| ## conInstit                                   | NA          | NA     |
| ## conPrvCom                                   | 1.124e+05   | 2.878  |
| ## conPubOwn                                   | 4.219e+04   | -0.851 |
| ## conSewer                                    | 1.438e+04   | 1.329  |
| ## conStorm                                    | 3.532e+03   | -2.841 |
| ## conTranCap                                  | 3.828e+03   | -1.449 |
| ## conTranInt                                  | 4.194e+03   | -1.493 |
| ## conTranSub                                  | 2.487e+03   | -4.388 |
| ## conWater                                    | 4.591e+03   | -2.134 |
| ## conView                                     | NA          | NA     |
| ## conCovrly                                   | 5.043e+03   | -0.040 |
| ## conPovrly                                   | 6.997e+03   | -3.174 |
| ## conFldway                                   | 2.834e+04   | 0.278  |
| ## conWetland                                  | 2.710e+04   | -2.896 |
| ## conFld100                                   | 1.581e+04   | -0.250 |
| ## pct_conFld100                               | 2.491e+04   | 0.037  |
| ## pct_conPovrly                               | 1.132e+05   | -0.014 |
| ## pct_conCovrly                               | 9.926e+03   | 2.309  |
| ## pct_conWetland                              | NA          | NA     |
| ## pct_conFldway                               | 8.747e+04   | 0.267  |
| ## pct_canopy_cov                              | 5.567e+03   | -5.218 |
| ##   | Pr(> t )    |        |
| ## (Intercept)                                 | < 2e-16 *** |        |
| ## f_baths                                     | < 2e-16 *** |        |
| ## h_baths                                     | < 2e-16 *** |        |
| ## n_fireplaces                                | 0.306102    |        |

|   |              |
|---|--------------|
| ## yearbuilt                                  | < 2e-16 ***  |
| ## totalsqft                                  | < 2e-16 ***  |
| ## I(totalsqft^2)                             | < 2e-16 ***  |
| ## taxlot_area                                | < 2e-16 ***  |
| ## FLOORS                                     | NA           |
| ## surfelev                                   | 1.01e-14 *** |
| ## percent_vacant                             | 0.900888     |
| ## dist_cityhall                              | < 2e-16 ***  |
| ## HIGH_SCHCLEVELAND HS                       | 0.192142     |
| ## HIGH_SCHDAVID DOUGLAS HS                   | 0.008834 **  |
| ## HIGH_SCHFRANKLIN HS                        | 0.061681 .   |
| ## HIGH_SCHGRANT HS                           | 0.688089     |
| ## HIGH_SCHGRANT-JEFF                         | 0.014536 *   |
| ## HIGH_SCHLINCOLN HS                         | 1.83e-05 *** |
| ## HIGH_SCHMADISON HS                         | 6.03e-06 *** |
| ## HIGH_SCHMADISON-JEFF                       | 4.92e-06 *** |
| ## HIGH_SCHPARKROSE HS                        | 0.237433     |
| ## HIGH_SCHREYNOLDS HS                        | 0.712139     |
| ## HIGH_SCHRIVERDALE HS                       | 0.002470 **  |
| ## HIGH_SCHROOS-JEFF                          | 0.000219 *** |
| ## HIGH_SCHROOSEVELT CAMPUS                   | 0.000951 *** |
| ## HIGH_SCHSUNSET HS                          | 0.071449 .   |
| ## HIGH_SCHWILSON HS                          | < 2e-16 ***  |
| ## MapLabelArbor Lodge                        | 0.171989     |
| ## MapLabelArdenwald-Johnson Creek            | 1.35e-06 *** |
| ## MapLabelArgay Terrace                      | 1.42e-14 *** |
| ## MapLabelArlington Heights                  | 5.66e-07 *** |
| ## MapLabelArnold Creek                       | 1.47e-08 *** |
| ## MapLabelAshcreek                           | 0.006538 **  |
| ## MapLabelBeaumont-Wilshire                  | 0.518718     |
| ## MapLabelBoise                              | 0.137465     |
| ## MapLabelBrentwood-Darlington               | < 2e-16 ***  |
| ## MapLabelBridlemile                         | 0.716581     |
| ## MapLabelBrooklyn Action Corps              | 2.50e-12 *** |
| ## MapLabelBuckman Community Association      | 0.006730 **  |
| ## MapLabelCathedral Park                     | 0.941940     |
| ## MapLabelCentennial Community Association   | 5.52e-14 *** |
| ## MapLabelCollins View                       | 0.002409 **  |
| ## MapLabelConcordia                          | 0.014645 *   |
| ## MapLabelCreston-Kenilworth                 | 3.89e-14 *** |
| ## MapLabelCrestwood                          | 0.478214     |
| ## MapLabelCully Association of Neighbors     | < 2e-16 ***  |
| ## MapLabelEast Columbia                      | 2.63e-07 *** |
| ## MapLabelEastmoreland                       | 5.68e-05 *** |
| ## MapLabelEliot                              | 0.008206 **  |
| ## MapLabelFar Southwest                      | 0.000318 *** |
| ## MapLabelForest Park                        | 0.014694 *   |
| ## MapLabelFoster-Powell                      | 2.59e-13 *** |
| ## MapLabelGlenfair                           | 5.79e-12 *** |
| ## MapLabelGoose Hollow Foothills League      | 0.000137 *** |
| ## MapLabelGrant Park                         | 5.80e-06 *** |
| ## MapLabelHayden Island Neighborhood Network | 0.331513     |
| ## MapLabelHayhurst                           | 0.011293 *   |
| ## MapLabelHazelwood                          | < 2e-16 ***  |

|  |              |
|--|--------------|
| ## MapLabelHealy Heights                                 | 0.002464 **  |
| ## MapLabelHillsdale                                     | 0.000382 *** |
| ## MapLabelHillside                                      | 4.71e-10 *** |
| ## MapLabelHollywood                                     | 0.791214     |
| ## MapLabelHomestead                                     | 0.191207     |
| ## MapLabelHosford-Abernethy Neighborhood District Assn. | 0.047963 *   |
| ## MapLabelHumboldt                                      | 0.090433 .   |
| ## MapLabelIrvington Community Association               | 0.021269 *   |
| ## MapLabelKenton  | 0.054344 .   |
| ## MapLabelKerns   | 0.959725     |
| ## MapLabelKing  | 8.37e-07 *** |
| ## MapLabelLaurelhurst                                   | 0.000130 *** |
| ## MapLabelLents   | < 2e-16 ***  |
| ## MapLabelLinnton                                       | 0.478998     |
| ## MapLabelMadison South                                 | < 2e-16 ***  |
| ## MapLabelMaplewood                                     | 0.001830 **  |
| ## MapLabelMarkham                                       | 0.947117     |
| ## MapLabelMarshall Park                                 | 0.000832 *** |
| ## MapLabelMC Unclaimed #13                              | 0.153900     |
| ## MapLabelMill Park                                     | < 2e-16 ***  |
| ## MapLabelMontavilla                                    | 4.46e-14 *** |
| ## MapLabelMt. Scott-Arleta                              | 6.15e-12 *** |
| ## MapLabelMt. Tabor                                     | 0.312968     |
| ## MapLabelMultnomah                                     | 0.000990 *** |
| ## MapLabelNorth Tabor                                   | 3.29e-06 *** |
| ## MapLabelNorthwest District Association                | < 2e-16 ***  |
| ## MapLabelNorthwest Heights                             | 6.69e-05 *** |
| ## MapLabelOverlook                                      | 0.382319     |
| ## MapLabelParkrose                                      | 3.91e-15 *** |
| ## MapLabelParkrose Heights Association of Neighbors     | < 2e-16 ***  |
| ## MapLabelPiedmont                                      | 0.025077 *   |
| ## MapLabelPleasant Valley                               | 2.29e-16 *** |
| ## MapLabelPortsmouth                                    | 0.093902 .   |
| ## MapLabelPowellhurst-Gilbert                           | < 2e-16 ***  |
| ## MapLabelReed  | 5.85e-05 *** |
| ## MapLabelRichmond                                      | 0.006383 **  |
| ## MapLabelRose City Park                                | 4.39e-07 *** |
| ## MapLabelRoseway                                       | 2.05e-10 *** |
| ## MapLabelRussell                                       | 1.72e-15 *** |
| ## MapLabelSabin Community Association                   | 0.131605     |
| ## MapLabelSellwood-Moreland Improvement League          | 0.049857 *   |
| ## MapLabelSouth Burlingame                              | 0.060109 .   |
| ## MapLabelSouth Portland                                | 2.32e-16 *** |
| ## MapLabelSouth Tabor                                   | 4.42e-08 *** |
| ## MapLabelSouthwest Hills Residential League            | 1.16e-06 *** |
| ## MapLabelSt. Johns                                     | 0.151321     |
| ## MapLabelSullivan's Gulch                              | 4.88e-09 *** |
| ## MapLabelSumner Association of Neighbors               | 5.61e-12 *** |
| ## MapLabelSunderland Association of Neighbors           | 0.068025 .   |
| ## MapLabelSunnyside                                     | 0.153210     |
| ## MapLabelSylvan-Highlands                              | 0.558617     |
| ## MapLabelUniversity Park                               | 0.379196     |
| ## MapLabelVernon  | 0.775641     |
| ## MapLabelWest Portland Park                            | NA           |

