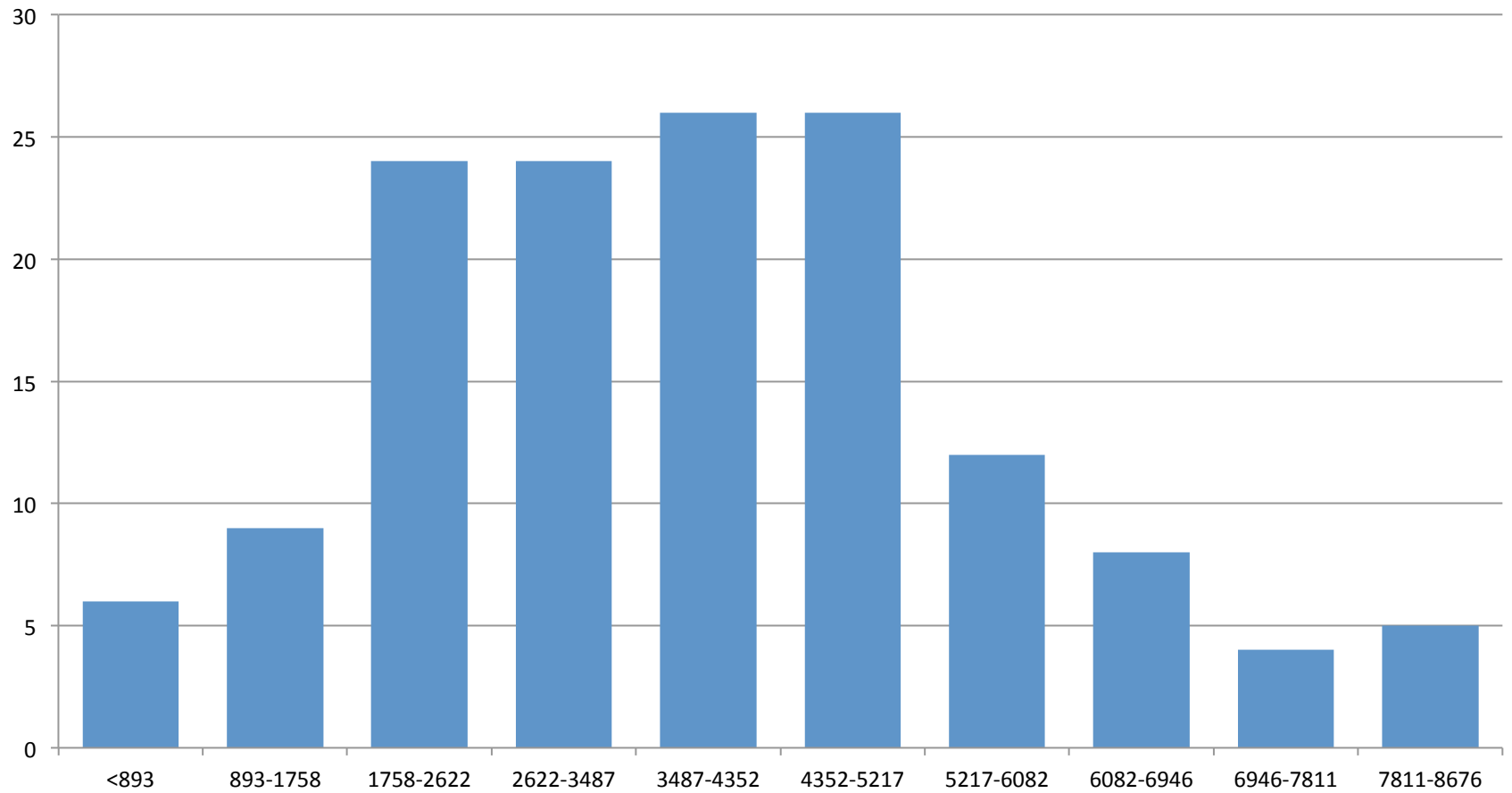


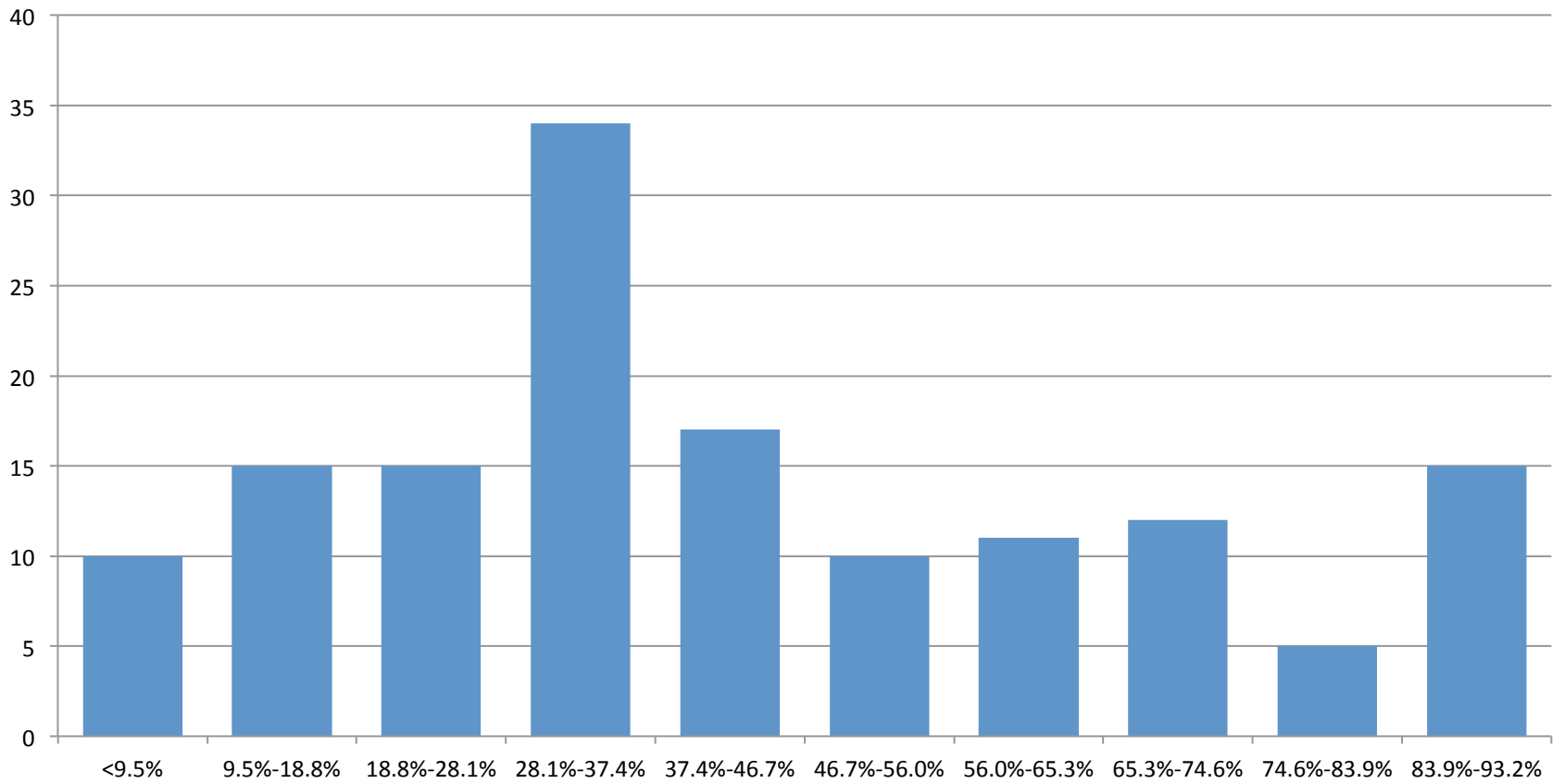
Stats & GIS

Spring 2009

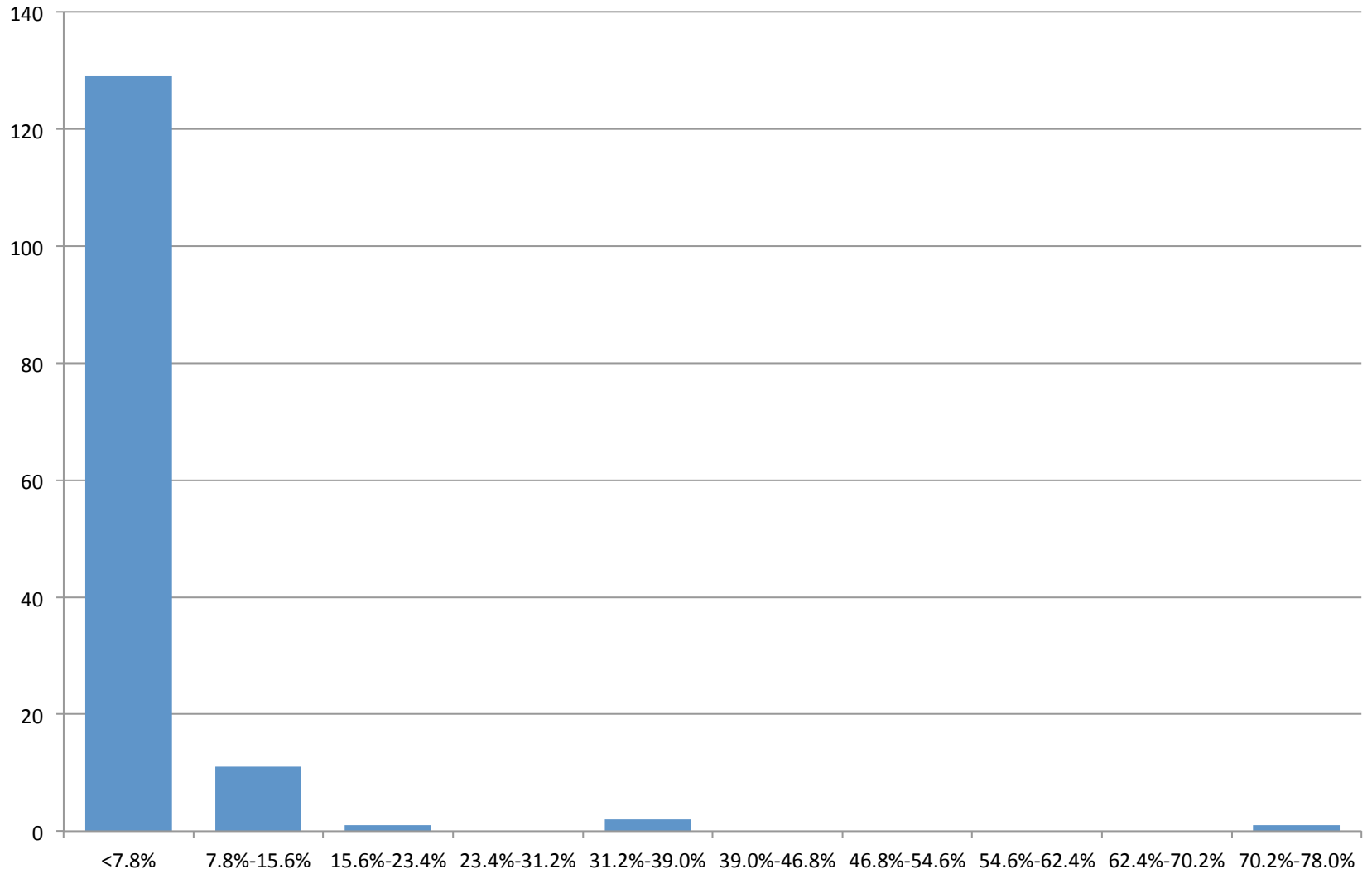
POP2000



