

# Data Exploration

October 19, 2020

```
[30]: #import libraries
import pandas as pd
import os
```

```
[37]: #import data
HPI = pd.read_csv('HPI_master.csv',encoding = "Latin-1")
```

```
[38]: #shows data
print(HPI)
```

	CensusTract	pop2010	pct2010gq	City	ZIP	County_FIPS	\
0	6001400100	2937	0.1	Oakland	94704.0	6001	
1	6001400200	1974	3.5	Oakland	94618.0	6001	
2	6001400300	4865	0.8	Oakland	94618.0	6001	
3	6001400400	3703	0.9	Oakland	94609.0	6001	
4	6001400500	3517	3.6	Oakland	94609.0	6001	
...	...	...	...	...	...	...	
8052	6115040800	4233	0.1	NaN	95692.0	6115	
8053	6115040901	2783	0.4	NaN	95901.0	6115	
8054	6115040902	1737	23.8	NaN	95901.0	6115	
8055	6115041000	7357	0.0	NaN	95901.0	6115	
8056	6115041100	4941	0.1	NaN	95925.0	6115	

  

	County_Name	UrbanType	hpi2score	hpi2_pctile_pos	...	LEB_pctile	\
0	Alameda	urban_area	1.182028	99.114590	...	96.663673	
1	Alameda	urban_area	1.325874	99.704863	...	96.612344	
2	Alameda	urban_area	0.925666	95.932247	...	95.136661	
3	Alameda	urban_area	1.117603	98.537149	...	68.959322	
4	Alameda	urban_area	0.562799	83.318363	...	38.855383	
...	...	...	...	...	...	...	
8052	Yuba	urban_cluster	-0.037308	47.427178	...	30.694213	
8053	Yuba	rural	-0.425301	24.188374	...	6.685487	
8054	Yuba	rural	-0.791742	7.840370	...	17.849352	
8055	Yuba	rural	0.162931	59.425125	...	20.531246	
8056	Yuba	rural	-0.218389	36.661106	...	24.881304	

  

	white_pct	black_pct	asian_pct	latino_pct	multiple_pct	NativeAm_pct	\
0	70.752469	4.766769	15.526047	3.983657	3.779367	0.068097	

1	78.318136	1.570415	7.396150	7.649443	4.812563	0.101317
2	66.927030	10.524152	8.612539	8.201439	5.056526	0.164440
3	65.460437	12.098299	7.291385	8.965703	5.320011	0.135026
4	50.554450	26.528291	5.914131	9.667330	6.113165	0.454933
...	...	...	...	...	...	...
8052	71.178833	0.803213	4.890149	16.843846	4.535790	1.464682
8053	65.145526	0.718649	10.636004	17.103845	4.275961	2.120014
8054	65.342545	9.038572	3.511802	14.219919	5.757052	1.381693
8055	78.673372	0.679625	2.378687	12.450727	3.901047	1.699062
8056	83.383930	0.526209	1.032180	6.354989	5.100182	3.238211

	PacificIsl_pct	other_pct	version
0	0.272387	0.851209	Wed13Dec17
1	0.000000	0.151976	Wed13Dec17
2	0.102775	0.411100	Wed13Dec17
3	0.162031	0.567108	Wed13Dec17
4	0.113733	0.653966	Wed13Dec17
...	...	...	...
8052	0.094496	0.188991	Wed13Dec17
8053	0.000000	0.000000	Wed13Dec17
8054	0.518135	0.230282	Wed13Dec17
8055	0.108740	0.108740	Wed13Dec17
8056	0.263105	0.101194	Wed13Dec17

[8057 rows x 91 columns]

```
[39]: #data as a table showing only first 5 rows
      HPI.head()
```

```
[39]:  CensusTract  pop2010  pct2010gq  City  ZIP  County_FIPS  County_Name  \
0    6001400100    2937      0.1  Oakland  94704.0      6001    Alameda
1    6001400200    1974      3.5  Oakland  94618.0      6001    Alameda
2    6001400300    4865      0.8  Oakland  94618.0      6001    Alameda
3    6001400400    3703      0.9  Oakland  94609.0      6001    Alameda
4    6001400500    3517      3.6  Oakland  94609.0      6001    Alameda
```

	UrbanType	hpi2score	hpi2_pctile_pos	...	LEB_pctile	white_pct	\
0	urban_area	1.182028	99.114590	...	96.663673	70.752469	
1	urban_area	1.325874	99.704863	...	96.612344	78.318136	
2	urban_area	0.925666	95.932247	...	95.136661	66.927030	
3	urban_area	1.117603	98.537149	...	68.959322	65.460437	
4	urban_area	0.562799	83.318363	...	38.855383	50.554450	

	black_pct	asian_pct	latino_pct	multiple_pct	NativeAm_pct	\
0	4.766769	15.526047	3.983657	3.779367	0.068097	
1	1.570415	7.396150	7.649443	4.812563	0.101317	
2	10.524152	8.612539	8.201439	5.056526	0.164440	

3	12.098299	7.291385	8.965703	5.320011	0.135026
4	26.528291	5.914131	9.667330	6.113165	0.454933

	PacificIsl_pct	other_pct	version
0	0.272387	0.851209	Wed13Dec17
1	0.000000	0.151976	Wed13Dec17
2	0.102775	0.411100	Wed13Dec17
3	0.162031	0.567108	Wed13Dec17
4	0.113733	0.653966	Wed13Dec17

[5 rows x 91 columns]

```
[40]: #Some preliminary findings:

#first 5 rows are from Oakland/Alameda County as have relatively low Healthy_
↳Place Index score
#in terms of demographics, these 5 places have a greater White populations than_
↳other racial/ethnic groups
#also all 5 places are classified as a more urban area
```