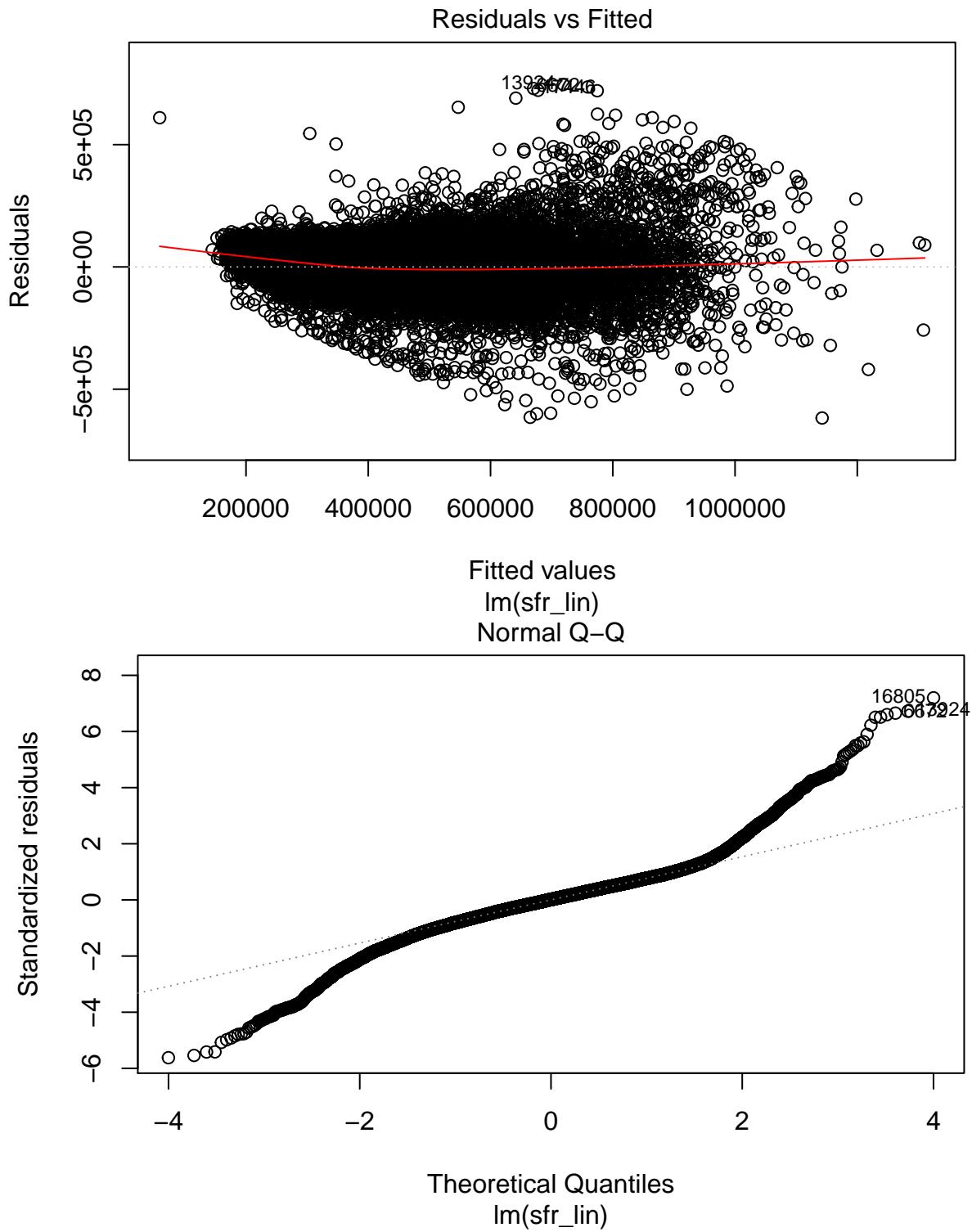
```

## MapLabelWilkes Community Group            3.14e-13 ***
## MapLabelWoodland Park                  2.76e-10 ***
## MapLabelWoodlawn                      0.009582 **
## MapLabelWoodstock                     1.38e-07 ***
## CN_score                            0.001207 **
## dist_ugb                           0.030823 *
## conECSI                            0.238894
## conLUST                            0.953756
## conHist                           6.71e-08 ***
## conHistLdm                         0.025244 *
## conNatAm                           NA
## conAirHgt                          0.001057 **
## conHeliprt                         NA
## conNoise                           0.513374
## conGW                             0.259925
## conLSHA                            0.402223
## conSLIDO                           0.001173 **
## conSlp25                           0.019937 *
## conInstit                          NA
## conPrvCom                          0.004004 **
## conPubOwn                          0.394690
## conSewer                           0.183918
## conStorm                           0.004502 **
## conTranCap                         0.147237
## conTranInt                          0.135350
## conTranSub                         1.15e-05 ***
## conWater                           0.032826 *
## conView                            NA
## conCovrly                          0.968308
## conPovrly                           0.001509 **
## conFldway                          0.781270
## conWetland                          0.003787 **
## conFld100                           0.802584
## pct_conFld100                      0.970457
## pct_conPovrly                      0.988785
## pct_conCovrly                      0.020938 *
## pct_conWetland                      NA
## pct_conFldway                      0.789713
## pct_canopy_cov                     1.83e-07 ***
## ---

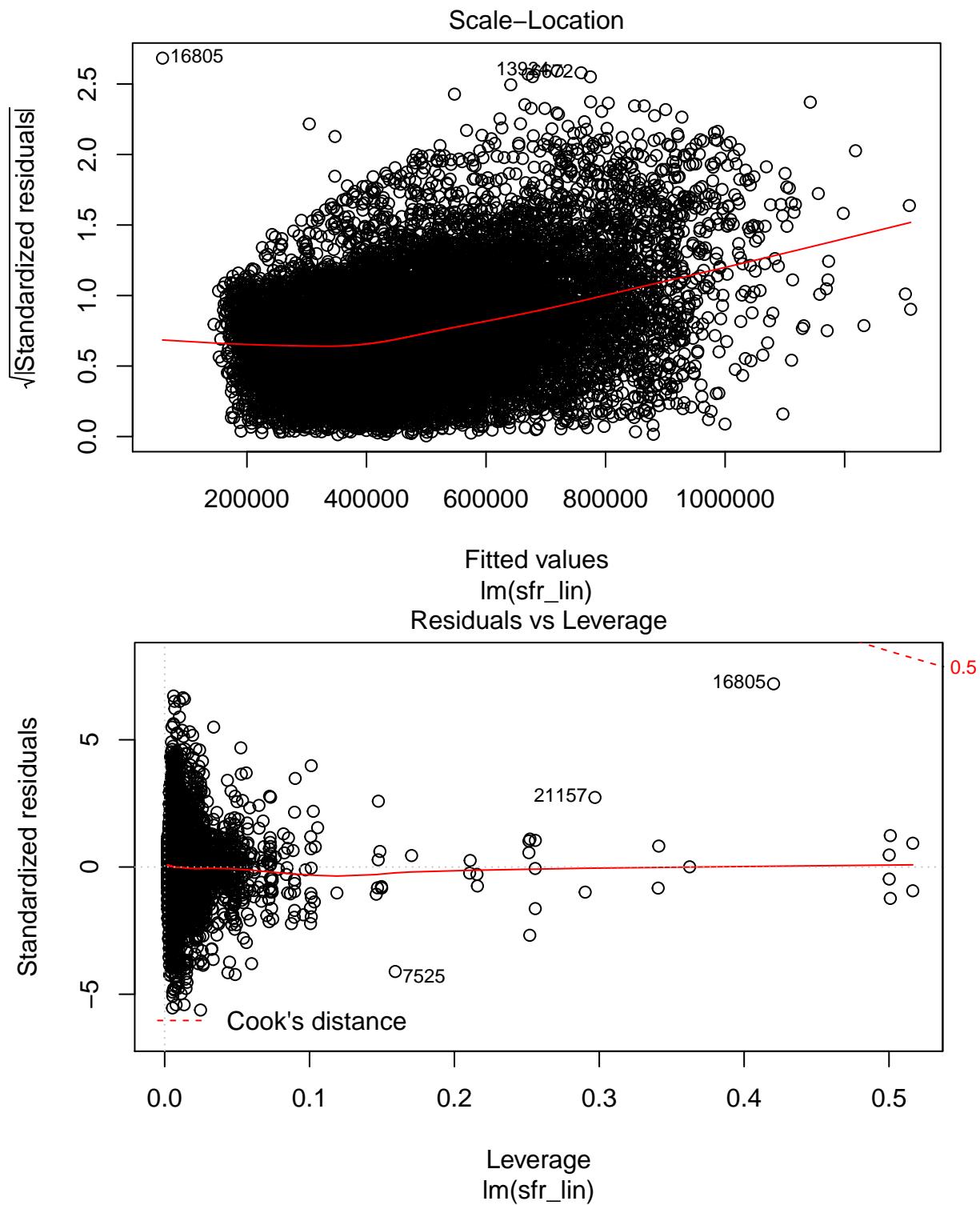
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 111300 on 15701 degrees of freedom
##   (9675 observations deleted due to missingness)
## Multiple R-squared:  0.7182, Adjusted R-squared:  0.7156
## F-statistic: 279.8 on 143 and 15701 DF,  p-value: < 2.2e-16

## Warning: not plotting observations with leverage one:
##      5135, 11888, 14466

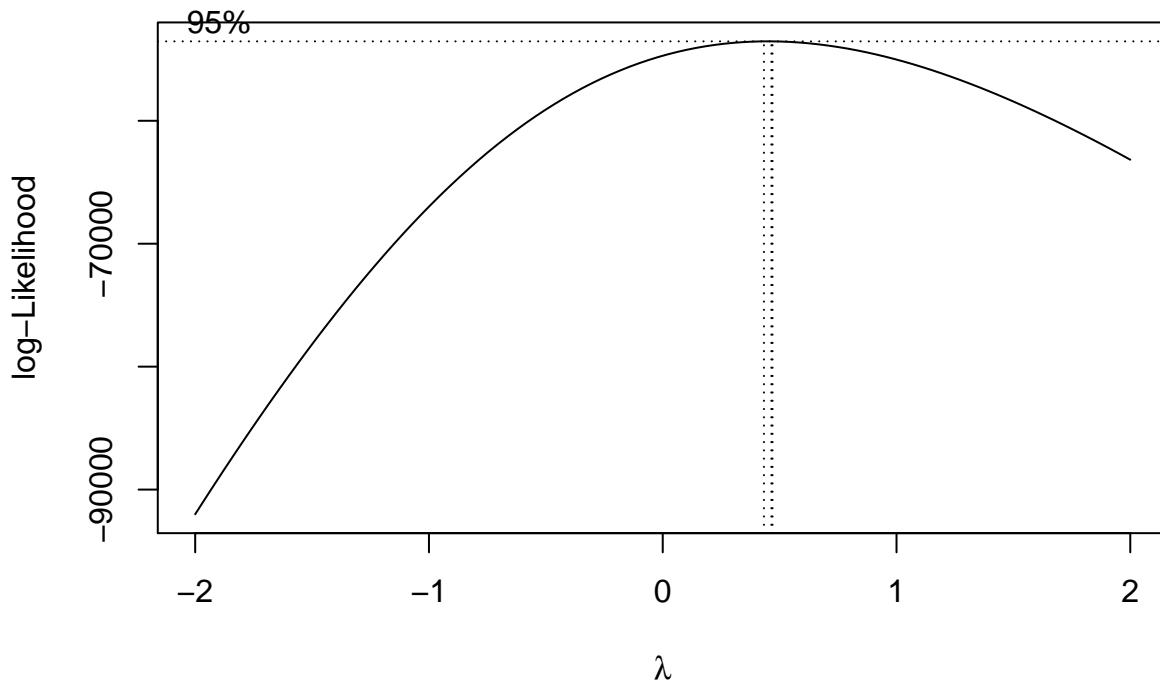
```



```
## Warning: not plotting observations with leverage one:
##      5135, 11888, 14466
```



```
## Warning: In lm.fit(x, y, offset = offset, singular.ok = singular.ok, ...):
##   extra argument 'lambda' will be disregarded
```



```
##
## Call:
## lm(formula = sfr_bc, data = dat1)
##
## Residuals:
##    Min     1Q Median     3Q    Max 
## -324.49 -21.05   3.01  24.77 284.97 
##
## Coefficients: (7 not defined because of singularities)
##                               Estimate
## (Intercept)                7.227e+02
## f_baths                  2.353e+01
## h_baths                   1.662e+01
## n_fireplaces               1.410e+00
## yearbuilt                 -1.519e-01
## totalsqft                  2.416e-02
## I(totalsqft^2)             -1.417e-06
## taxlot_area                 7.266e-04
## FLOORS                      NA
## surfelev                    4.020e-02
## percent_vacant              2.044e-01
## dist_cityhall                -2.134e-03
## HIGH_SCHCLEVELAND HS        -1.472e+01
## HIGH_SCHDAVID DOUGLAS HS      -1.422e+01
## HIGH_SCHFRANKLIN HS          -1.725e+01
## HIGH_SCHGRANT HS              -1.156e+01
## HIGH_SCHGRANT-JEFF            -3.650e+01
## HIGH_SCHLINCOLN HS              -6.071e+01
## HIGH_SCHMADISON HS              -3.687e+01
## HIGH_SCHMADISON-JEFF            -3.995e+01
## HIGH_SCHPARKROSE HS              -9.514e+00
## HIGH_SCHREYNOLDS HS              -5.061e+00
```

|  |            |
|--|------------|
| ## HIGH_SCHRIVERDALE HS                                  | 4.802e+01  |
| ## HIGH_SCHROOS-JEFF                                     | -4.822e+01 |
| ## HIGH_SCHROOSEVELT CAMPUS                              | -5.235e+01 |
| ## HIGH_SCHSUNSET HS                                     | -4.596e+01 |
| ## HIGH_SCHWILSON HS                                     | -8.537e+01 |
| ## MapLabelArbor Lodge                                   | -8.562e+00 |
| ## MapLabelArdenwald-Johnson Creek                       | -5.137e+01 |
| ## MapLabelArgay Terrace                                 | -7.514e+01 |
| ## MapLabelArlington Heights                             | 4.435e+01  |
| ## MapLabelArnold Creek                                  | 2.787e+01  |
| ## MapLabelAshcreek                                      | 1.301e+01  |
| ## MapLabelBeaumont-Wilshire                             | -3.075e+00 |
| ## MapLabelBoise   | -7.413e+00 |
| ## MapLabelBrentwood-Darlington                          | -7.660e+01 |
| ## MapLabelBridlemile                                    | 6.950e+00  |
| ## MapLabelBrooklyn Action Corps                         | -5.121e+01 |
| ## MapLabelBuckman Community Association                 | -2.110e+01 |
| ## MapLabelCathedral Park                                | 6.905e+00  |
| ## MapLabelCentennial Community Association              | -8.040e+01 |
| ## MapLabelCollins View                                  | 1.724e+01  |
| ## MapLabelConcordia                                     | -1.239e+01 |
| ## MapLabelCreston-Kenilworth                            | -5.092e+01 |
| ## MapLabelCrestwood                                     | 2.975e+00  |
| ## MapLabelCully Association of Neighbors                | -4.692e+01 |
| ## MapLabelEast Columbia                                 | -6.490e+01 |
| ## MapLabelEastmoreland                                  | 2.484e+01  |
| ## MapLabelEliot   | -3.814e+01 |
| ## MapLabelFar Southwest                                 | 2.135e+01  |
| ## MapLabelForest Park                                   | 1.962e+01  |
| ## MapLabelFoster-Powell                                 | -5.221e+01 |
| ## MapLabelGlenfair                                      | -8.575e+01 |
| ## MapLabelGoose Hollow Foothills League                 | 3.875e+01  |
| ## MapLabelGrant Park                                    | 2.074e+01  |
| ## MapLabelHayden Island Neighborhood Network            | 1.860e+01  |
| ## MapLabelHayhurst                                      | 1.424e+01  |
| ## MapLabelHazelwood                                     | -7.877e+01 |
| ## MapLabelHealy Heights                                 | 3.547e+01  |
| ## MapLabelHillsdale                                     | 1.715e+01  |
| ## MapLabelHillside                                      | 4.722e+01  |
| ## MapLabelHollywood                                     | 7.032e+00  |
| ## MapLabelHomestead                                     | -1.141e+01 |
| ## MapLabelHosford-Abernethy Neighborhood District Assn. | -1.296e+01 |
| ## MapLabelHumboldt                                      | -1.164e+01 |
| ## MapLabelIrvington Community Association               | 6.954e+00  |
| ## MapLabelKenton  | -1.655e+01 |
| ## MapLabelKerns   | 6.366e-01  |
| ## MapLabelKing  | -3.116e+01 |
| ## MapLabelLaurelhurst                                   | 1.670e+01  |
| ## MapLabelLents   | -7.919e+01 |
| ## MapLabelLinnton                                       | 1.398e+01  |
| ## MapLabelMadison South                                 | -5.380e+01 |
| ## MapLabelMaplewood                                     | 1.894e+01  |
| ## MapLabelMarkham                                       | 3.511e-01  |
| ## MapLabelMarshall Park                                 | 2.151e+01  |