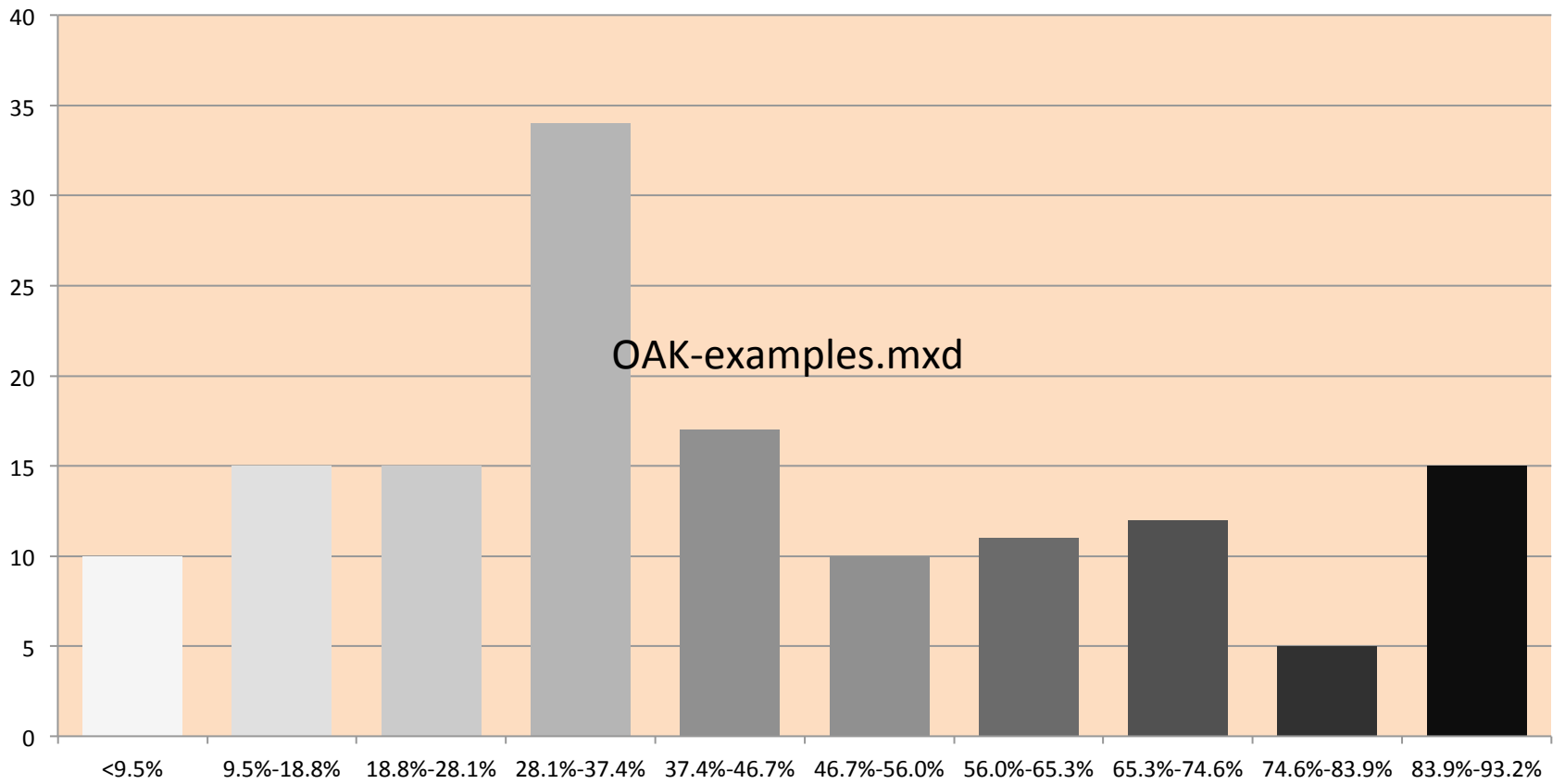
PCT_OOHU



PCT_VACANT



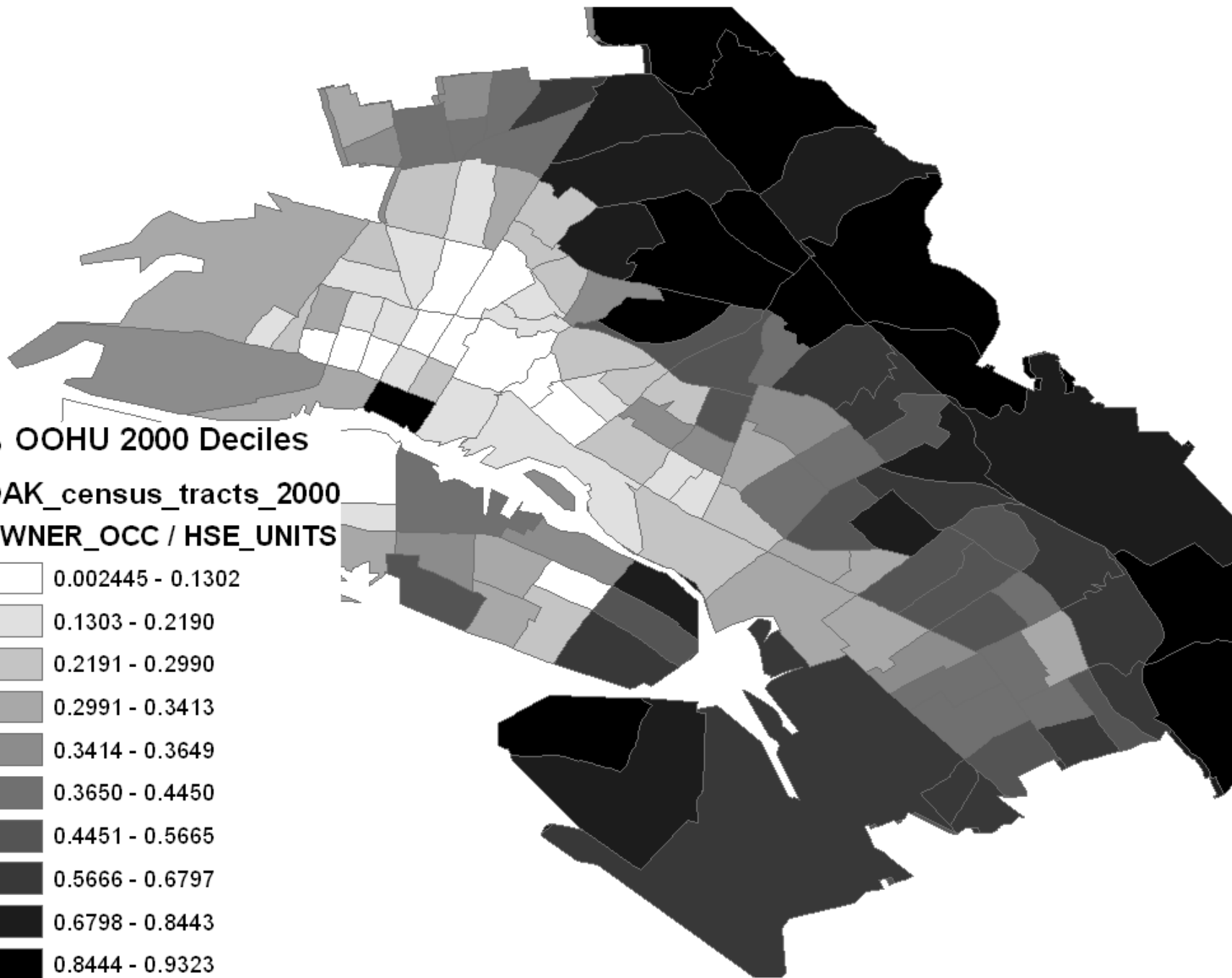
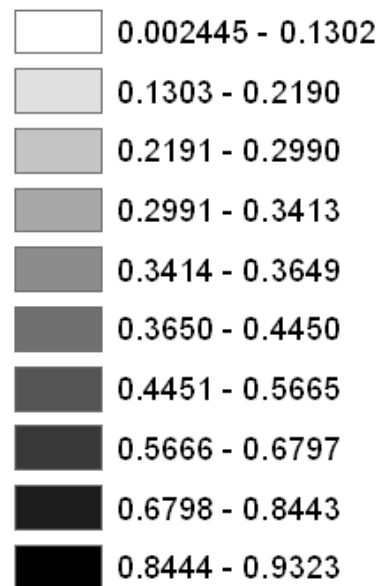
PCT_OOHU



