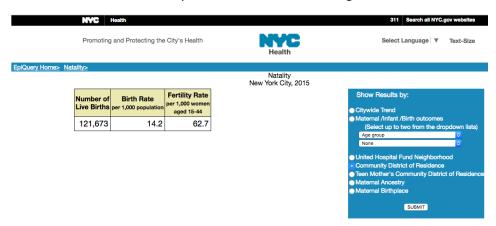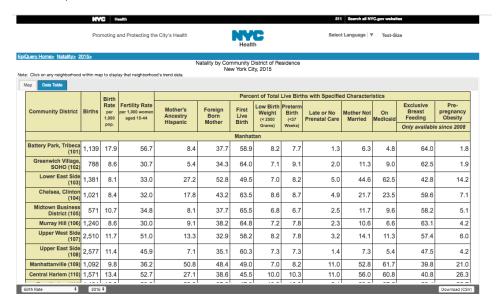- If Community District 10 (CD10) is deemed a suitable 'proxy' for The Zone based on Demographic Comparison, I HIGHLY recommend using the already-existing model for births data provided by the NYC Dept. Of Health and Mental Hygeine, Bureau of Vital Stats
  - This model is robust and maintained by Bureau of Vital Stats
  - Only parameters needed: Community District 10 and Year of Interest
  - CD10 Model found here:
    - https://a816-healthpsi.nyc.gov/epiquery/Birth/index.html
    - Choose year of interest and click 'SUBMIT'

  - Then, choose 'Community District of Residence' on right-side menu and click 'SUBMIT'

  - Then, download dataset and filter for 'cd' == 110

Community District	Births	Birth Rate per 1,000 pop.	Fertility Rate per 1,000 women aged 15-44	Percent of Total Live Births with Specified Characteristics									
				Mother's Ancestry Hispanic	Foreign Born Mother	First Live Birth	Low Birth Weight (< 2500 Grams)	Preterm Birth (<37 Weeks)	Late or No Prenatal Care	Mother Not Married	On Medicaid	Exclusive Breast Feeding	Pre-pregnancy Obesity Only available since 2008
Manhattan													
Battery Park, Tribeca (101)	1,139	17.9	56.7	8.4	37.7	58.9	8.2	7.7	1.3	6.3	4.8	64.0	1.8
Greenwich Village, SOHO (102)	788	8.6	30.7	5.4	34.3	64.0	7.1	9.1	2.0	11.3	9.0	62.5	1.9
Lower East Side (103)	1,381	8.1	33.0	27.2	52.8	49.5	7.0	8.2	5.0	44.6	62.5	42.8	14.2
Chelsea, Clinton (104)	1,021	8.4	32.0	17.8	43.2	63.5	8.6	8.7	4.9	21.7	23.5	59.6	7.1
Midtown Business District (105)	571	10.7	34.8	8.1	37.7	65.5	6.8	6.7	2.5	11.7	9.6	58.2	5.1
Murray Hill (106)	1,240	8.6	30.0	9.1	38.2	64.8	7.2	7.8	2.3	10.6	6.6	63.1	4.2
Upper West Side (107)	2,510	11.7	51.0	13.3	32.9	58.2	8.2	7.8	3.2	14.1	11.3	57.4	6.0
Upper East Side (108)	2,577	11.4	45.9	7.1	35.1	60.3	7.3	7.3	1.4	7.3	5.4	47.5	4.2
Manhattanville (109)	1,092	9.8	36.2	50.8	48.4	49.0	7.0	8.2	11.0	52.8	61.7	39.8	21.0
Central Harlem (110)	1,571	13.4	52.7	27.1	38.6	45.5	10.0	10.3	11.0	56.0	60.8	40.8	26.3

- If Community District 10 (CD10) is NOT deemed a suitable 'proxy' for The Zone based on Demographic Comparison, I have provided 2 custom models for HCZ, based on 5-year aggregate data
- Model Development Steps/jupyter notebook can be viewed here:
    - Link:

      http://nbviewer.jupyter.org/github/kgracia44/hcz_custom_model/blob/master/HCZ_birthrate_model.ipynb

    - Data sets and pickled models are available in attached zip folder as well as folder on shared drive [datakind/HCZ]