|  |            |
|--|------------|
| ## MapLabelMC Unclaimed #13                          | 3.916e+01  |
| ## MapLabelMill Park                                 | -8.369e+01 |
| ## MapLabelMontavilla                                | -4.310e+01 |
| ## MapLabelMt. Scott-Arleta                          | -4.896e+01 |
| ## MapLabelMt. Tabor                                 | -3.732e+00 |
| ## MapLabelMultnomah                                 | 1.695e+01  |
| ## MapLabelNorth Tabor                               | -2.540e+01 |
| ## MapLabelNorthwest District Association            | 8.689e+01  |
| ## MapLabelNorthwest Heights                         | 3.106e+01  |
| ## MapLabelOverlook                                  | -4.112e+00 |
| ## MapLabelParkrose                                  | -8.432e+01 |
| ## MapLabelParkrose Heights Association of Neighbors | -9.203e+01 |
| ## MapLabelPiedmont                                  | -1.665e+01 |
| ## MapLabelPleasant Valley                           | -7.042e+01 |
| ## MapLabelPortsmouth                                | -1.635e+01 |
| ## MapLabelPowellhurst-Gilbert                       | -7.926e+01 |
| ## MapLabelReed                                      | -2.686e+01 |
| ## MapLabelRichmond                                  | -1.345e+01 |
| ## MapLabelRose City Park                            | -1.509e+01 |
| ## MapLabelRoseway                                   | -3.146e+01 |
| ## MapLabelRussell                                   | -8.165e+01 |
| ## MapLabelSabin Community Association               | -5.108e+00 |
| ## MapLabelSellwood-Moreland Improvement League      | -1.029e+01 |
| ## MapLabelSouth Burlingame                          | 1.218e+01  |
| ## MapLabelSouth Portland                            | 5.752e+01  |
| ## MapLabelSouth Tabor                               | -3.217e+01 |
| ## MapLabelSouthwest Hills Residential League        | 3.145e+01  |
| ## MapLabelSt. Johns                                 | -1.525e+01 |
| ## MapLabelSullivan's Gulch                          | -4.524e+01 |
| ## MapLabelSumner Association of Neighbors           | -8.470e+01 |
| ## MapLabelSunderland Association of Neighbors       | -6.561e+01 |
| ## MapLabelSunnyside                                 | -6.556e+00 |
| ## MapLabelSylvan-Highlands                          | -3.383e+00 |
| ## MapLabelUniversity Park                           | -2.501e+00 |
| ## MapLabelVernon                                    | -7.044e-01 |
| ## MapLabelWest Portland Park                        | NA         |
| ## MapLabelWilkes Community Group                    | -7.662e+01 |
| ## MapLabelWoodland Park                             | -9.214e+01 |
| ## MapLabelWoodlawn                                  | -1.992e+01 |
| ## MapLabelWoodstock                                 | -3.498e+01 |
| ## CN_score  | -1.712e-01 |
| ## dist_ugb  | -5.636e-04 |
| ## conECI  | 5.087e+01  |
| ## conLUST   | 4.545e+00  |
| ## conHist   | 1.371e+01  |
| ## conHistLdm  | 1.547e+01  |
| ## conNatAm  | NA         |
| ## conAirHgt   | 6.878e+00  |
| ## conHeliprt  | NA         |
| ## conNoise  | 1.612e+00  |
| ## conGW   | 2.796e+01  |
| ## conLSHA   | 2.859e+00  |
| ## conSLIDO  | -5.150e+00 |
| ## conSlp25  | 2.762e+00  |

|                                    |                    |
|------------------------------------|--------------------|
| ## conInstit                       | NA                 |
| ## conPrvCom                       | 8.638e+01          |
| ## conPubOwn                       | -2.120e+01         |
| ## conSewer                        | 6.842e+00          |
| ## conStorm                        | -2.773e+00         |
| ## conTranCap                      | -1.945e+00         |
| ## conTranInt                      | -3.319e+00         |
| ## conTranSub                      | -4.196e+00         |
| ## conWater                        | -5.100e+00         |
| ## conView                         | NA                 |
| ## conCovrly                       | 7.303e-01          |
| ## conPovrly                       | -5.516e+00         |
| ## conFldway                       | 1.527e+00          |
| ## conWetland                      | -2.462e+01         |
| ## conFld100                       | -1.133e+00         |
| ## pct_conFld100                   | -1.563e+00         |
| ## pct_conPovrly                   | 3.530e-01          |
| ## pct_conCovrly                   | 1.057e+01          |
| ## pct_conWetland                  | NA                 |
| ## pct_conFldway                   | 1.189e+01          |
| ## pct_canopy_cov                  | -9.796e+00         |
| ##                                 | Std. Error t value |
| ## (Intercept)                     | 3.387e+01 21.338   |
| ## f_baths                         | 5.761e-01 40.841   |
| ## h_baths                         | 7.265e-01 22.873   |
| ## n_fireplaces                    | 1.783e+00 0.791    |
| ## yearbuilt                       | 1.650e-02 -9.210   |
| ## totalsqft                       | 8.055e-04 29.994   |
| ## I(totalsqft^2)                  | 7.849e-08 -18.057  |
| ## taxlot_area                     | 5.034e-05 14.433   |
| ## FLOORS                          | NA NA              |
| ## surfelev                        | 5.358e-03 7.502    |
| ## percent_vacant                  | 1.417e+00 0.144    |
| ## dist_cityhall                   | 1.766e-04 -12.082  |
| ## HIGH_SCHCLEVELAND HS            | 6.569e+00 -2.241   |
| ## HIGH_SCHDAVID DOUGLAS HS        | 4.018e+00 -3.540   |
| ## HIGH_SCHFRANKLIN HS             | 5.922e+00 -2.913   |
| ## HIGH_SCHGRANT HS                | 6.977e+00 -1.657   |
| ## HIGH_SCHGRANT-JEFF              | 1.024e+01 -3.563   |
| ## HIGH_SCHLINCOLN HS              | 1.100e+01 -5.519   |
| ## HIGH_SCHMADISON HS              | 6.455e+00 -5.711   |
| ## HIGH_SCHMADISON-JEFF            | 7.693e+00 -5.193   |
| ## HIGH_SCHPARKROSE HS             | 5.985e+00 -1.590   |
| ## HIGH_SCHREYNOLDS HS             | 5.935e+00 -0.853   |
| ## HIGH_SCHRIVERDALE HS            | 3.138e+01 1.530    |
| ## HIGH_SCHROOOS-JEFF              | 1.082e+01 -4.455   |
| ## HIGH_SCHROOSEVELT CAMPUS        | 1.223e+01 -4.282   |
| ## HIGH_SCHSUNSET HS               | 1.657e+01 -2.773   |
| ## HIGH_SCHWILSON HS               | 8.589e+00 -9.940   |
| ## MapLabelArbor Lodge             | 9.932e+00 -0.862   |
| ## MapLabelArdenwald-Johnson Creek | 1.072e+01 -4.791   |
| ## MapLabelArgay Terrace           | 9.039e+00 -8.312   |
| ## MapLabelArlington Heights       | 1.092e+01 4.062    |
| ## MapLabelArnold Creek            | 5.086e+00 5.479    |

|  |           |         |
|--|-----------|---------|
| ## MapLabelAshcreek                                      | 4.558e+00 | 2.853   |
| ## MapLabelBeaumont-Wilshire                             | 4.319e+00 | -0.712  |
| ## MapLabelBoise   | 1.295e+01 | -0.572  |
| ## MapLabelBrentwood-Darlington                          | 6.905e+00 | -11.093 |
| ## MapLabelBridlemile                                    | 8.511e+00 | 0.817   |
| ## MapLabelBrooklyn Action Corps                         | 7.972e+00 | -6.424  |
| ## MapLabelBuckman Community Association                 | 8.429e+00 | -2.503  |
| ## MapLabelCathedral Park                                | 1.267e+01 | 0.545   |
| ## MapLabelCentennial Community Association              | 8.346e+00 | -9.633  |
| ## MapLabelCollins View                                  | 5.606e+00 | 3.075   |
| ## MapLabelConcordia                                     | 5.655e+00 | -2.191  |
| ## MapLabelCreston-Kenilworth                            | 6.900e+00 | -7.379  |
| ## MapLabelCrestwood                                     | 5.209e+00 | 0.571   |
| ## MapLabelCully Association of Neighbors                | 5.292e+00 | -8.865  |
| ## MapLabelEast Columbia                                 | 1.191e+01 | -5.450  |
| ## MapLabelEastmoreland                                  | 7.100e+00 | 3.499   |
| ## MapLabelEliot   | 2.004e+01 | -1.904  |
| ## MapLabelFar Southwest                                 | 5.576e+00 | 3.830   |
| ## MapLabelForest Park                                   | 1.004e+01 | 1.955   |
| ## MapLabelFoster-Powell                                 | 7.055e+00 | -7.400  |
| ## MapLabelGlenfair                                      | 1.068e+01 | -8.026  |
| ## MapLabelGoose Hollow Foothills League                 | 1.283e+01 | 3.019   |
| ## MapLabelGrant Park                                    | 4.928e+00 | 4.208   |
| ## MapLabelHayden Island Neighborhood Network            | 1.561e+01 | 1.191   |
| ## MapLabelHayhurst                                      | 5.054e+00 | 2.818   |
| ## MapLabelHazelwood                                     | 7.216e+00 | -10.917 |
| ## MapLabelHealy Heights                                 | 1.588e+01 | 2.233   |
| ## MapLabelHillsdale                                     | 4.862e+00 | 3.527   |
| ## MapLabelHillside                                      | 9.939e+00 | 4.751   |
| ## MapLabelHollywood                                     | 9.829e+00 | 0.715   |
| ## MapLabelHomestead                                     | 1.223e+01 | -0.933  |
| ## MapLabelHosford-Abernethy Neighborhood District Assn. | 6.909e+00 | -1.876  |
| ## MapLabelHumboldt                                      | 9.697e+00 | -1.201  |
| ## MapLabelIrvington Community Association               | 5.105e+00 | 1.362   |
| ## MapLabelKenton  | 1.105e+01 | -1.498  |
| ## MapLabelKerns   | 1.101e+01 | 0.058   |
| ## MapLabelKing  | 7.337e+00 | -4.247  |
| ## MapLabelLaurelhurst                                   | 4.467e+00 | 3.737   |
| ## MapLabelLents   | 6.676e+00 | -11.863 |
| ## MapLabelLinnton                                       | 1.209e+01 | 1.156   |
| ## MapLabelMadison South                                 | 5.714e+00 | -9.416  |
| ## MapLabelMaplewood                                     | 5.672e+00 | 3.339   |
| ## MapLabelMarkham                                       | 4.988e+00 | 0.070   |
| ## MapLabelMarshall Park                                 | 6.206e+00 | 3.466   |
| ## MapLabelMC Unclaimed #13                              | 3.702e+01 | 1.058   |
| ## MapLabelMill Park                                     | 7.573e+00 | -11.051 |
| ## MapLabelMontavilla                                    | 5.550e+00 | -7.766  |
| ## MapLabelMt. Scott-Arleta                              | 7.109e+00 | -6.887  |
| ## MapLabelMt. Tabor                                     | 6.003e+00 | -0.622  |
| ## MapLabelMultnomah                                     | 4.615e+00 | 3.673   |
| ## MapLabelNorth Tabor                                   | 6.268e+00 | -4.052  |
| ## MapLabelNorthwest District Association                | 1.100e+01 | 7.900   |
| ## MapLabelNorthwest Heights                             | 8.829e+00 | 3.518   |
| ## MapLabelOverlook                                      | 1.023e+01 | -0.402  |