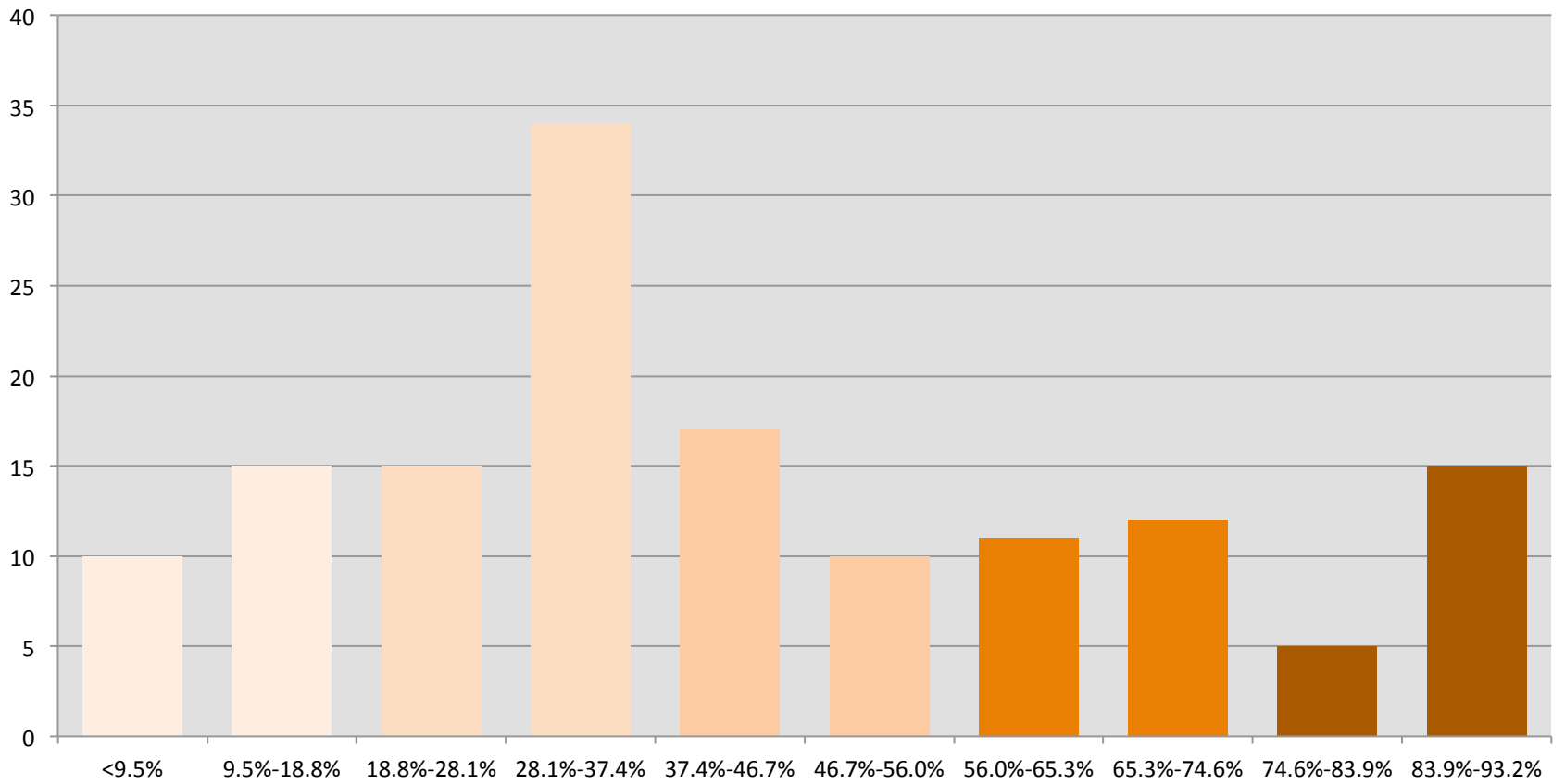
% OOHU 2000 Deciles

OAK_census_tracts_2000

OWNER_OCC / HSE_UNITS



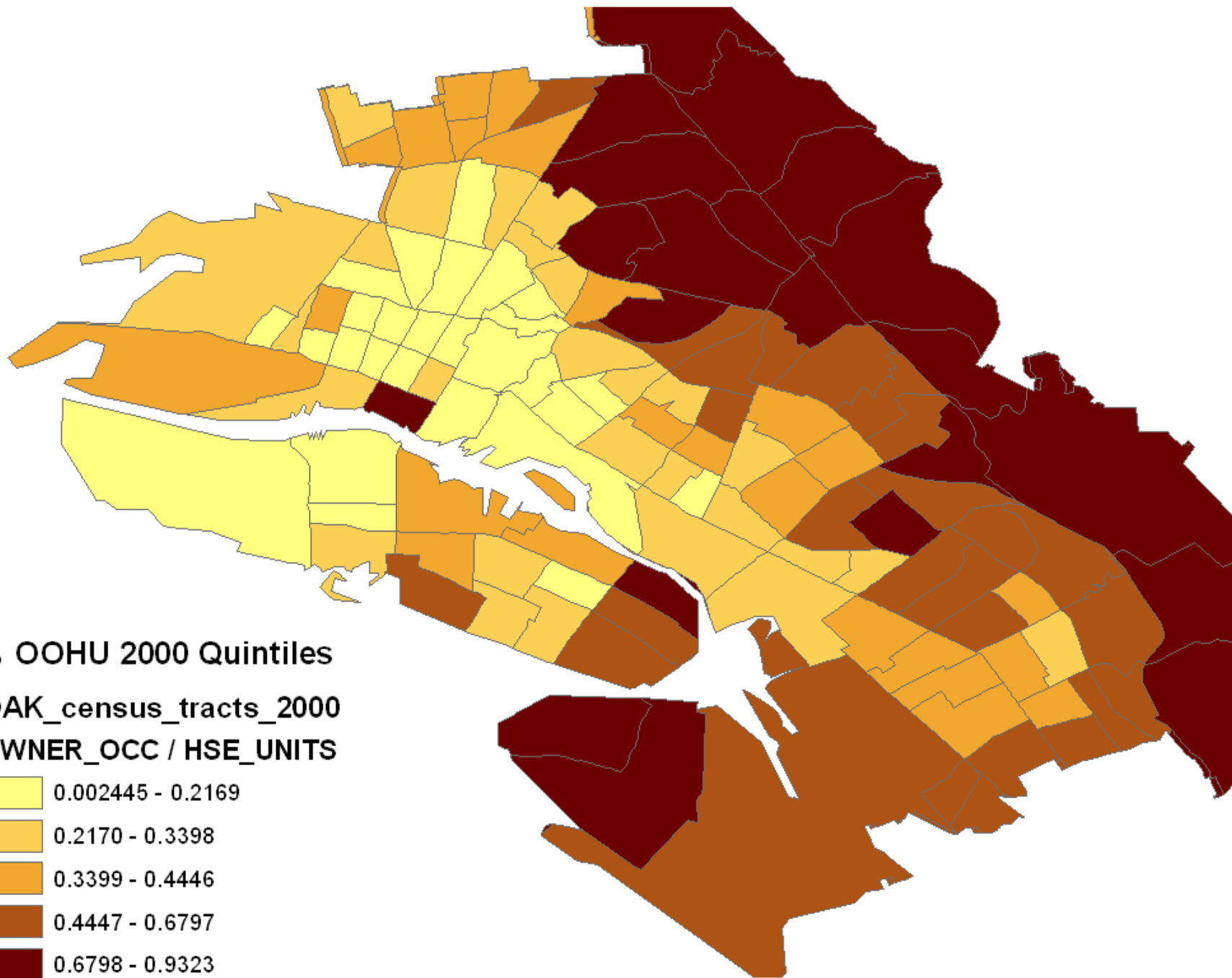
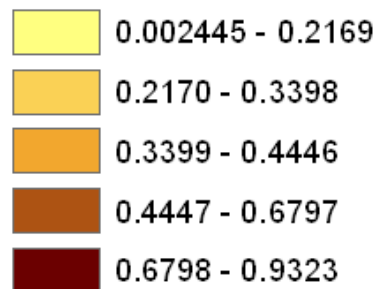
PCT_OOHU



% OOHU 2000 Quintiles

OAK_census_tracts_2000

OWNER_OCC / HSE_UNITS



Classification

Classification

Method: Quantile

Classes: 5

Data Exclusion

Exclusion ... Sampling ...

Columns: 100 Show Std. Dev. Show Mean

Classification Statistics

Count:	144
Minimum:	0%
Maximum:	93%
Sum:	6214%
Mean:	43%
Median:	36%
Standard Deviation:	25%

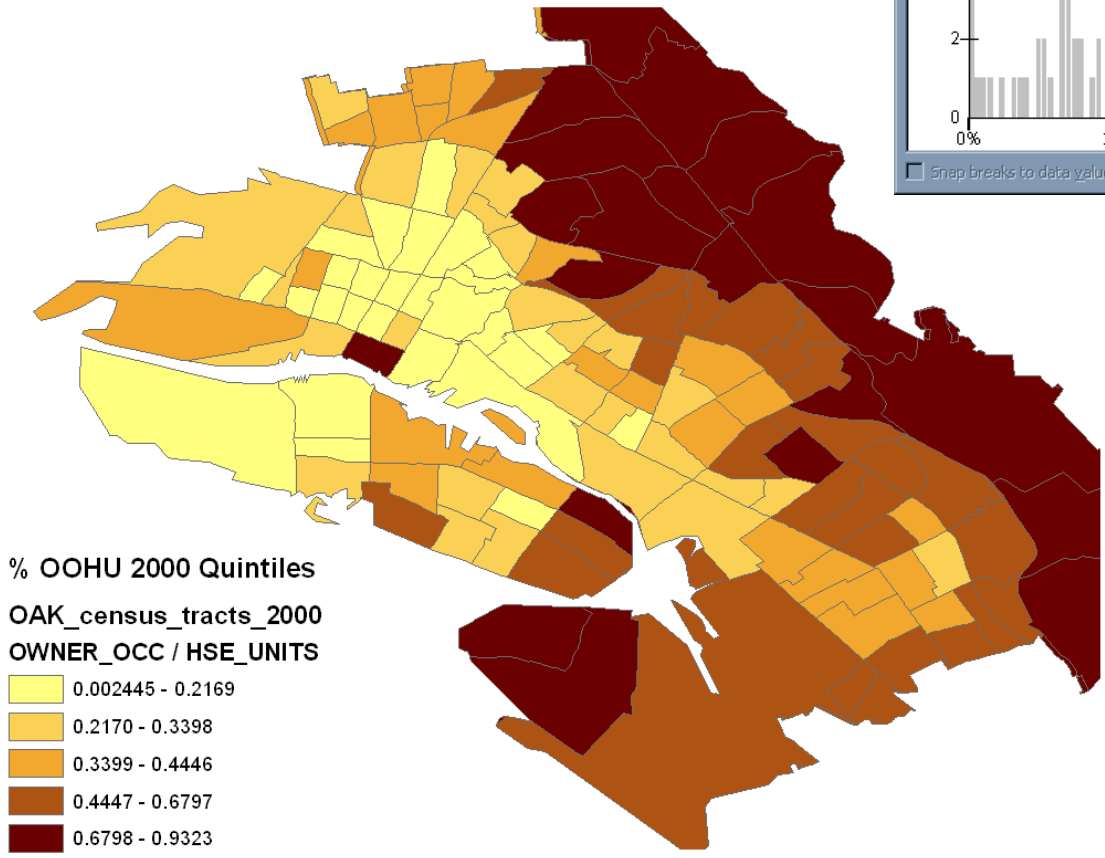
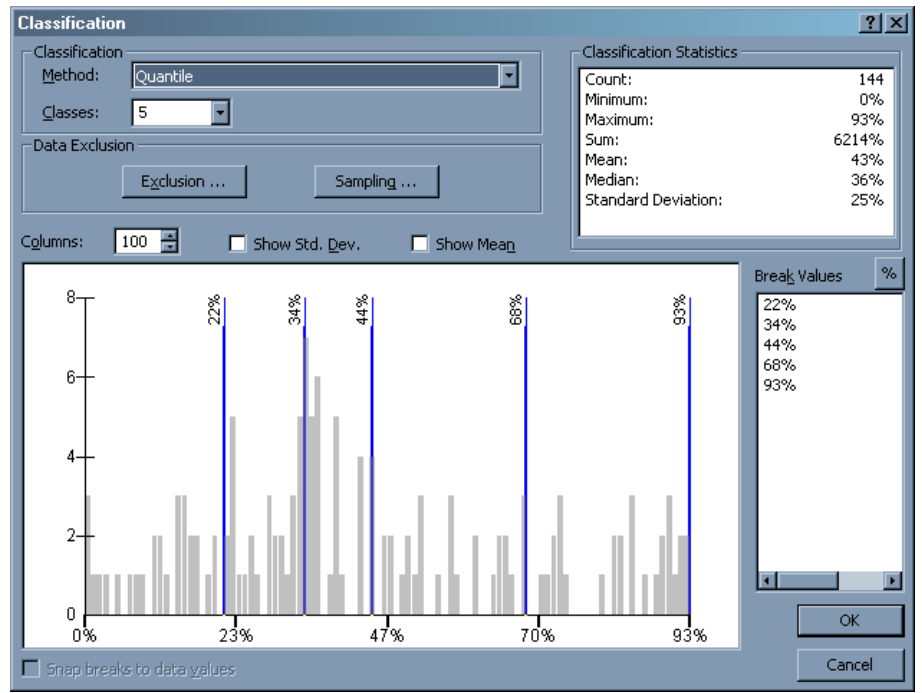
Columns: 100 Show Std. Dev. Show Mean

Break Values %

- 22%
- 34%
- 44%
- 68%
- 93%

Snap breaks to data values

OK
Cancel



Classification

Classification

Method: Equal Interval

Classes: 5

Data Exclusion

Exclusion ... Sampling ...

Columns: 100 Show Std. Dev. Show Mean

Classification Statistics

Count:	144
Minimum:	0%
Maximum:	93%
Sum:	6214%
Mean:	43%
Median:	36%
Standard Deviation:	25%