|  |           |         |
|--|-----------|---------|
| ## MapLabelParkrose                                  | 9.218e+00 | -9.147  |
| ## MapLabelParkrose Heights Association of Neighbors | 8.968e+00 | -10.263 |
| ## MapLabelPiedmont                                  | 9.706e+00 | -1.715  |
| ## MapLabelPleasant Valley                           | 8.054e+00 | -8.744  |
| ## MapLabelPortsmouth                                | 1.157e+01 | -1.413  |
| ## MapLabelPowellhurst-Gilbert                       | 7.626e+00 | -10.393 |
| ## MapLabelReed                                      | 7.914e+00 | -3.394  |
| ## MapLabelRichmond                                  | 6.246e+00 | -2.153  |
| ## MapLabelRose City Park                            | 4.183e+00 | -3.606  |
| ## MapLabelRoseway                                   | 5.270e+00 | -5.970  |
| ## MapLabelRussell                                   | 8.978e+00 | -9.094  |
| ## MapLabelSabin Community Association               | 4.607e+00 | -1.109  |
| ## MapLabelSellwood-Moreland Improvement League      | 6.778e+00 | -1.519  |
| ## MapLabelSouth Burlingame                          | 5.757e+00 | 2.115   |
| ## MapLabelSouth Portland                            | 7.293e+00 | 7.887   |
| ## MapLabelSouth Tabor                               | 6.604e+00 | -4.872  |
| ## MapLabelSouthwest Hills Residential League        | 8.473e+00 | 3.712   |
| ## MapLabelSt. Johns                                 | 1.159e+01 | -1.316  |
| ## MapLabelSullivan's Gulch                          | 9.133e+00 | -4.954  |
| ## MapLabelSumner Association of Neighbors           | 1.037e+01 | -8.166  |
| ## MapLabelSunderland Association of Neighbors       | 2.604e+01 | -2.520  |
| ## MapLabelSunnyside                                 | 6.902e+00 | -0.950  |
| ## MapLabelSylvan-Highlands                          | 9.997e+00 | -0.338  |
| ## MapLabelUniversity Park                           | 1.160e+01 | -0.216  |
| ## MapLabelVernon                                    | 8.244e+00 | -0.085  |
| ## MapLabelWest Portland Park                        | NA        | NA      |
| ## MapLabelWilkes Community Group                    | 9.462e+00 | -8.097  |
| ## MapLabelWoodland Park                             | 1.230e+01 | -7.492  |
| ## MapLabelWoodlawn                                  | 8.936e+00 | -2.229  |
| ## MapLabelWoodstock                                 | 7.182e+00 | -4.870  |
| ## CN_score  | 4.616e-02 | -3.708  |
| ## dist_ugb  | 2.208e-04 | -2.552  |
| ## conECI  | 4.227e+01 | 1.203   |
| ## conLUST   | 3.031e+01 | 0.150   |
| ## conHist   | 2.821e+00 | 4.858   |
| ## conHistLdm  | 1.190e+01 | 1.300   |
| ## conNatAm  | NA        | NA      |
| ## conAirHgt   | 2.058e+00 | 3.342   |
| ## conHeliprt  | NA        | NA      |
| ## conNoise  | 4.061e+00 | 0.397   |
| ## conGW   | 2.275e+01 | 1.229   |
| ## conLSHA   | 1.847e+00 | 1.548   |
| ## conSLIDO  | 2.517e+00 | -2.046  |
| ## conSlp25  | 1.727e+00 | 1.599   |
| ## conInstit   | NA        | NA      |
| ## conPrvCom   | 4.258e+01 | 2.029   |
| ## conPubOwn   | 1.598e+01 | -1.327  |
| ## conSewer  | 5.447e+00 | 1.256   |
| ## conStorm  | 1.338e+00 | -2.072  |
| ## conTranCap  | 1.450e+00 | -1.341  |
| ## conTranInt  | 1.589e+00 | -2.089  |
| ## conTranSub  | 9.423e-01 | -4.453  |
| ## conWater  | 1.739e+00 | -2.932  |
| ## conView   | NA        | NA      |

|   |           |        |
|---|-----------|--------|
| ## conCovrly                                | 1.910e+00 | 0.382  |
| ## conPovrly                                | 2.651e+00 | -2.081 |
| ## conFldway                                | 1.074e+01 | 0.142  |
| ## conWetland                               | 1.027e+01 | -2.398 |
| ## conFld100                                | 5.990e+00 | -0.189 |
| ## pct_conFld100                            | 9.436e+00 | -0.166 |
| ## pct_conPovrly                            | 4.287e+01 | 0.008  |
| ## pct_conCovrly                            | 3.760e+00 | 2.810  |
| ## pct_conWetland                           | NA        | NA     |
| ## pct_conFldway                            | 3.314e+01 | 0.359  |
| ## pct_canopy_cov                           | 2.109e+00 | -4.644 |
| ##  | Pr(> t )  |        |
| ## (Intercept)                              | < 2e-16   | ***    |
| ## f_baths                                  | < 2e-16   | ***    |
| ## h_baths                                  | < 2e-16   | ***    |
| ## n_fireplaces                             | 0.429067  |        |
| ## yearbuilt                                | < 2e-16   | ***    |
| ## totalsqft                                | < 2e-16   | ***    |
| ## I(totalsqft^2)                           | < 2e-16   | ***    |
| ## taxlot_area                              | < 2e-16   | ***    |
| ## FLOORS                                   | NA        |        |
| ## surfelev                                 | 6.63e-14  | ***    |
| ## percent_vacant                           | 0.885283  |        |
| ## dist_cityhall                            | < 2e-16   | ***    |
| ## HIGH_SCHCLEVELAND HS                     | 0.025012  | *      |
| ## HIGH_SCHDAVID DOUGLAS HS                 | 0.000402  | ***    |
| ## HIGH_SCHFRANKLIN HS                      | 0.003588  | **     |
| ## HIGH_SCHGRANT HS                         | 0.097584  | .      |
| ## HIGH_SCHGRANT-JEFF                       | 0.000367  | ***    |
| ## HIGH_SCHLINCOLN HS                       | 3.46e-08  | ***    |
| ## HIGH_SCHMADISON HS                       | 1.14e-08  | ***    |
| ## HIGH_SCHMADISON-JEFF                     | 2.10e-07  | ***    |
| ## HIGH_SCHPARKROSE HS                      | 0.111911  |        |
| ## HIGH_SCHREYNOLDS HS                      | 0.393801  |        |
| ## HIGH_SCHRIVERDALE HS                     | 0.125977  |        |
| ## HIGH_SCHROOS-JEFF                        | 8.43e-06  | ***    |
| ## HIGH_SCHROOSEVELT CAMPUS                 | 1.86e-05  | ***    |
| ## HIGH_SCHSUNSET HS                        | 0.005556  | **     |
| ## HIGH_SCHWILSON HS                        | < 2e-16   | ***    |
| ## MapLabelArbor Lodge                      | 0.388683  |        |
| ## MapLabelArdenwald-Johnson Creek          | 1.68e-06  | ***    |
| ## MapLabelArgay Terrace                    | < 2e-16   | ***    |
| ## MapLabelArlington Heights                | 4.89e-05  | ***    |
| ## MapLabelArnold Creek                     | 4.33e-08  | ***    |
| ## MapLabelAshcreek                         | 0.004336  | **     |
| ## MapLabelBeaumont-Wilshire                | 0.476459  |        |
| ## MapLabelBoise                            | 0.567066  |        |
| ## MapLabelBrentwood-Darlington             | < 2e-16   | ***    |
| ## MapLabelBridlemile                       | 0.414184  |        |
| ## MapLabelBrooklyn Action Corps            | 1.37e-10  | ***    |
| ## MapLabelBuckman Community Association    | 0.012308  | *      |
| ## MapLabelCathedral Park                   | 0.585829  |        |
| ## MapLabelCentennial Community Association | < 2e-16   | ***    |
| ## MapLabelCollins View                     | 0.002112  | **     |

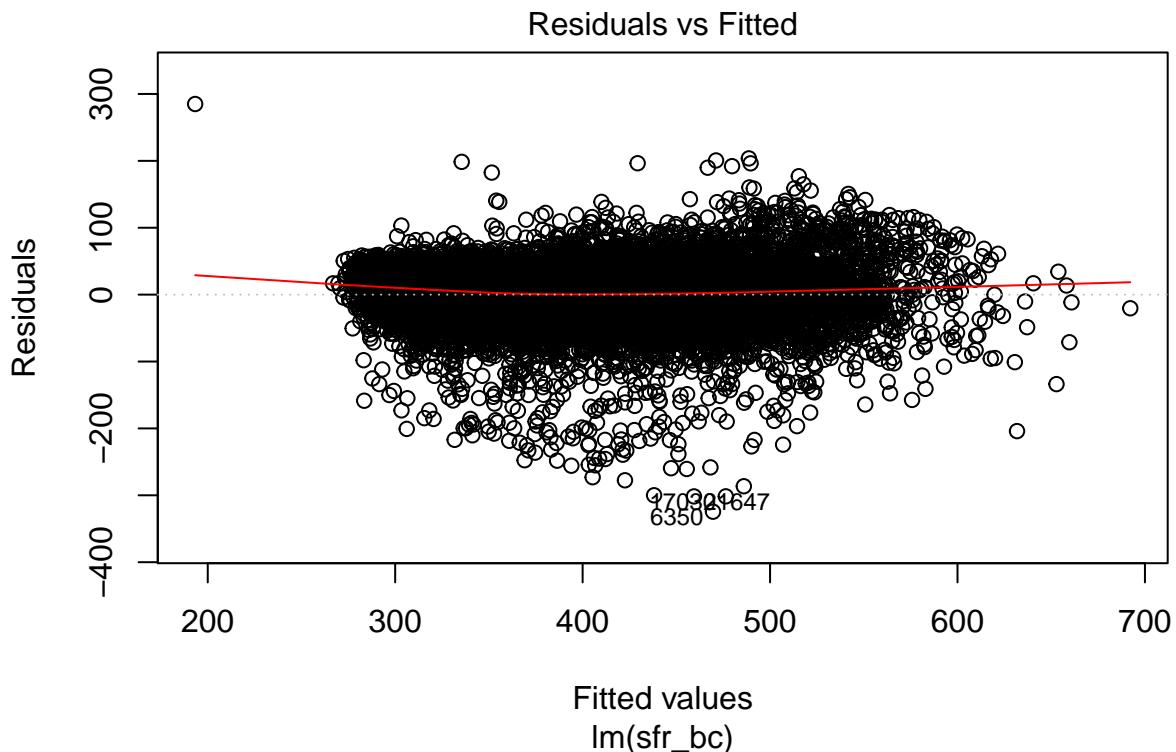
|  |              |
|--|--------------|
| ## MapLabelConcordia                                     | 0.028457 *   |
| ## MapLabelCreston-Kenilworth                            | 1.67e-13 *** |
| ## MapLabelCrestwood                                     | 0.567868     |
| ## MapLabelCully Association of Neighbors                | < 2e-16 ***  |
| ## MapLabelEast Columbia                                 | 5.13e-08 *** |
| ## MapLabelEastmoreland                                  | 0.000468 *** |
| ## MapLabelEliot   | 0.056973 .   |
| ## MapLabelFar Southwest                                 | 0.000129 *** |
| ## MapLabelForest Park                                   | 0.050586 .   |
| ## MapLabelFoster-Powell                                 | 1.43e-13 *** |
| ## MapLabelGlenfair                                      | 1.08e-15 *** |
| ## MapLabelGoose Hollow Foothills League                 | 0.002539 **  |
| ## MapLabelGrant Park                                    | 2.59e-05 *** |
| ## MapLabelHayden Island Neighborhood Network            | 0.233593     |
| ## MapLabelHayhurst                                      | 0.004838 **  |
| ## MapLabelHazelwood                                     | < 2e-16 ***  |
| ## MapLabelHealy Heights                                 | 0.025555 *   |
| ## MapLabelHillsdale                                     | 0.000422 *** |
| ## MapLabelHillside                                      | 2.04e-06 *** |
| ## MapLabelHollywood                                     | 0.474327     |
| ## MapLabelHomestead                                     | 0.351056     |
| ## MapLabelHosford-Abernethy Neighborhood District Assn. | 0.060641 .   |
| ## MapLabelHumboldt                                      | 0.229841     |
| ## MapLabelIrvington Community Association               | 0.173115     |
| ## MapLabelKenton  | 0.134197     |
| ## MapLabelKerns   | 0.953873     |
| ## MapLabelKing  | 2.18e-05 *** |
| ## MapLabelLaurelhurst                                   | 0.000187 *** |
| ## MapLabelLents   | < 2e-16 ***  |
| ## MapLabelLinnnton                                      | 0.247603     |
| ## MapLabelMadison South                                 | < 2e-16 ***  |
| ## MapLabelMaplewood                                     | 0.000842 *** |
| ## MapLabelMarkham                                       | 0.943890     |
| ## MapLabelMarshall Park                                 | 0.000530 *** |
| ## MapLabelMC Unclaimed #13                              | 0.290233     |
| ## MapLabelMill Park                                     | < 2e-16 ***  |
| ## MapLabelMontavilla                                    | 8.60e-15 *** |
| ## MapLabelMt. Scott-Arleta                              | 5.93e-12 *** |
| ## MapLabelMt. Tabor                                     | 0.534091     |
| ## MapLabelMultnomah                                     | 0.000240 *** |
| ## MapLabelNorth Tabor                                   | 5.10e-05 *** |
| ## MapLabelNorthwest District Association                | 2.97e-15 *** |
| ## MapLabelNorthwest Heights                             | 0.000436 *** |
| ## MapLabelOverlook                                      | 0.687737     |
| ## MapLabelParkrose                                      | < 2e-16 ***  |
| ## MapLabelParkrose Heights Association of Neighbors     | < 2e-16 ***  |
| ## MapLabelPiedmont                                      | 0.086314 .   |
| ## MapLabelPleasant Valley                               | < 2e-16 ***  |
| ## MapLabelPortsmouth                                    | 0.157822     |
| ## MapLabelPowellhurst-Gilbert                           | < 2e-16 ***  |
| ## MapLabelReed  | 0.000690 *** |
| ## MapLabelRichmond                                      | 0.031317 *   |
| ## MapLabelRose City Park                                | 0.000312 *** |
| ## MapLabelRoseway                                       | 2.42e-09 *** |