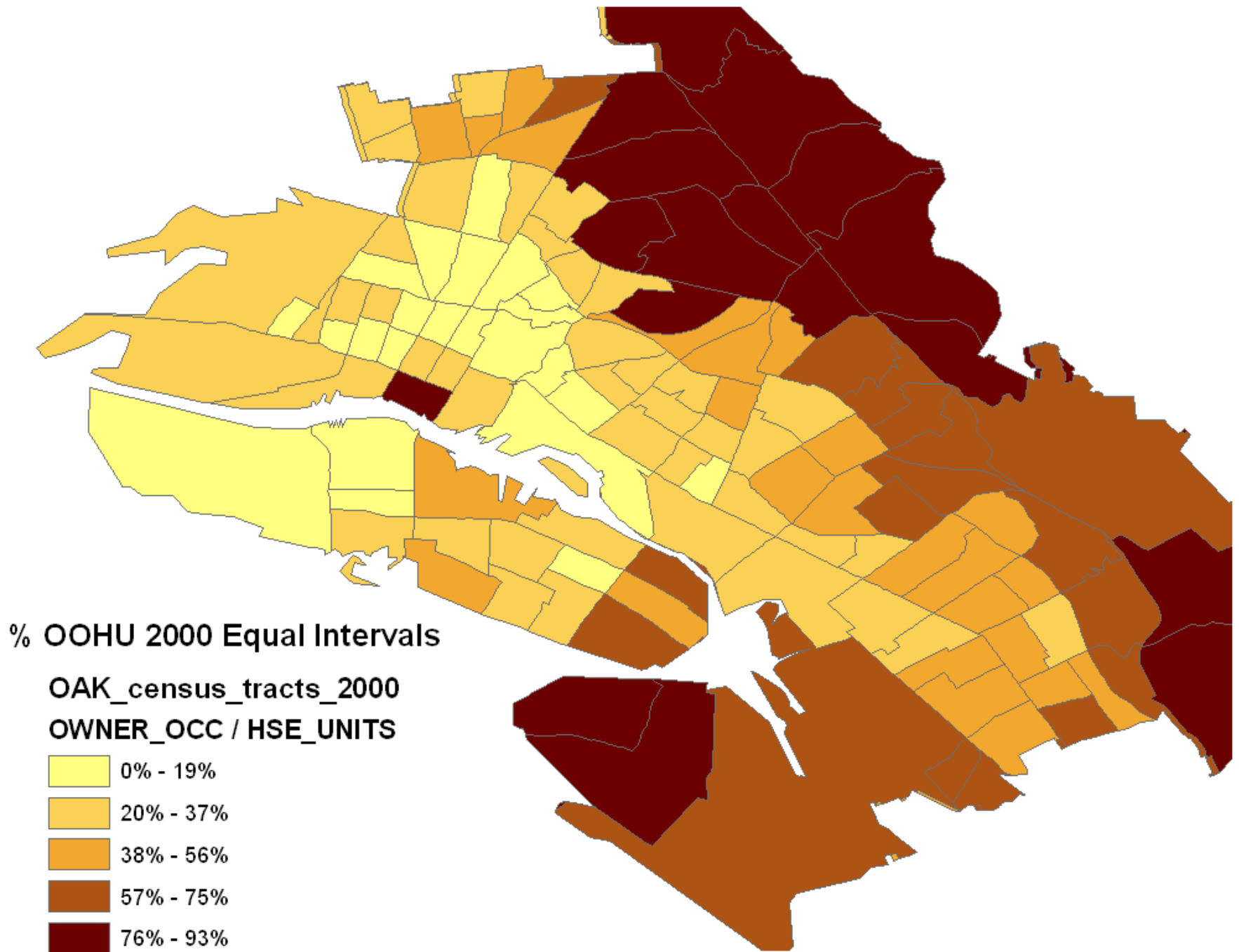
Columns: 100 Show Std. Dev. Show Mean

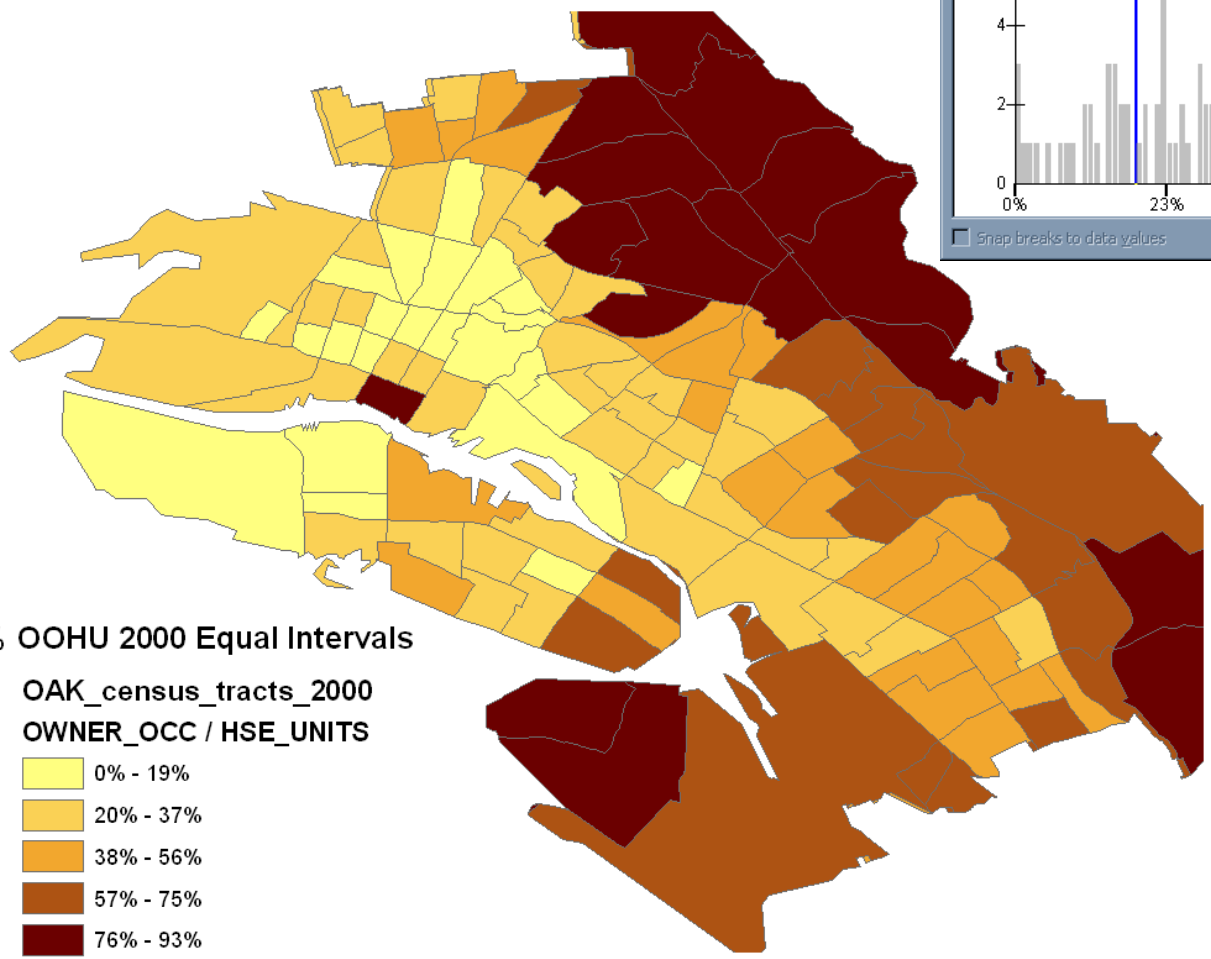
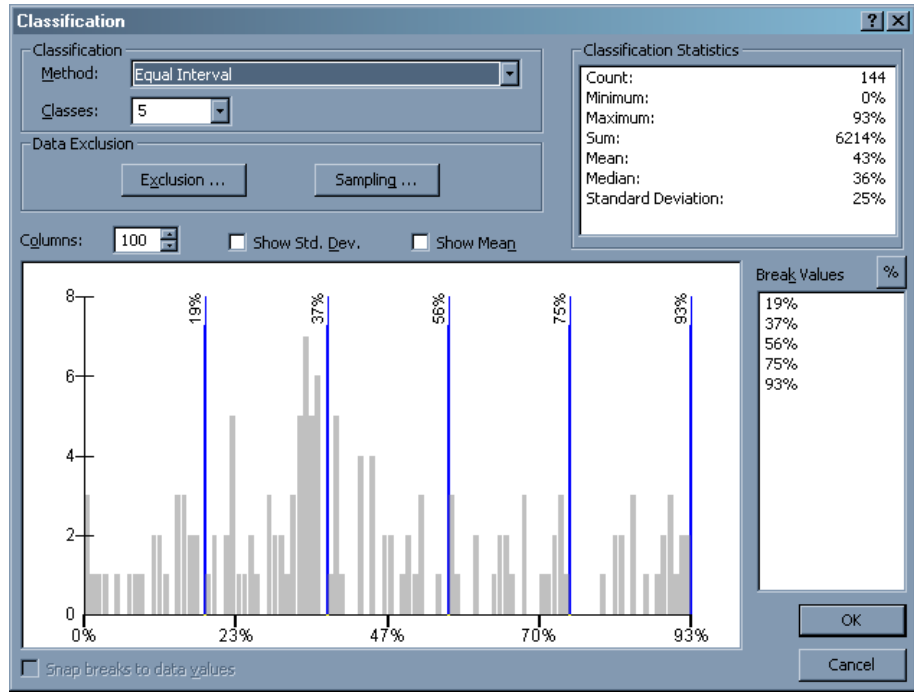
Break Values %