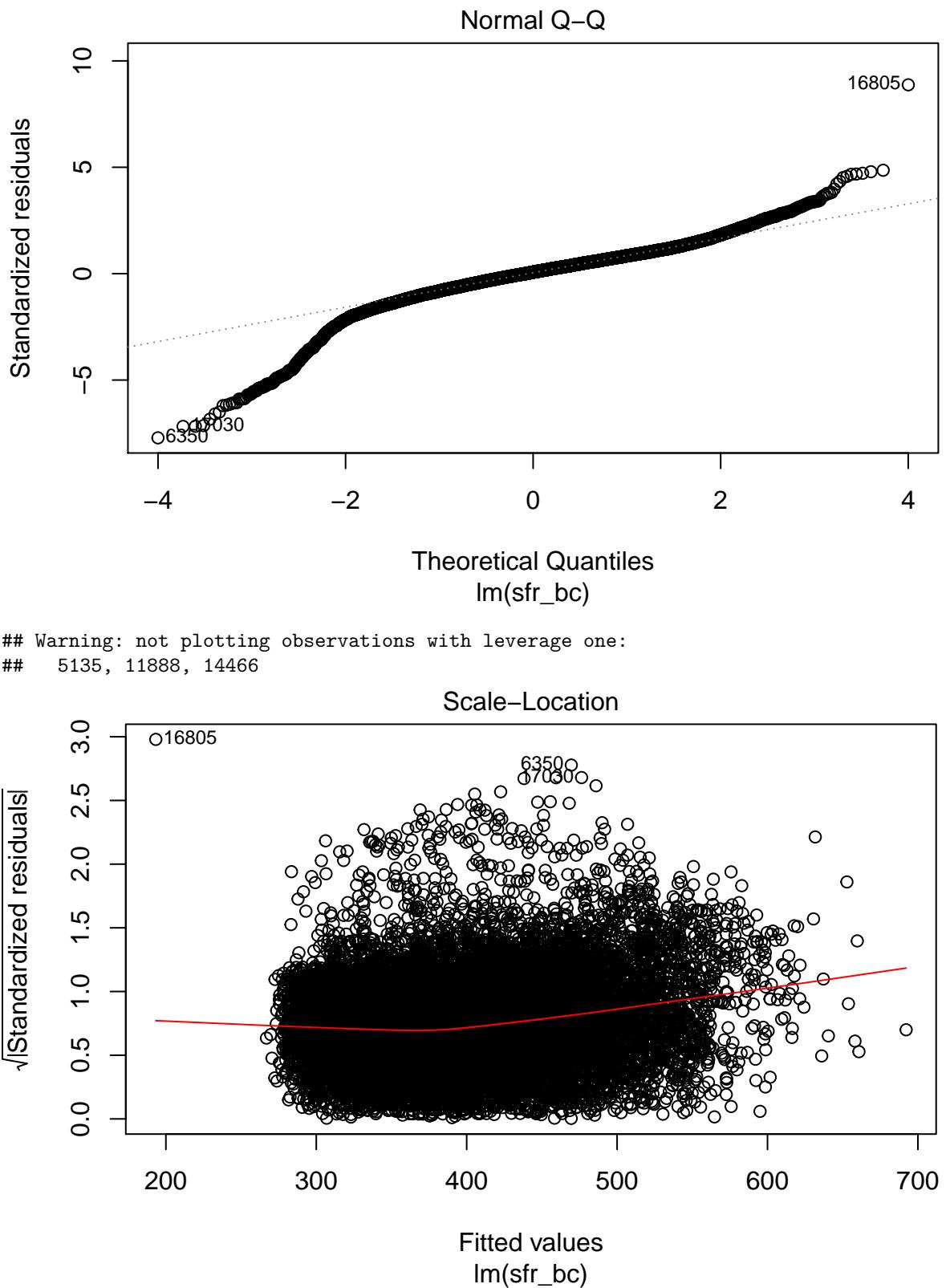
|   |              |
|---|--------------|
| ## MapLabelRussell                              | < 2e-16 ***  |
| ## MapLabelSabin Community Association          | 0.267611     |
| ## MapLabelSellwood-Moreland Improvement League | 0.128872     |
| ## MapLabelSouth Burlingame                     | 0.034466 *   |
| ## MapLabelSouth Portland                       | 3.30e-15 *** |
| ## MapLabelSouth Tabor                          | 1.12e-06 *** |
| ## MapLabelSouthwest Hills Residential League   | 0.000206 *** |
| ## MapLabelSt. Johns                            | 0.188088     |
| ## MapLabelSullivan's Gulch                     | 7.34e-07 *** |
| ## MapLabelSumner Association of Neighbors      | 3.41e-16 *** |
| ## MapLabelSunderland Association of Neighbors  | 0.011750 *   |
| ## MapLabelSunnyside                            | 0.342209     |
| ## MapLabelSylvan-Highlands                     | 0.735089     |
| ## MapLabelUniversity Park                      | 0.829312     |
| ## MapLabelVernon                               | 0.931913     |
| ## MapLabelWest Portland Park                   | NA           |
| ## MapLabelWilkes Community Group               | 6.02e-16 *** |
| ## MapLabelWoodland Park                        | 7.15e-14 *** |
| ## MapLabelWoodlawn                             | 0.025835 *   |
| ## MapLabelWoodstock                            | 1.12e-06 *** |
| ## CN_score                                     | 0.000209 *** |
| ## dist_ugb                                     | 0.010711 *   |
| ## conECSI                                      | 0.228810     |
| ## conLUST                                      | 0.880816     |
| ## conHist                                      | 1.19e-06 *** |
| ## conHistLdm                                   | 0.193769     |
| ## conNatAm                                     | NA           |
| ## conAirHgt                                    | 0.000834 *** |
| ## conHeliprt                                   | NA           |
| ## conNoise                                     | 0.691442     |
| ## conGW  | 0.219125     |
| ## conLSHA                                      | 0.121590     |
| ## conSLIDO                                     | 0.040772 *   |
| ## conSlp25                                     | 0.109764     |
| ## conInstit                                    | NA           |
| ## conPrvCom                                    | 0.042494 *   |
| ## conPubOwn                                    | 0.184662     |
| ## conSewer                                     | 0.209101     |
| ## conStorm                                     | 0.038255 *   |
| ## conTranCap                                   | 0.179952     |
| ## conTranInt                                   | 0.036703 *   |
| ## conTranSub                                   | 8.54e-06 *** |
| ## conWater                                     | 0.003368 **  |
| ## conView                                      | NA           |
| ## conCovrly                                    | 0.702266     |
| ## conPovrly                                    | 0.037441 *   |
| ## conFldway                                    | 0.886888     |
| ## conWetland                                   | 0.016502 *   |
| ## conFld100                                    | 0.849968     |
| ## pct_conFld100                                | 0.868469     |
| ## pct_conPovrly                                | 0.993431     |
| ## pct_conCovrly                                | 0.004958 **  |
| ## pct_conWetland                               | NA           |
| ## pct_conFldway                                | 0.719721     |

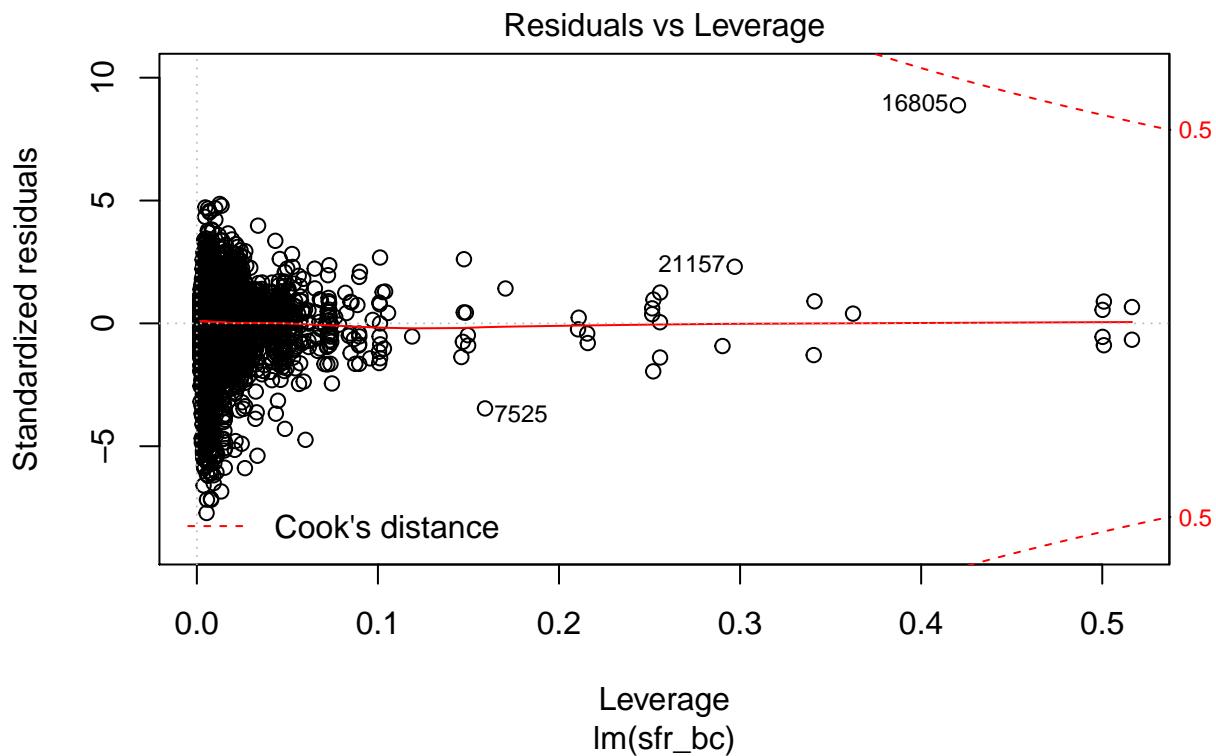
```

## pct_canopy_cov           3.44e-06 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 42.17 on 15701 degrees of freedom
##   (9675 observations deleted due to missingness)
## Multiple R-squared:  0.713,  Adjusted R-squared:  0.7104
## F-statistic: 272.8 on 143 and 15701 DF,  p-value: < 2.2e-16
## Warning: not plotting observations with leverage one:
##   5135, 11888, 14466

```







```
##
## Call:
## lm(formula = sfr_log, data = dat1)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -2.51832 -0.10461  0.03067  0.14783  1.69022
##
## Coefficients: (7 not defined because of singularities)
##                               Estimate
## (Intercept)                  1.459e+01
## f_baths                     1.217e-01
## h_baths                      8.551e-02
## n_fireplaces                 5.913e-03
## yearbuilt                   -7.146e-04
## totalsqft                   1.267e-04
## I(totalsqft^2)              -7.838e-09
## taxlot_area                  3.487e-06
## FLOORS                       NA
## surfelev                     2.076e-04
## percent_vacant               2.364e-03
## dist_cityhall                -1.122e-05
## HIGH_SCHCLEVELAND HS        -1.126e-01
## HIGH_SCHDAVID DOUGLAS HS    -9.174e-02
## HIGH_SCHFRANKLIN HS         -1.258e-01
## HIGH_SCHGRANT HS            -1.065e-01
## HIGH_SCHGRANT-JEFF          -2.592e-01
## HIGH_SCHLINCOLN HS          -3.772e-01
## HIGH_SCHMADISON HS          -2.362e-01
## HIGH_SCHMADISON-JEFF        -2.394e-01
```

|  |            |
|--|------------|
| ## HIGH_SCHPARKROSE HS                                   | -6.556e-02 |
| ## HIGH_SCHREYNOLDS HS                                   | -4.329e-02 |
| ## HIGH_SCHRIVERDALE HS                                  | 6.779e-02  |
| ## HIGH_SCHROOS-JEFF                                     | -3.037e-01 |
| ## HIGH_SCHROOSEVELT CAMPUS                              | -3.451e-01 |
| ## HIGH_SCHSUNSET HS                                     | -3.095e-01 |
| ## HIGH_SCHWILSON HS                                     | -4.781e-01 |
| ## MapLabelArbor Lodge                                   | -1.399e-02 |
| ## MapLabelArdenwald-Johnson Creek                       | -2.586e-01 |
| ## MapLabelArgay Terrace                                 | -4.231e-01 |
| ## MapLabelArlington Heights                             | 1.846e-01  |
| ## MapLabelArnold Creek                                  | 1.320e-01  |
| ## MapLabelAshcreek                                      | 7.015e-02  |
| ## MapLabelBeaumont-Wilshire                             | -1.664e-02 |
| ## MapLabelBoise   | 2.324e-02  |
| ## MapLabelBrentwood-Darlington                          | -4.266e-01 |
| ## MapLabelBridlemile                                    | 4.424e-02  |
| ## MapLabelBrooklyn Action Corps                         | -2.456e-01 |
| ## MapLabelBuckman Community Association                 | -1.015e-01 |
| ## MapLabelCathedral Park                                | 7.578e-02  |
| ## MapLabelCentennial Community Association              | -5.093e-01 |
| ## MapLabelCollins View                                  | 9.047e-02  |
| ## MapLabelConcordia                                     | -5.941e-02 |
| ## MapLabelCreston-Kenilworth                            | -2.623e-01 |
| ## MapLabelCrestwood                                     | 7.419e-03  |
| ## MapLabelCully Association of Neighbors                | -2.560e-01 |
| ## MapLabelEast Columbia                                 | -3.622e-01 |
| ## MapLabelEastmoreland                                  | 1.185e-01  |
| ## MapLabelEliot   | -1.303e-01 |
| ## MapLabelFar Southwest                                 | 1.168e-01  |
| ## MapLabelForest Park                                   | 7.051e-02  |
| ## MapLabelFoster-Powell                                 | -2.710e-01 |
| ## MapLabelGlenfair                                      | -5.088e-01 |
| ## MapLabelGoose Hollow Foothills League                 | 1.585e-01  |
| ## MapLabelGrant Park                                    | 1.072e-01  |
| ## MapLabelHayden Island Neighborhood Network            | 1.100e-01  |
| ## MapLabelHayhurst                                      | 7.848e-02  |
| ## MapLabelHazelwood                                     | -4.613e-01 |
| ## MapLabelHealy Heights                                 | 1.316e-01  |
| ## MapLabelHillsdale                                     | 8.438e-02  |
| ## MapLabelHillside                                      | 1.854e-01  |
| ## MapLabelHollywood                                     | 5.791e-02  |
| ## MapLabelHomestead                                     | -5.477e-02 |
| ## MapLabelHosford-Abernethy Neighborhood District Assn. | -6.440e-02 |
| ## MapLabelHumboldt                                      | -4.191e-02 |
| ## MapLabelIrvington Community Association               | 1.877e-02  |
| ## MapLabelKenton  | -5.355e-02 |
| ## MapLabelKerns   | 4.709e-03  |
| ## MapLabelKing  | -1.427e-01 |
| ## MapLabelLaurelhurst                                   | 8.986e-02  |
| ## MapLabelLents   | -4.645e-01 |
| ## MapLabelLinnton                                       | 9.036e-02  |
| ## MapLabelMadison South                                 | -3.007e-01 |
| ## MapLabelMaplewood                                     | 1.024e-01  |

|  |            |
|--|------------|
| ## MapLabelMarkham                                   | 5.367e-03  |
| ## MapLabelMarshall Park                             | 1.142e-01  |
| ## MapLabelMC Unclaimed #13                          | 1.617e-01  |
| ## MapLabelMill Park                                 | -5.017e-01 |
| ## MapLabelMontavilla                                | -2.306e-01 |
| ## MapLabelMt. Scott-Arleta                          | -2.474e-01 |
| ## MapLabelMt. Tabor                                 | -5.099e-03 |
| ## MapLabelMultnomah                                 | 9.497e-02  |
| ## MapLabelNorth Tabor                               | -1.126e-01 |
| ## MapLabelNorthwest District Association            | 3.953e-01  |
| ## MapLabelNorthwest Heights                         | 1.315e-01  |
| ## MapLabelOverlook                                  | 2.490e-03  |
| ## MapLabelParkrose                                  | -4.984e-01 |
| ## MapLabelParkrose Heights Association of Neighbors | -5.436e-01 |
| ## MapLabelPiedmont                                  | -5.823e-02 |
| ## MapLabelPleasant Valley                           | -3.916e-01 |
| ## MapLabelPortsmouth                                | -5.754e-02 |
| ## MapLabelPowellhurst-Gilbert                       | -4.833e-01 |
| ## MapLabelReed                                      | -1.121e-01 |
| ## MapLabelRichmond                                  | -5.192e-02 |
| ## MapLabelRose City Park                            | -5.094e-02 |
| ## MapLabelRoseway                                   | -1.549e-01 |
| ## MapLabelRussell                                   | -4.787e-01 |
| ## MapLabelSabin Community Association               | -1.876e-02 |
| ## MapLabelSellwood-Moreland Improvement League      | -3.603e-02 |
| ## MapLabelSouth Burlingame                          | 6.738e-02  |
| ## MapLabelSouth Portland                            | 2.917e-01  |
| ## MapLabelSouth Tabor                               | -1.408e-01 |
| ## MapLabelSouthwest Hills Residential League        | 1.203e-01  |
| ## MapLabelSt. Johns                                 | -6.115e-02 |
| ## MapLabelSullivan's Gulch                          | -2.026e-01 |
| ## MapLabelSumner Association of Neighbors           | -5.104e-01 |
| ## MapLabelSunderland Association of Neighbors       | -4.289e-01 |
| ## MapLabelSunnyside                                 | -1.455e-02 |
| ## MapLabelSylvan-Highlands                          | -1.778e-02 |
| ## MapLabelUniversity Park                           | 3.396e-02  |
| ## MapLabelVernon                                    | 4.267e-03  |
| ## MapLabelWest Portland Park                        | NA         |
| ## MapLabelWilkes Community Group                    | -4.388e-01 |
| ## MapLabelWoodland Park                             | -5.515e-01 |
| ## MapLabelWoodlawn                                  | -8.652e-02 |
| ## MapLabelWoodstock                                 | -1.631e-01 |
| ## CN_score  | -1.006e-03 |
| ## dist_ugb  | -3.660e-06 |
| ## conECSI   | 2.774e-01  |
| ## conLUST   | 4.620e-02  |
| ## conHist   | 6.544e-02  |
| ## conHistLdm  | 3.783e-02  |
| ## conNatAm  | NA         |
| ## conAirHgt   | 3.899e-02  |
| ## conHeliprt  | NA         |
| ## conNoise  | 3.657e-03  |
| ## conGW   | 1.639e-01  |
| ## conLSHA   | 2.196e-02  |

|                                    |                    |
|------------------------------------|--------------------|
| ## conSLIDO                        | -1.678e-02         |
| ## conSlp25                        | 7.731e-03          |
| ## conInstit                       | NA                 |
| ## conPrvCom                       | 3.226e-01          |
| ## conPubOwn                       | -1.475e-01         |
| ## conSewer                        | 3.323e-02          |
| ## conStorm                        | -1.068e-02         |
| ## conTranCap                      | -8.072e-03         |
| ## conTranInt                      | -2.116e-02         |
| ## conTranSub                      | -2.413e-02         |
| ## conWater                        | -3.388e-02         |
| ## conView                         | NA                 |
| ## conCovrly                       | 9.035e-03          |
| ## conPovrly                       | -1.745e-02         |
| ## conFldway                       | 3.969e-03          |
| ## conWetland                      | -1.076e-01         |
| ## conFld100                       | -1.761e-03         |
| ## pct_conFld100                   | -2.641e-02         |
| ## pct_conPovrly                   | 5.401e-03          |
| ## pct_conCovrly                   | 6.427e-02          |
| ## pct_conWetland                  | NA                 |
| ## pct_conFldway                   | 8.649e-02          |
| ## pct_canopy_cov                  | -4.908e-02         |
| ##                                 | Std. Error t value |
| ## (Intercept)                     | 2.025e-01 72.044   |
| ## f_baths                         | 3.444e-03 35.322   |
| ## h_baths                         | 4.344e-03 19.685   |
| ## n_fireplaces                    | 1.066e-02 0.555    |
| ## yearbuilt                       | 9.863e-05 -7.246   |
| ## totalsqft                       | 4.816e-06 26.301   |
| ## I(totalsqft^2)                  | 4.693e-10 -16.702  |
| ## taxlot_area                     | 3.010e-07 11.586   |
| ## FLOORS                          | NA NA              |
| ## surfelev                        | 3.204e-05 6.481    |
| ## percent_vacant                  | 8.471e-03 0.279    |
| ## dist_cityhall                   | 1.056e-06 -10.622  |
| ## HIGH_SCHCLEVELAND HS            | 3.928e-02 -2.868   |
| ## HIGH_SCHDAVID DOUGLAS HS        | 2.402e-02 -3.819   |
| ## HIGH_SCHFRANKLIN HS             | 3.541e-02 -3.553   |
| ## HIGH_SCHGRANT HS                | 4.171e-02 -2.552   |
| ## HIGH_SCHGRANT-JEFF              | 6.124e-02 -4.233   |
| ## HIGH_SCHLINCOLN HS              | 6.576e-02 -5.735   |
| ## HIGH_SCHMADISON HS              | 3.860e-02 -6.121   |
| ## HIGH_SCHMADISON-JEFF            | 4.599e-02 -5.204   |
| ## HIGH_SCHPARKROSE HS             | 3.578e-02 -1.832   |
| ## HIGH_SCHREYNOLDS HS             | 3.548e-02 -1.220   |
| ## HIGH_SCHRIVERDALE HS            | 1.876e-01 0.361    |
| ## HIGH_SCHROOS-JEFF               | 6.470e-02 -4.693   |
| ## HIGH_SCHROOSEVELT CAMPUS        | 7.310e-02 -4.721   |
| ## HIGH_SCHSUNSET HS               | 9.908e-02 -3.124   |
| ## HIGH_SCHWILSON HS               | 5.135e-02 -9.310   |
| ## MapLabelArbor Lodge             | 5.938e-02 -0.236   |
| ## MapLabelArdenwald-Johnson Creek | 6.411e-02 -4.034   |
| ## MapLabelArgay Terrace           | 5.404e-02 -7.828   |

|  |           |         |
|--|-----------|---------|
| ## MapLabelArlington Heights                             | 6.529e-02 | 2.828   |
| ## MapLabelArnold Creek                                  | 3.041e-02 | 4.340   |
| ## MapLabelAshcreek                                      | 2.725e-02 | 2.574   |
| ## MapLabelBeaumont-Wilshire                             | 2.582e-02 | -0.644  |
| ## MapLabelBoise   | 7.743e-02 | 0.300   |
| ## MapLabelBrentwood-Darlington                          | 4.128e-02 | -10.333 |
| ## MapLabelBridlemile                                    | 5.088e-02 | 0.869   |
| ## MapLabelBrooklyn Action Corps                         | 4.766e-02 | -5.152  |
| ## MapLabelBuckman Community Association                 | 5.040e-02 | -2.015  |
| ## MapLabelCathedral Park                                | 7.576e-02 | 1.000   |
| ## MapLabelCentennial Community Association              | 4.990e-02 | -10.207 |
| ## MapLabelCollins View                                  | 3.352e-02 | 2.699   |
| ## MapLabelConcordia                                     | 3.381e-02 | -1.757  |
| ## MapLabelCreston-Kenilworth                            | 4.126e-02 | -6.358  |
| ## MapLabelCrestwood                                     | 3.114e-02 | 0.238   |
| ## MapLabelCully Association of Neighbors                | 3.164e-02 | -8.092  |
| ## MapLabelEast Columbia                                 | 7.120e-02 | -5.086  |
| ## MapLabelEastmoreland                                  | 4.245e-02 | 2.791   |
| ## MapLabelEliot   | 1.198e-01 | -1.087  |
| ## MapLabelFar Southwest                                 | 3.334e-02 | 3.504   |
| ## MapLabelForest Park                                   | 6.001e-02 | 1.175   |
| ## MapLabelFoster-Powell                                 | 4.218e-02 | -6.424  |
| ## MapLabelGlenfair                                      | 6.388e-02 | -7.965  |
| ## MapLabelGoose Hollow Foothills League                 | 7.674e-02 | 2.065   |
| ## MapLabelGrant Park                                    | 2.947e-02 | 3.637   |
| ## MapLabelHayden Island Neighborhood Network            | 9.335e-02 | 1.178   |
| ## MapLabelHayhurst                                      | 3.022e-02 | 2.597   |
| ## MapLabelHazelwood                                     | 4.314e-02 | -10.693 |
| ## MapLabelHealy Heights                                 | 9.496e-02 | 1.385   |
| ## MapLabelHillsdale                                     | 2.907e-02 | 2.903   |
| ## MapLabelHillside                                      | 5.942e-02 | 3.120   |
| ## MapLabelHollywood                                     | 5.877e-02 | 0.985   |
| ## MapLabelHomestead                                     | 7.314e-02 | -0.749  |
| ## MapLabelHosford-Abernethy Neighborhood District Assn. | 4.131e-02 | -1.559  |
| ## MapLabelHumboldt                                      | 5.798e-02 | -0.723  |
| ## MapLabelIrvington Community Association               | 3.052e-02 | 0.615   |
| ## MapLabelKenton  | 6.606e-02 | -0.811  |
| ## MapLabelKerns   | 6.580e-02 | 0.072   |
| ## MapLabelKing  | 4.387e-02 | -3.254  |
| ## MapLabelLaurelhurst                                   | 2.671e-02 | 3.364   |
| ## MapLabelLents   | 3.991e-02 | -11.639 |
| ## MapLabelLinnton                                       | 7.227e-02 | 1.250   |
| ## MapLabelMadison South                                 | 3.416e-02 | -8.801  |
| ## MapLabelMaplewood                                     | 3.391e-02 | 3.019   |
| ## MapLabelMarkham                                       | 2.982e-02 | 0.180   |
| ## MapLabelMarshall Park                                 | 3.710e-02 | 3.079   |
| ## MapLabelMC Unclaimed #13                              | 2.214e-01 | 0.731   |
| ## MapLabelMill Park                                     | 4.528e-02 | -11.081 |
| ## MapLabelMontavilla                                    | 3.318e-02 | -6.951  |
| ## MapLabelMt. Scott-Arleta                              | 4.250e-02 | -5.821  |
| ## MapLabelMt. Tabor                                     | 3.589e-02 | -0.142  |
| ## MapLabelMultnomah                                     | 2.759e-02 | 3.442   |
| ## MapLabelNorth Tabor                                   | 3.748e-02 | -3.005  |
| ## MapLabelNorthwest District Association                | 6.576e-02 | 6.012   |