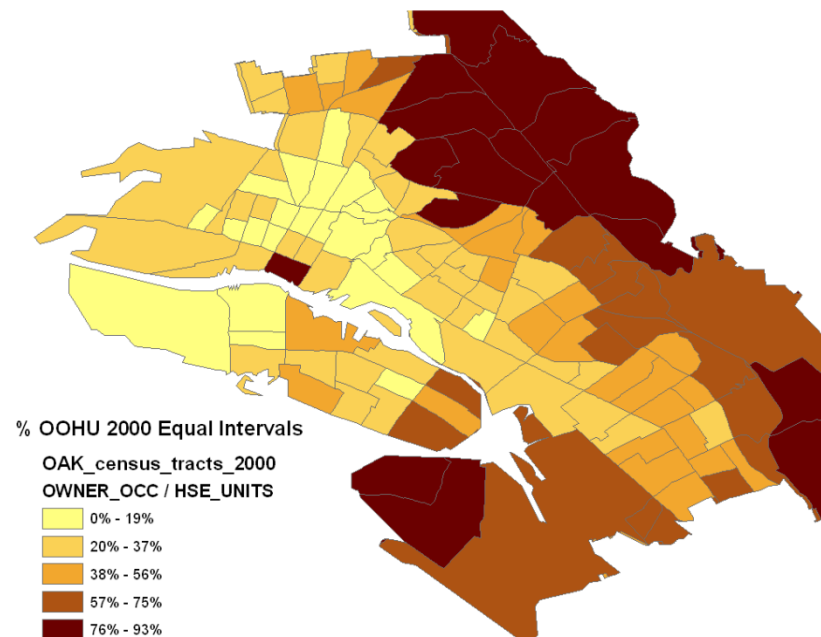
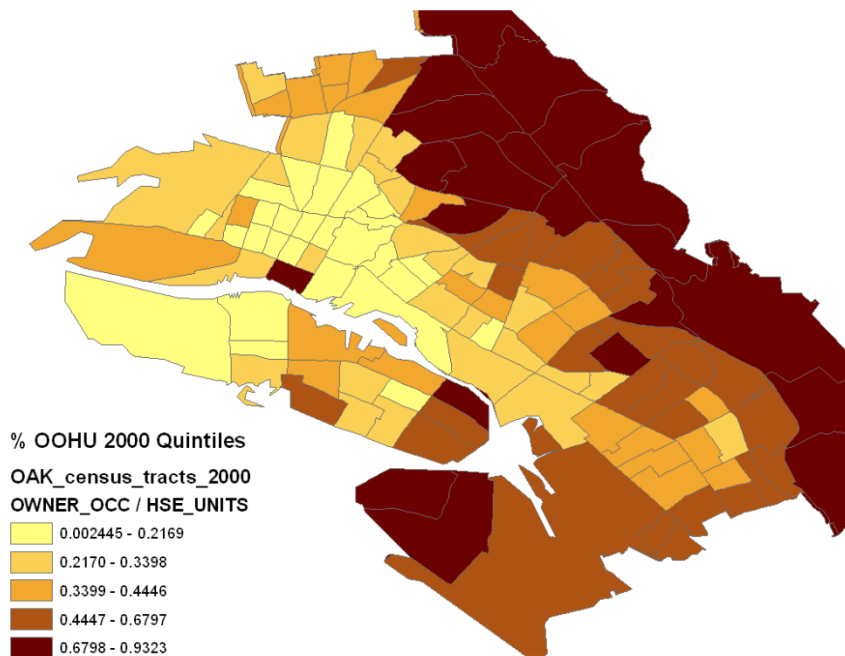
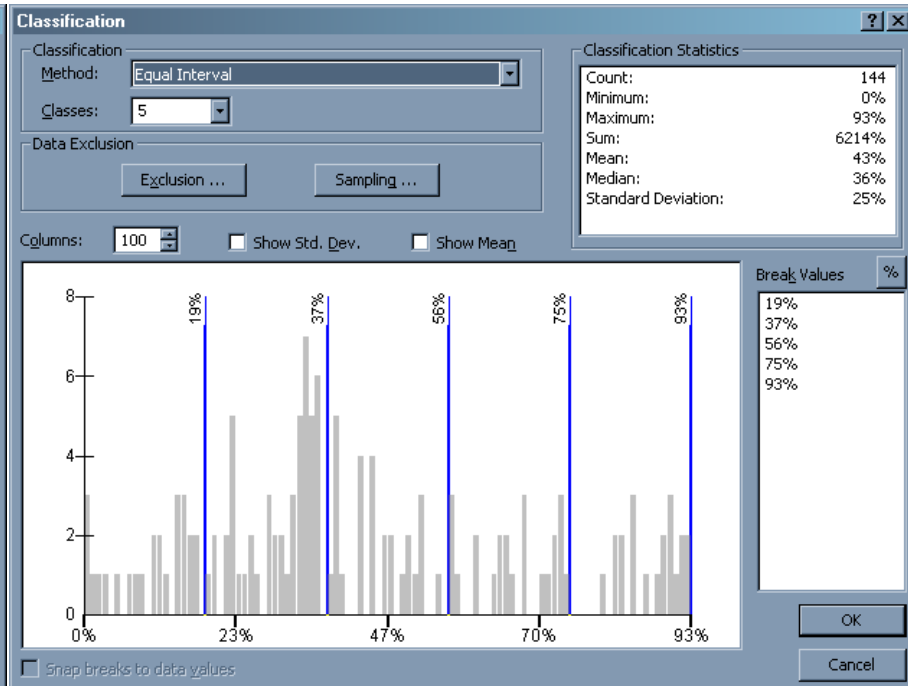
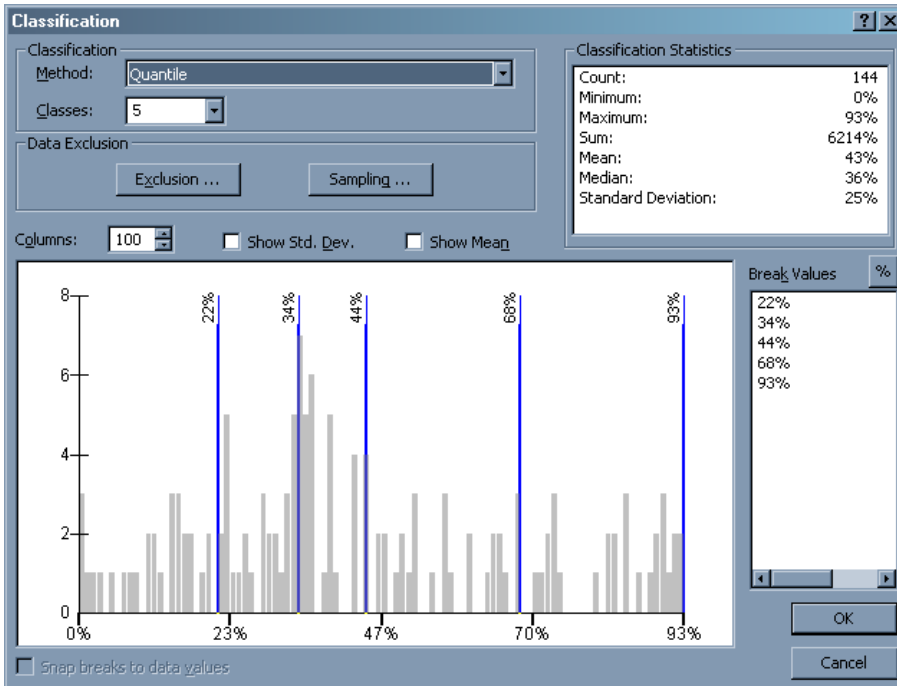
- 19%
- 37%
- 56%
- 75%
- 93%

Snap breaks to data values

OK Cancel







Classification

Classification

Method: Standard Deviation

Classes: 5 Interval Size: 1 Std Dev

Data Exclusion

Exclusion ...

Sampling ...

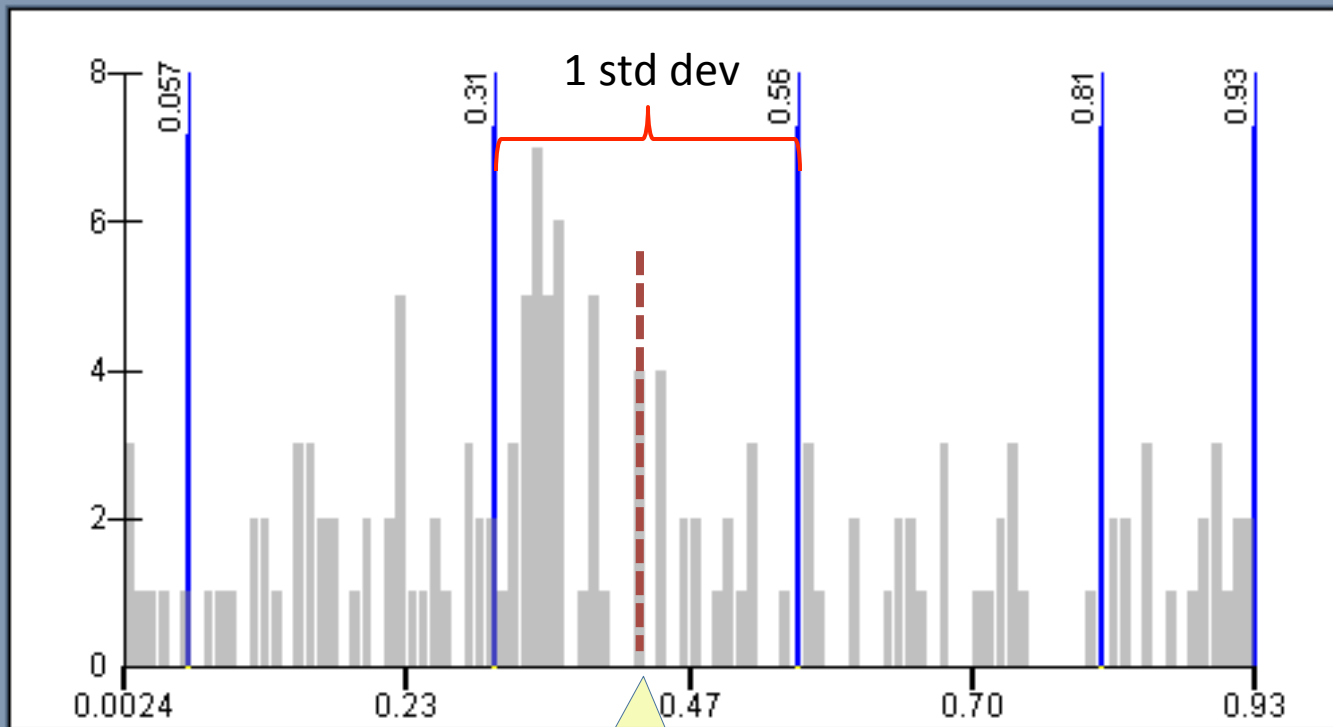
Columns: 100

Show Std. Dev.

Show Mean

Classification Statistics

Count:	144
Minimum:	0.0024
Maximum:	0.93
Sum:	62
Mean:	0.43
Median:	0.36
Standard Deviation:	0.25