|  |           |         |
|--|-----------|---------|
| ## MapLabelNorthwest Heights                         | 5.278e-02 | 2.491   |
| ## MapLabelOverlook                                  | 6.117e-02 | 0.041   |
| ## MapLabelParkrose                                  | 5.511e-02 | -9.044  |
| ## MapLabelParkrose Heights Association of Neighbors | 5.362e-02 | -10.138 |
| ## MapLabelPiedmont                                  | 5.803e-02 | -1.003  |
| ## MapLabelPleasant Valley                           | 4.815e-02 | -8.132  |
| ## MapLabelPortsmouth                                | 6.919e-02 | -0.832  |
| ## MapLabelPowellhurst-Gilbert                       | 4.559e-02 | -10.600 |
| ## MapLabelReed                                      | 4.732e-02 | -2.368  |
| ## MapLabelRichmond                                  | 3.734e-02 | -1.390  |
| ## MapLabelRose City Park                            | 2.501e-02 | -2.037  |
| ## MapLabelRoseway                                   | 3.151e-02 | -4.916  |
| ## MapLabelRussell                                   | 5.368e-02 | -8.917  |
| ## MapLabelSabin Community Association               | 2.755e-02 | -0.681  |
| ## MapLabelSellwood-Moreland Improvement League      | 4.052e-02 | -0.889  |
| ## MapLabelSouth Burlingame                          | 3.442e-02 | 1.957   |
| ## MapLabelSouth Portland                            | 4.361e-02 | 6.690   |
| ## MapLabelSouth Tabor                               | 3.948e-02 | -3.565  |
| ## MapLabelSouthwest Hills Residential League        | 5.066e-02 | 2.375   |
| ## MapLabelSt. Johns                                 | 6.929e-02 | -0.883  |
| ## MapLabelSullivan's Gulch                          | 5.460e-02 | -3.710  |
| ## MapLabelSumner Association of Neighbors           | 6.201e-02 | -8.232  |
| ## MapLabelSunderland Association of Neighbors       | 1.557e-01 | -2.755  |
| ## MapLabelSunnyside                                 | 4.127e-02 | -0.353  |
| ## MapLabelSylvan-Highlands                          | 5.977e-02 | -0.297  |
| ## MapLabelUniversity Park                           | 6.937e-02 | 0.490   |
| ## MapLabelVernon                                    | 4.929e-02 | 0.087   |
| ## MapLabelWest Portland Park                        | NA        | NA      |
| ## MapLabelWilkes Community Group                    | 5.657e-02 | -7.756  |
| ## MapLabelWoodland Park                             | 7.353e-02 | -7.501  |
| ## MapLabelWoodlawn                                  | 5.343e-02 | -1.619  |
| ## MapLabelWoodstock                                 | 4.294e-02 | -3.799  |
| ## CN_score  | 2.760e-04 | -3.646  |
| ## dist_ugb  | 1.320e-06 | -2.773  |
| ## conECSI   | 2.527e-01 | 1.098   |
| ## conLUST   | 1.812e-01 | 0.255   |
| ## conHist   | 1.687e-02 | 3.880   |
| ## conHistLdm  | 7.115e-02 | 0.532   |
| ## conNatAm  | NA        | NA      |
| ## conAirHgt   | 1.231e-02 | 3.168   |
| ## conHeliprt  | NA        | NA      |
| ## conNoise  | 2.428e-02 | 0.151   |
| ## conGW   | 1.360e-01 | 1.205   |
| ## conLSHA   | 1.104e-02 | 1.989   |
| ## conSLIDO  | 1.505e-02 | -1.115  |
| ## conSlp25  | 1.032e-02 | 0.749   |
| ## conInstit   | NA        | NA      |
| ## conPrvCom   | 2.546e-01 | 1.267   |
| ## conPubOwn   | 9.557e-02 | -1.544  |
| ## conSewer  | 3.257e-02 | 1.020   |
| ## conStorm  | 8.000e-03 | -1.335  |
| ## conTranCap  | 8.670e-03 | -0.931  |
| ## conTranInt  | 9.499e-03 | -2.227  |
| ## conTranSub  | 5.634e-03 | -4.283  |

|  |           |        |
|--|-----------|--------|
| ## conWater                              | 1.040e-02 | -3.258 |
| ## conView                               | NA        | NA     |
| ## conCovrly                             | 1.142e-02 | 0.791  |
| ## conPovrly                             | 1.585e-02 | -1.101 |
| ## conFldway                             | 6.418e-02 | 0.062  |
| ## conWetland                            | 6.139e-02 | -1.752 |
| ## conFld100                             | 3.581e-02 | -0.049 |
| ## pct_conFld100                         | 5.642e-02 | -0.468 |
| ## pct_conPovrly                         | 2.563e-01 | 0.021  |
| ## pct_conCovrly                         | 2.248e-02 | 2.858  |
| ## pct_conWetland                        | NA        | NA     |
| ## pct_conFldway                         | 1.981e-01 | 0.437  |
| ## pct_canopy_cov                        | 1.261e-02 | -3.892 |
| ##                                       | Pr(> t )  |        |
| ## (Intercept)                           | < 2e-16   | ***    |
| ## f_baths                               | < 2e-16   | ***    |
| ## h_baths                               | < 2e-16   | ***    |
| ## n_fireplaces                          | 0.579128  |        |
| ## yearbuilt                             | 4.50e-13  | ***    |
| ## totalsqft                             | < 2e-16   | ***    |
| ## I(totalsqft^2)                        | < 2e-16   | ***    |
| ## taxlot_area                           | < 2e-16   | ***    |
| ## FLOORS                                | NA        |        |
| ## surfelev                              | 9.38e-11  | ***    |
| ## percent_vacant                        | 0.780197  |        |
| ## dist_cityhall                         | < 2e-16   | ***    |
| ## HIGH_SCHCLEVELAND HS                  | 0.004137  | **     |
| ## HIGH_SCHDAVID DOUGLAS HS              | 0.000134  | ***    |
| ## HIGH_SCHFRANKLIN HS                   | 0.000382  | ***    |
| ## HIGH_SCHGRANT HS                      | 0.010718  | *      |
| ## HIGH_SCHGRANT-JEFF                    | 2.32e-05  | ***    |
| ## HIGH_SCHLINCOLN HS                    | 9.92e-09  | ***    |
| ## HIGH_SCHMADISON HS                    | 9.53e-10  | ***    |
| ## HIGH_SCHMADISON-JEFF                  | 1.97e-07  | ***    |
| ## HIGH_SCHPARKROSE HS                   | 0.066940  | .      |
| ## HIGH_SCHREYNOLDS HS                   | 0.222445  |        |
| ## HIGH_SCHRIVERDALE HS                  | 0.717870  |        |
| ## HIGH_SCHROOS-JEFF                     | 2.71e-06  | ***    |
| ## HIGH_SCHROOSEVELT CAMPUS              | 2.37e-06  | ***    |
| ## HIGH_SCHSUNSET HS                     | 0.001786  | **     |
| ## HIGH_SCHWILSON HS                     | < 2e-16   | ***    |
| ## MapLabelArbor Lodge                   | 0.813772  |        |
| ## MapLabelArdenwald-Johnson Creek       | 5.50e-05  | ***    |
| ## MapLabelArgay Terrace                 | 5.25e-15  | ***    |
| ## MapLabelArlington Heights             | 0.004695  | **     |
| ## MapLabelArnold Creek                  | 1.44e-05  | ***    |
| ## MapLabelAshcreek                      | 0.010068  | *      |
| ## MapLabelBeaumont-Wilshire             | 0.519418  |        |
| ## MapLabelBoise                         | 0.764119  |        |
| ## MapLabelBrentwood-Darlington          | < 2e-16   | ***    |
| ## MapLabelBridlemile                    | 0.384673  |        |
| ## MapLabelBrooklyn Action Corps         | 2.60e-07  | ***    |
| ## MapLabelBuckman Community Association | 0.043958  | *      |
| ## MapLabelCathedral Park                | 0.317215  |        |

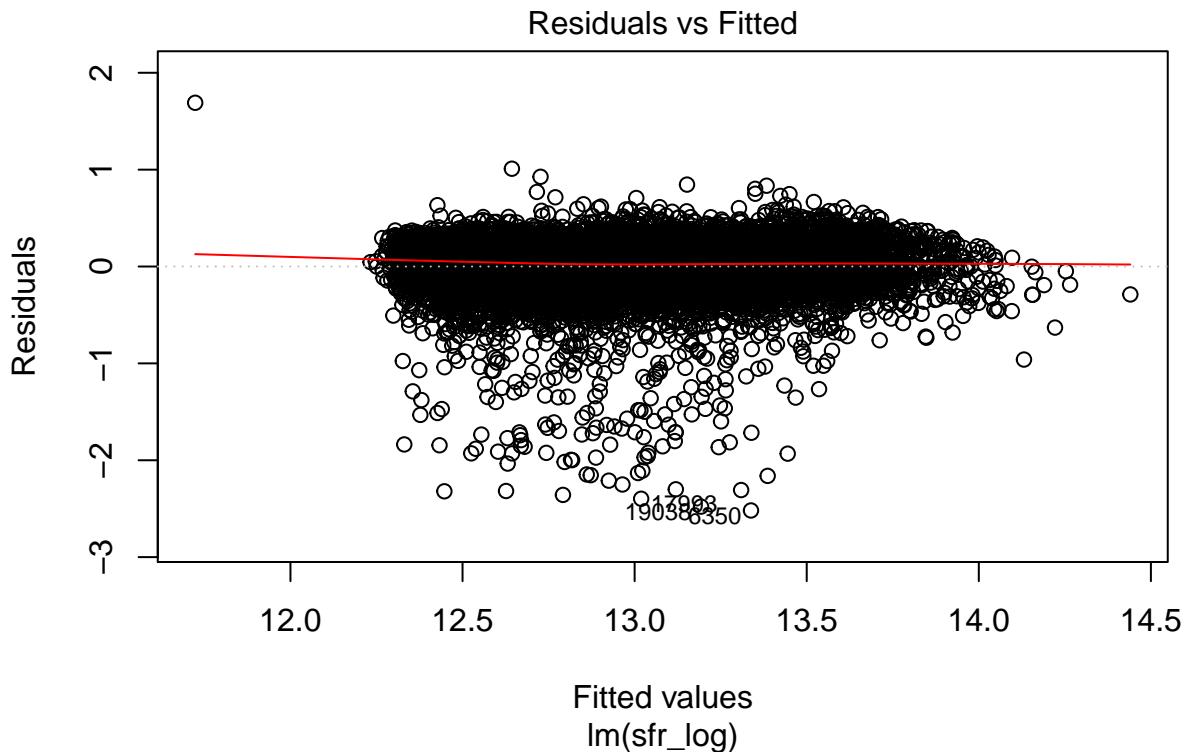
|  |              |
|--|--------------|
| ## MapLabelCentennial Community Association              | < 2e-16 ***  |
| ## MapLabelCollins View                                  | 0.006962 **  |
| ## MapLabelConcordia                                     | 0.078929 .   |
| ## MapLabelCreston-Kenilworth                            | 2.10e-10 *** |
| ## MapLabelCrestwood                                     | 0.811732     |
| ## MapLabelCully Association of Neighbors                | 6.31e-16 *** |
| ## MapLabelEast Columbia                                 | 3.69e-07 *** |
| ## MapLabelEastmoreland                                  | 0.005266 **  |
| ## MapLabelEliot   | 0.276880     |
| ## MapLabelFar Southwest                                 | 0.000459 *** |
| ## MapLabelForest Park                                   | 0.239991     |
| ## MapLabelFoster-Powell                                 | 1.36e-10 *** |
| ## MapLabelGlenfair                                      | 1.77e-15 *** |
| ## MapLabelGoose Hollow Foothills League                 | 0.038899 *   |
| ## MapLabelGrant Park                                    | 0.000277 *** |
| ## MapLabelHayden Island Neighborhood Network            | 0.238722     |
| ## MapLabelHayhurst                                      | 0.009408 **  |
| ## MapLabelHazelwood                                     | < 2e-16 ***  |
| ## MapLabelHealy Heights                                 | 0.165934     |
| ## MapLabelHillsdale                                     | 0.003706 **  |
| ## MapLabelHillside                                      | 0.001813 **  |
| ## MapLabelHollywood                                     | 0.324402     |
| ## MapLabelHomestead                                     | 0.453935     |
| ## MapLabelHosford-Abernethy Neighborhood District Assn. | 0.118995     |
| ## MapLabelHumboldt                                      | 0.469729     |
| ## MapLabelIrvington Community Association               | 0.538597     |
| ## MapLabelKenton  | 0.417632     |
| ## MapLabelKerns   | 0.942953     |
| ## MapLabelKing  | 0.001142 **  |
| ## MapLabelLaurelhurst                                   | 0.000769 *** |
| ## MapLabelLents   | < 2e-16 ***  |
| ## MapLabelLinnton                                       | 0.211179     |
| ## MapLabelMadison South                                 | < 2e-16 ***  |
| ## MapLabelMaplewood                                     | 0.002541 **  |
| ## MapLabelMarkham                                       | 0.857195     |
| ## MapLabelMarshall Park                                 | 0.002082 **  |
| ## MapLabelMC Unclaimed #13                              | 0.465042     |
| ## MapLabelMill Park                                     | < 2e-16 ***  |
| ## MapLabelMontavilla                                    | 3.78e-12 *** |
| ## MapLabelMt. Scott-Arleta                              | 5.96e-09 *** |
| ## MapLabelMt. Tabor                                     | 0.887017     |
| ## MapLabelMultnomah                                     | 0.000579 *** |
| ## MapLabelNorth Tabor                                   | 0.002656 **  |
| ## MapLabelNorthwest District Association                | 1.87e-09 *** |
| ## MapLabelNorthwest Heights                             | 0.012765 *   |
| ## MapLabelOverlook                                      | 0.967534     |
| ## MapLabelParkrose                                      | < 2e-16 ***  |
| ## MapLabelParkrose Heights Association of Neighbors     | < 2e-16 ***  |
| ## MapLabelPiedmont                                      | 0.315656     |
| ## MapLabelPleasant Valley                               | 4.53e-16 *** |
| ## MapLabelPortsmouth                                    | 0.405634     |
| ## MapLabelPowellhurst-Gilbert                           | < 2e-16 ***  |
| ## MapLabelReed  | 0.017891 *   |
| ## MapLabelRichmond                                      | 0.164429     |

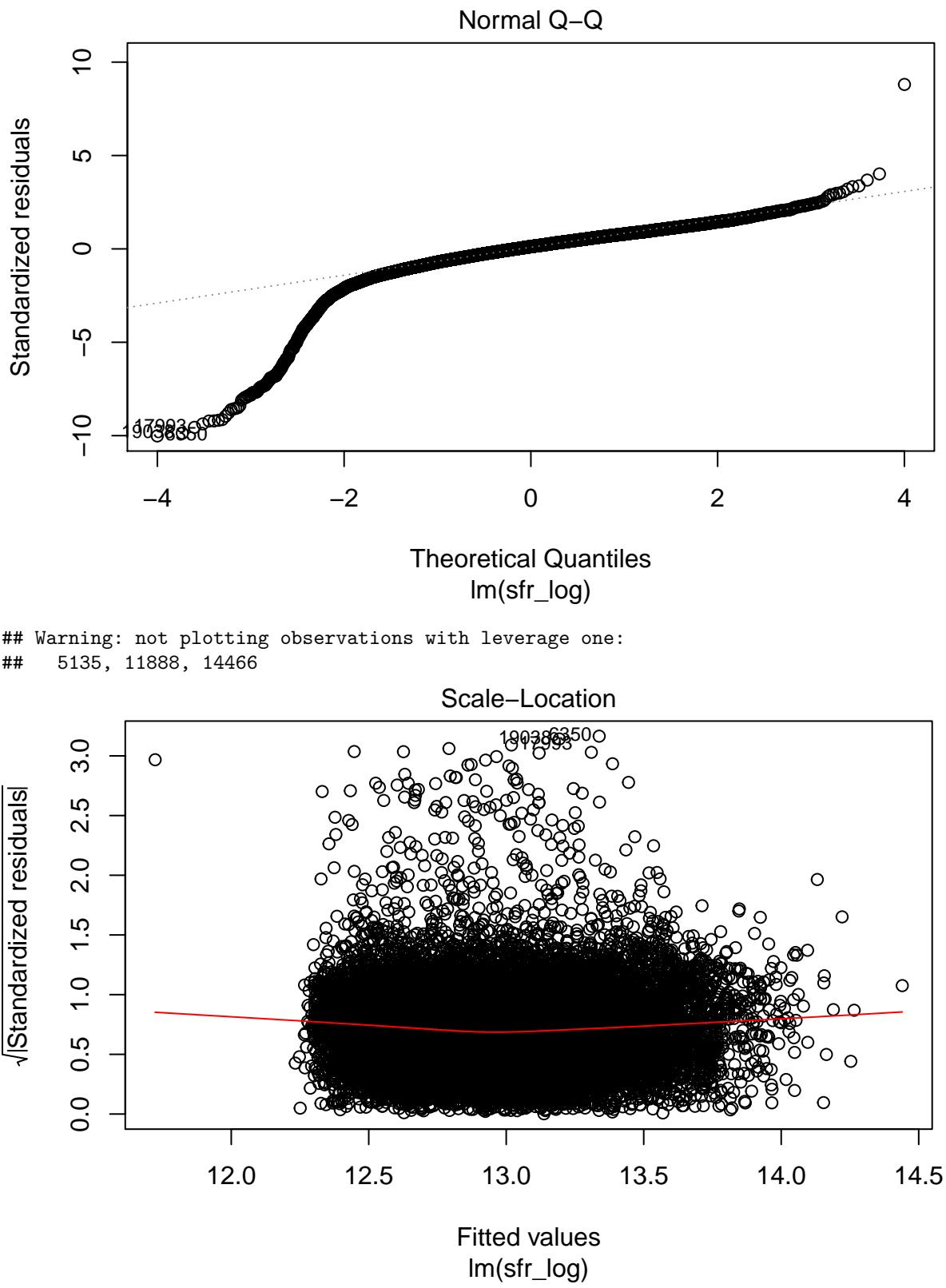
|   |              |
|---|--------------|
| ## MapLabelRose City Park                       | 0.041713 *   |
| ## MapLabelRoseway                              | 8.94e-07 *** |
| ## MapLabelRussell                              | < 2e-16 ***  |
| ## MapLabelSabin Community Association          | 0.495779     |
| ## MapLabelSellwood-Moreland Improvement League | 0.373926     |
| ## MapLabelSouth Burlingame                     | 0.050308 .   |
| ## MapLabelSouth Portland                       | 2.31e-11 *** |
| ## MapLabelSouth Tabor                          | 0.000365 *** |
| ## MapLabelSouthwest Hills Residential League   | 0.017560 *   |
| ## MapLabelSt. Johns                            | 0.377498     |
| ## MapLabelSullivan's Gulch                     | 0.000208 *** |
| ## MapLabelSumner Association of Neighbors      | < 2e-16 ***  |
| ## MapLabelSunderland Association of Neighbors  | 0.005869 **  |
| ## MapLabelSunnyside                            | 0.724329     |
| ## MapLabelSylvan-Highlands                     | 0.766132     |
| ## MapLabelUniversity Park                      | 0.624456     |
| ## MapLabelVernon                               | 0.931011     |
| ## MapLabelWest Portland Park                   | NA           |
| ## MapLabelWilkes Community Group               | 9.32e-15 *** |
| ## MapLabelWoodland Park                        | 6.69e-14 *** |
| ## MapLabelWoodlawn                             | 0.105374     |
| ## MapLabelWoodstock                            | 0.000146 *** |
| ## CN_score                                     | 0.000267 *** |
| ## dist_ugb                                     | 0.005569 **  |
| ## conECI                                       | 0.272404     |
| ## conLUST                                      | 0.798788     |
| ## conHist                                      | 0.000105 *** |
| ## conHistLdm                                   | 0.594927     |
| ## conNatAm                                     | NA           |
| ## conAirHgt                                    | 0.001537 **  |
| ## conHeliprt                                   | NA           |
| ## conNoise                                     | 0.880300     |
| ## conGW  | 0.228359     |
| ## conLSHA                                      | 0.046688 *   |
| ## conSLIDO                                     | 0.264819     |
| ## conSlp25                                     | 0.453985     |
| ## conInstit                                    | NA           |
| ## conPrvCom                                    | 0.205111     |
| ## conPubOwn                                    | 0.122719     |
| ## conSewer                                     | 0.307538     |
| ## conStorm                                     | 0.181808     |
| ## conTranCap                                   | 0.351894     |
| ## conTranInt                                   | 0.025951 *   |
| ## conTranSub                                   | 1.86e-05 *** |
| ## conWater                                     | 0.001123 **  |
| ## conView                                      | NA           |
| ## conCovrly                                    | 0.428943     |
| ## conPovrly                                    | 0.270920     |
| ## conFldway                                    | 0.950688     |
| ## conWetland                                   | 0.079826 .   |
| ## conFld100                                    | 0.960778     |
| ## pct_conFld100                                | 0.639774     |
| ## pct_conPovrly                                | 0.983187     |
| ## pct_conCovrly                                | 0.004263 **  |

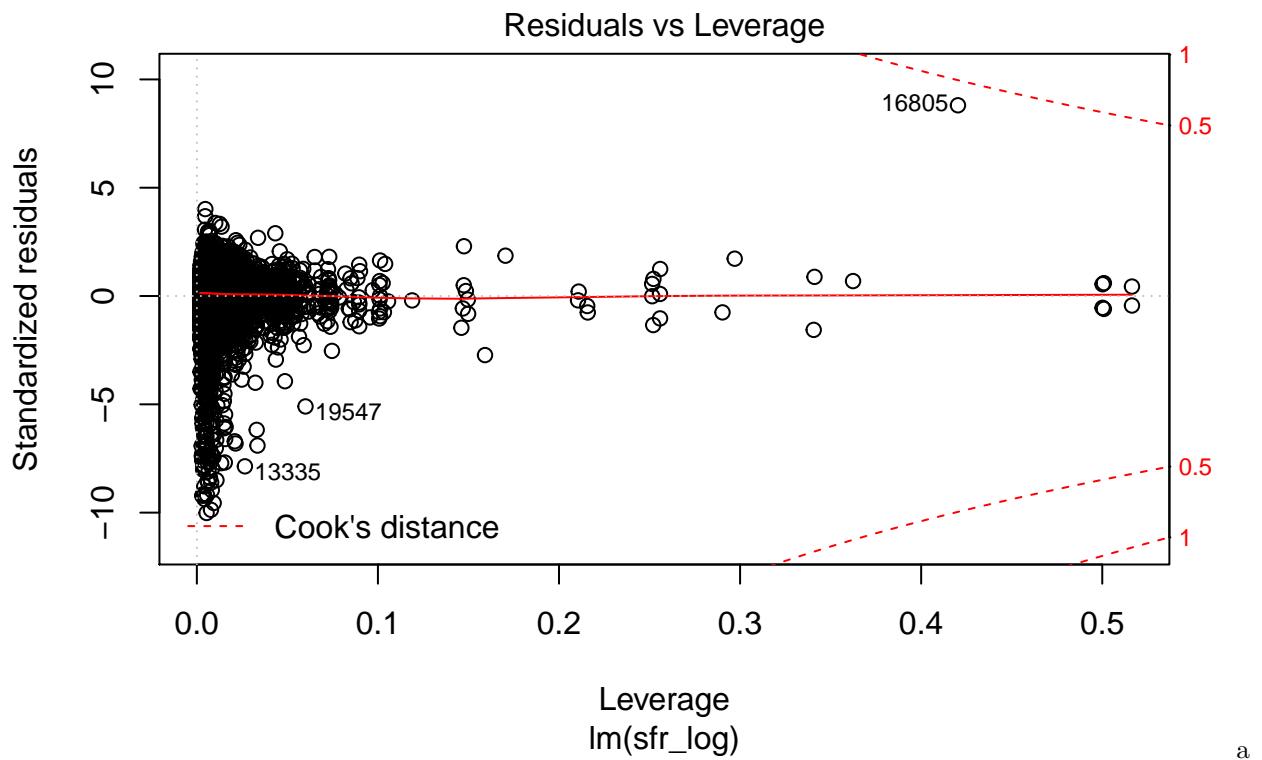
```

## pct_conWetland NA
## pct_conFldway 0.662471
## pct_canopy_cov 9.97e-05 ***
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.2521 on 15701 degrees of freedom
## (9675 observations deleted due to missingness)
## Multiple R-squared: 0.6602, Adjusted R-squared: 0.6571
## F-statistic: 213.3 on 143 and 15701 DF, p-value: < 2.2e-16
## Warning: not plotting observations with leverage one:
## 5135, 11888, 14466

```







little off at the edges normality of errors is really bad, skewing all over the place homoskedasticity is really bad too, should be a straight line but is not residuals?? unsure how to interpret, theres a little red line

## Diagnostics

### Cross-Validation and Sensitivity Analysis