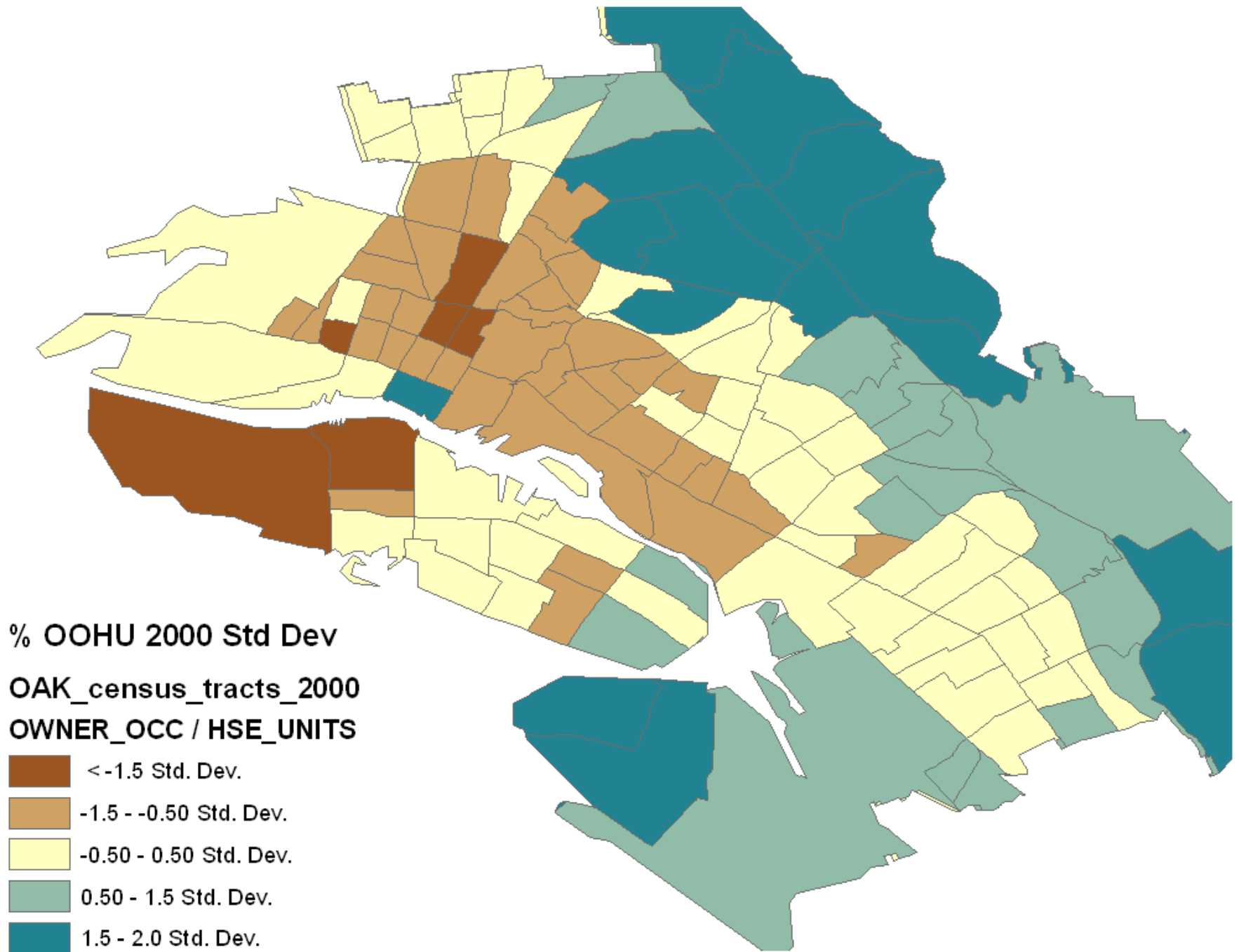
Break Values

- 0.057
- 0.31
- 0.56
- 0.81
- 0.93

OK

Cancel

Snap breaks to data values



Why does ArcGIS switch to a two color scale when I use standard deviation?

Classification



Classification

Method: Standard Deviation

Classes: 5 Interval Size: 1 Std Dev

Data Exclusion

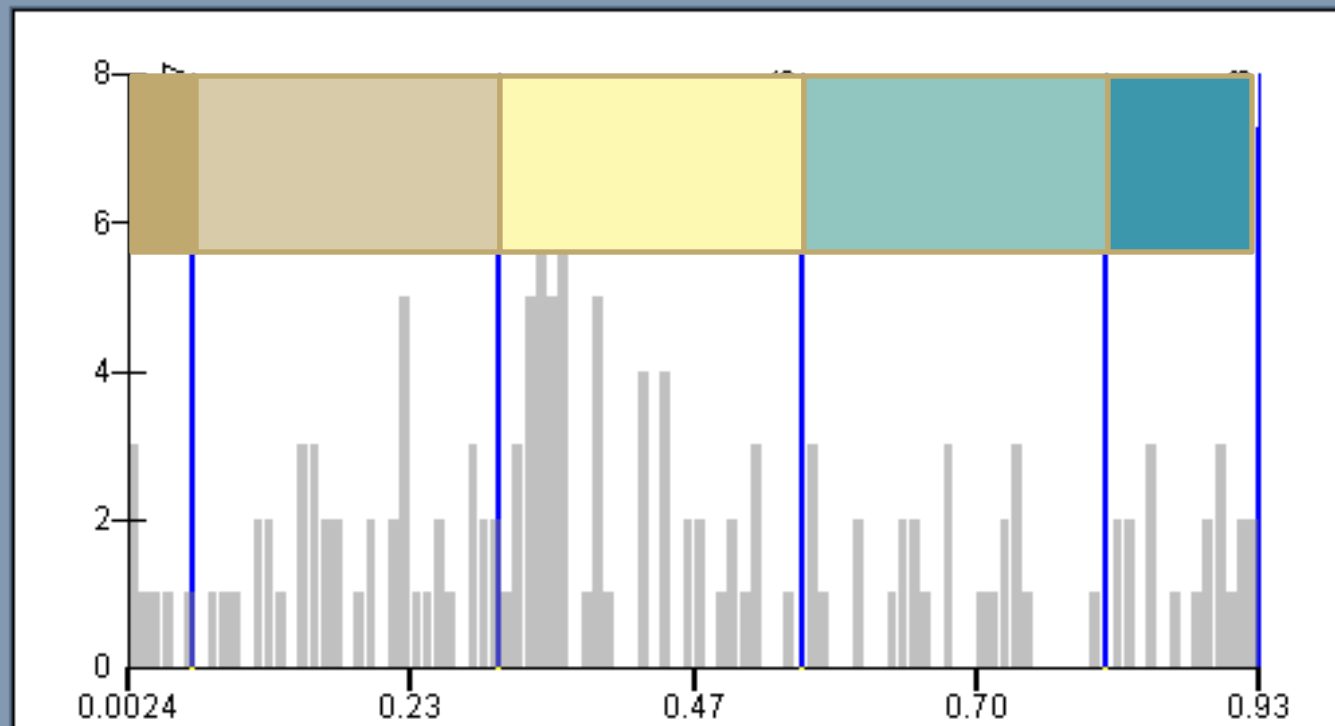
Exclusion ...

Sampling ...

Classification Statistics

Count:	144
Minimum:	0.0024
Maximum:	0.93
Sum:	62
Mean:	0.43
Median:	0.36
Standard Deviation:	0.25

Columns: 100 Show Std. Dev. Show Mean



Break Values %

- 0.057
- 0.31
- 0.56
- 0.81
- 0.93

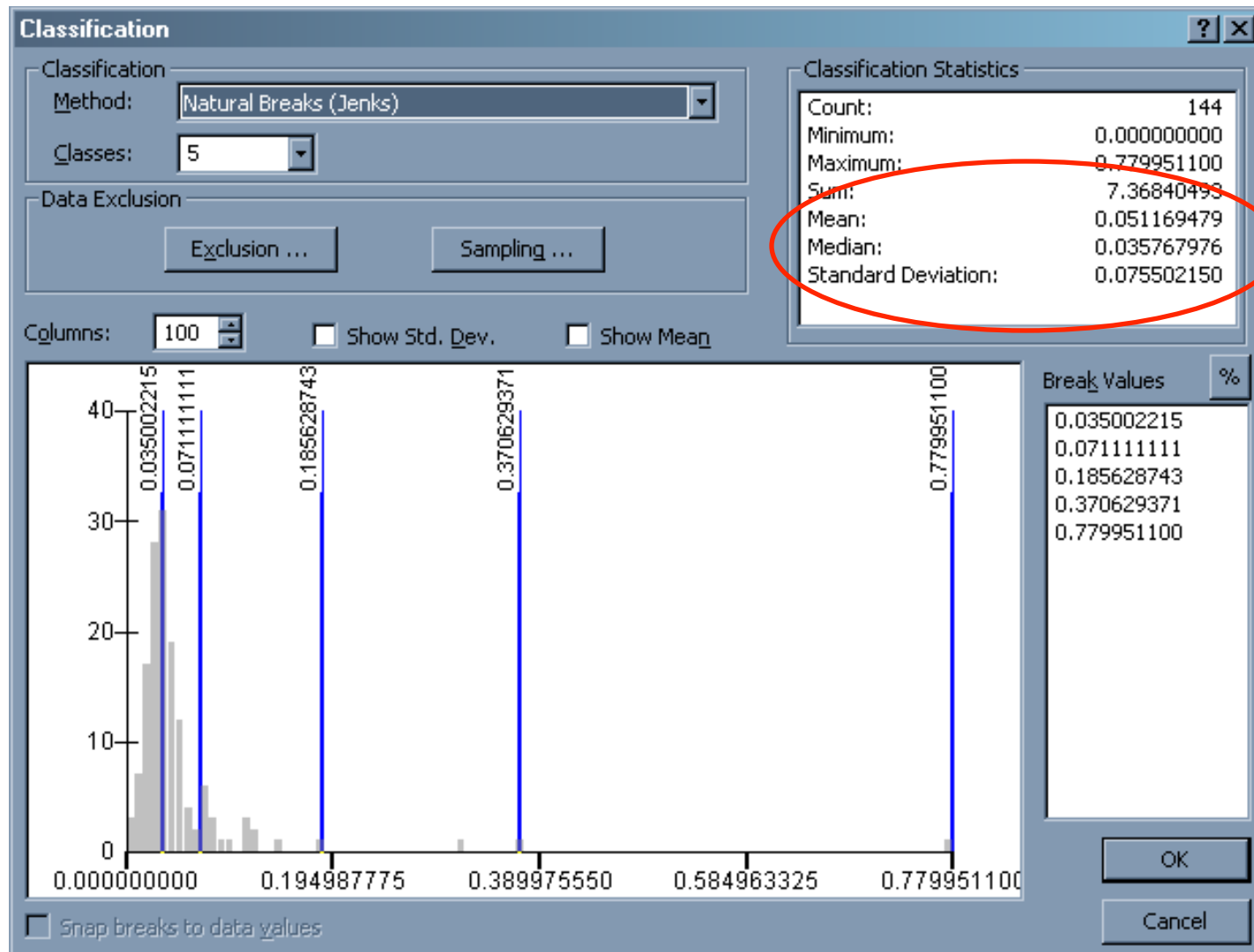
Snap breaks to data values

OK

Cancel

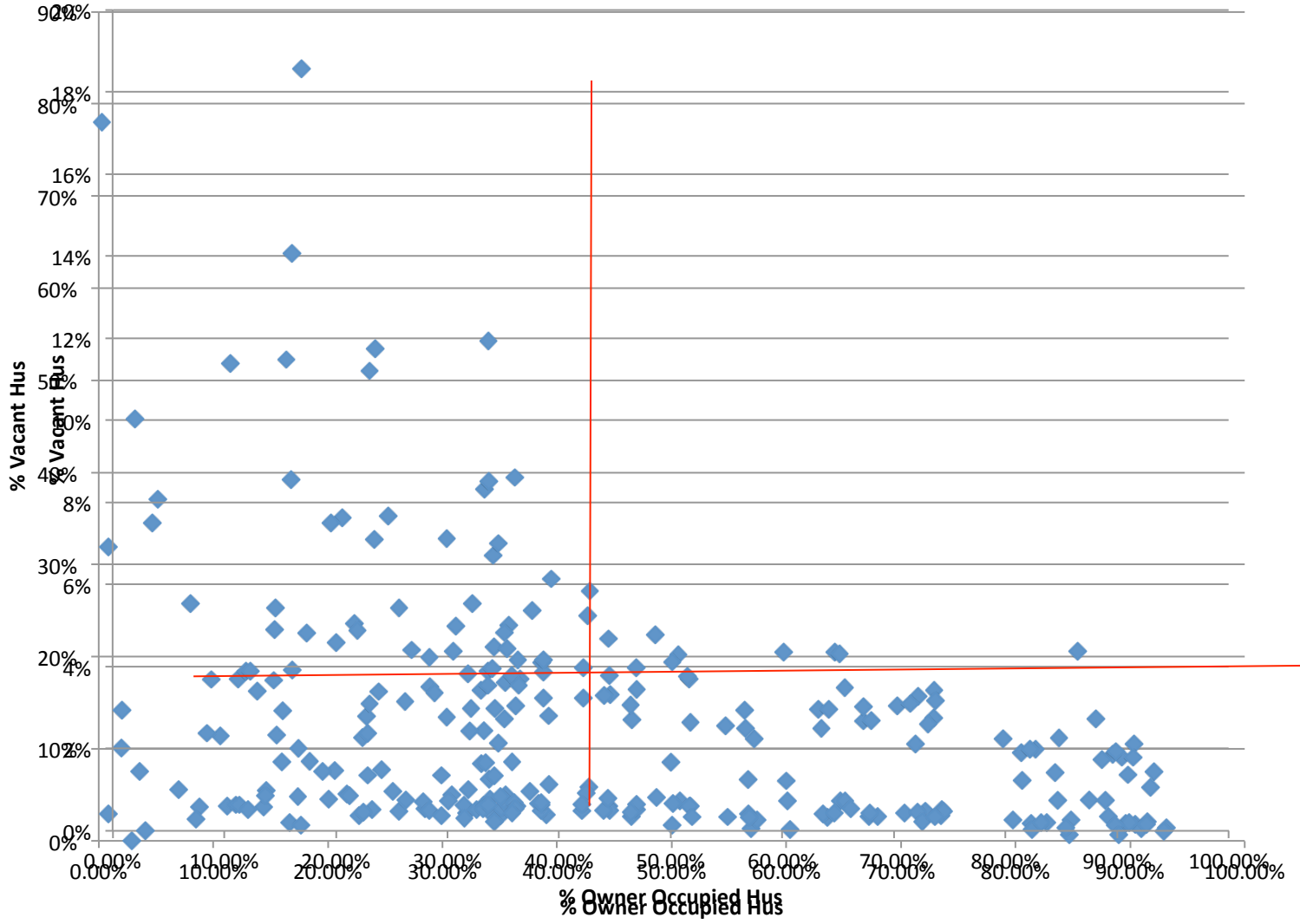
**WHAT ABOUT BIVARIATE
QUESTIONS?**

Median % vacant is about 3.5% (in 2000)



Owner Occupancy and Vacancy

- Median owner occupancy was ~36%
- Median vacant unit rate was ~3.5%
- Can I map above and below on both variables?



It turns out that...

- “TRUE” = -1
- “False” = 0

And so I can create a new field and code it ...

- If %VAHU<median add zero
- If %VAHU>median add one
- If %OOHU<median add zero
- If %OOHU>median add two

Low VAHU	Low OOHU	0+0=0
High VAHU	Low OOHU	1+0=1
Low VAHU	High OOHU	0+2=2
High VAHU	High OOHU	1+2=3

Field Calculator [?] [X]

Fields:

- OBJECTID
- ID
- FIPSSTCO
- TRT2000
- STFID
- TRACTID
- OID
- STATE
- COUNTY
- TRACT
- STFID_1
- POP2000

Type:

- Number
- String
- Date

Functions:

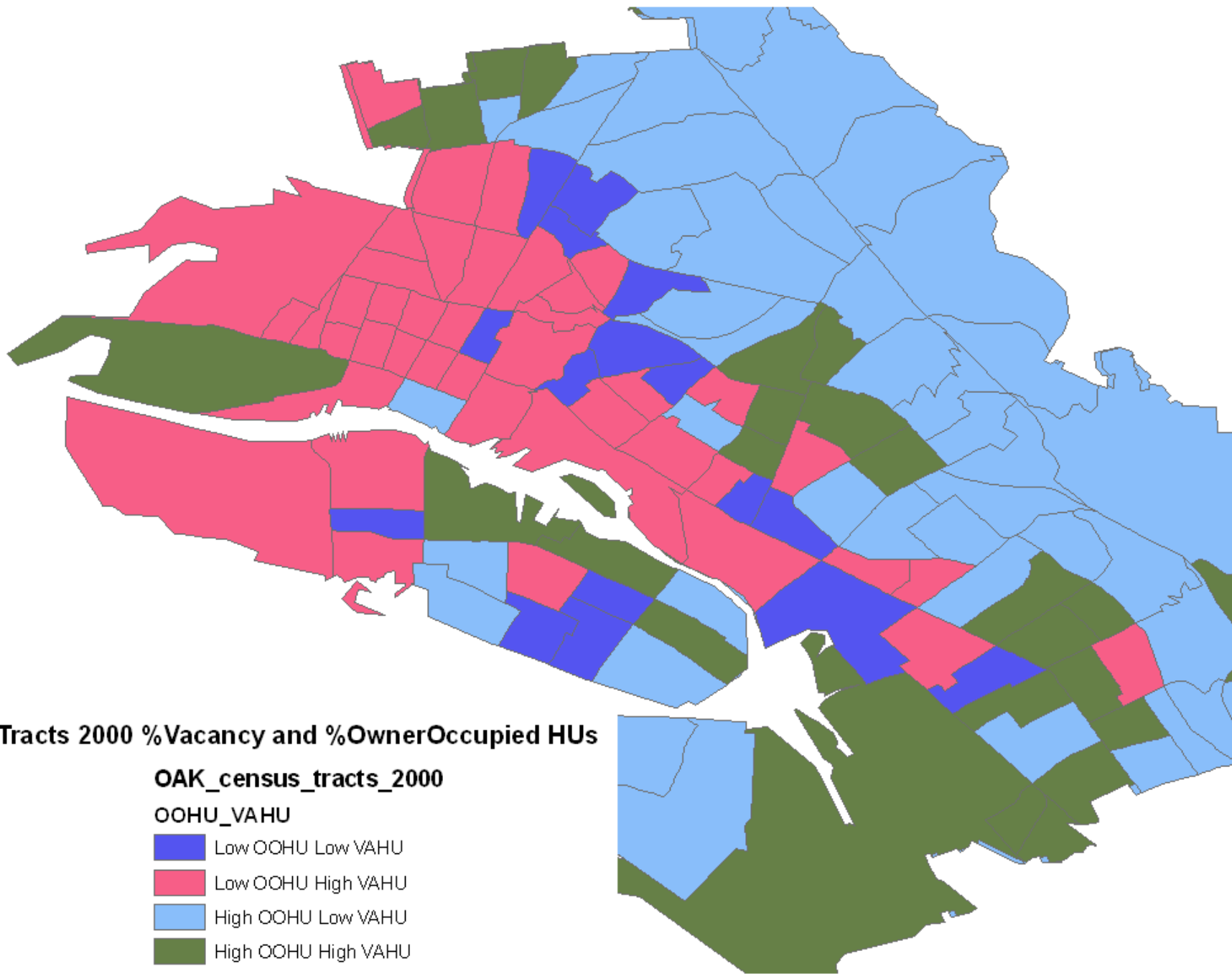
- Abs ()
- Atn ()
- Cos ()
- Exp ()
- Fix ()
- Int ()
- Log ()
- Sin ()
- Sqr ()

ROHU_VAHU = **Advanced**

$$\frac{([OWNER_OCC] / [HSE_UNITS] > 0.35)^2 + ([VACANT] / [HSE_UNITS] > 0.035)^2}{2}$$

Calculate selected records only

Buttons: * / & + - = Load... Save... Help OK Cancel



Tracts 2000 %Vacancy and %OwnerOccupied HUs

OAK_census_tracts_2000

OOHU_VAHU

Low OOHU Low VAHU

Low OOHU High VAHU

High OOHU Low VAHU

High OOHU High VAHU