**BigQuery Data Exploration Part 2**

Step 1 - Open the dataset you created last time, which should be a table named Homelessness. Once you have opened it, click on the Query button and open a new query in a new tab.

Step 2 - Using this dataset, answer the following questions. These first few questions can be answered by using ORDER BY and WHERE clauses. For reference, a list of all of the [state abbreviations is listed HERE](#hw0orp63jxl).

1. We want to develop some new programs to help unaccompanied homeless children under 18 years old, and need some locations to start some programs. What are the top 3 Continuum of Care areas (CoC\_Name in the table) with the highest number of unaccompanied homeless youth under 18 in the year 2018.

Answer: San Jose/Santa Clara City & County CoC,Oregon Balance of State CoC,Las Vegas/Clark County CoC

SQL Code Used:

SELECT\*

FROM `merit-america-jc.Exploration\_Data\_set.homelessness`

WHERE Count\_Year = 2018

ORDER BY Homeless\_Unaccompanied\_Youth\_Under\_18 DESC;

2. We suspect that in Delaware (state abbreviation is “DE”), the number of unsheltered homeless people has been increasing over the past 7 years. Is this statement true? How do you know?

Answer: Yes it has increased as the years go by. Starting from 2012 to 2018 we start out with 22 and end up at 93. In Between the years it has increased around 20. Exempt for the years 2014 and 2015 in which the number stayed the same.

SQL Code Used:

SELECT\*

FROM `merit-america-jc.Exploration\_Data\_set.homelessness`

WHERE State = 'DE'

ORDER BY Unsheltered\_Homeless DESC;

3. The Safe Haven program was created in 1992 to provide shelter for people who are homeless and have a serious mental illness. However, funding for Safe Havens was cut in 2009, so no new Safe Havens could be created. Looking at data from only 2018, answer the following questions:

1. In 2018, how many different locations had at least 1 person as a Sheltered\_SH?

Answer: 90

SQL Code Used:SELECT COUNT(DISTINCT CoC\_Name) AS location\_count

FROM `merit-america-jc.Exploration\_Data\_set.homelessness`s

WHERE Sheltered\_SH\_Homeless > 0

AND Count\_Year = 2018;

1. In 2018, what was the CoC\_Name of the top 3 locations in terms of number of Sheltered\_SH?

Answer: Philadelphia CoC, Reno, Sparks/Washoe County, Indianapolis CoC

SQL Code Used:SELECT CoC\_Name, SUM(Sheltered\_SH\_Homeless) AS total\_sheltered\_sh

FROM `merit-america-jc.Exploration\_Data\_set.homelessness`

WHERE Count\_Year = 2018

GROUP BY CoC\_Name

ORDER BY total\_sheltered\_sh DESC

LIMIT 3;

4. What are the top 7 states in terms of Overall Homeless population in the year 2018? (Hint: This question will require the use of a GROUP BY clause in your query)

Answer: CA, NY, FL, TX, WA, MA, OR

SQL Code Used: SELECT State, SUM(Overall\_Homeless) AS total\_overall\_homeless

FROM `merit-america-jc.Exploration\_Data\_set.homelessness`

WHERE Count\_Year = 2018

GROUP BY State

ORDER BY total\_overall\_homeless DESC

LIMIT 7;

5. [Below you will see a table](#d5z9kqiu7tnp) of all of the states and their populations in 2018. If the Overall Homeless population were only correlated with the total state population, then the top 7 states for total population and the top 7 states for Overall Homeless population would be the same.

1. Is this the case? If not, which states are not lining up the same?   
   It is not the case. The states that are not lining up are NY, TX, WA, PA,IL, OH, and OR.
2. We would say that homelessness is overrepresented in a state if that state listed higher in the Homeless ranking than it did in total population ranking, and it would be underrepresented if the homeless ranking was lower than the population ranking. With that in mind, which states in the top 7 homelessness list would be overrepresented for homelessness?   
   That would be NY,WA,MA, and OR.

6. In order to create better policies to support homeless individuals, we want to study locations that are doing a good job providing shelter. To do so, we need to identify places that have a relatively large number of homeless, but a relatively small number of unsheltered homeless.

1. Generate a list of all locations, in 2018, that have more than 1000 Overall Homeless, but less than 100 unsheltered homeless.

Answer:

SQL Code Used:SELECT CoC\_Name, State, SUM(Overall\_Homeless) AS total\_overall\_homeless,

SUM(Unsheltered\_Homeless) AS total\_unsheltered\_homeless

FROM `merit-america-jc.Exploration\_Data\_set.homelessness`

WHERE Count\_Year = 2018

GROUP BY CoC\_Name, State

HAVING total\_overall\_homeless > 1000 AND total\_unsheltered\_homeless < 100;

1. From that same list, in which locations do Unsheltered Homeless account for less than 2% of the Overall Homeless population?

Answer:Springfield/Hampden County, MA and Nassau, Suffolk Counties, NY

**US State and Territory\* Population Ranking for 2018**

| **Rank** | **State** | **Population** | **Rank** | **State** | **Population** |
| --- | --- | --- | --- | --- | --- |
| 1 | California (CA) | 39776830 | 29 | Connecticut (CT) | 3588683 |
| 2 | Texas (TX) | 28704330 | 30 | Puerto Rico (PR) | 3193354 |
| 3 | Florida (FL) | 21312211 | 31 | Iowa (IA) | 3160553 |
| 4 | New York (NY) | 19862512 | 32 | Utah (UT) | 3159345 |
| 5 | Pennsylvania (PA) | 12823989 | 33 | Nevada (NV) | 3056824 |
| 6 | Illinois (IL) | 12768320 | 34 | Arkansas (AR) | 3020327 |
| 7 | Ohio (OH) | 11694664 | 35 | Mississippi (MS) | 2982785 |
| 8 | Georgia (GA) | 10545138 | 36 | Kansas (KS) | 2918515 |
| 9 | North Carolina (NC) | 10390149 | 37 | New Mexico (NM) | 2090708 |
| 10 | Michigan (MI) | 9991177 | 38 | Nebraska (NE) | 1932549 |
| 11 | New Jersey (NJ) | 9032872 | 39 | West Virginia (WV) | 1803077 |
| 12 | Virginia (VA) | 8525660 | 40 | Idaho (ID) | 1753860 |
| 13 | Washington (WA) | 7530552 | 41 | Guam (GU) | 168678 |
| 14 | Arizona (AZ) | 7123898 | 42 | Hawaii (HI) | 1426393 |
| 15 | Massachusetts (MA) | 6895917 | 43 | New Hampshire (NH) | 1350575 |
| 16 | Tennessee (TN) | 6782564 | 44 | Maine (ME) | 1341582 |
| 17 | Indiana (IN) | 6699629 | 45 | Montana (MT) | 1062330 |
| 18 | Missouri (MO) | 6135888 | 46 | Rhode Island (RI) | 1061712 |
| 19 | Maryland (MD) | 6079602 | 47 | Delaware (DE) | 971180 |
| 20 | Wisconsin (WI) | 5818049 | 48 | South Dakota (SD) | 877790 |
| 21 | Colorado (CO) | 5684203 | 49 | North Dakota (ND) | 755238 |
| 22 | Minnesota (MN) | 5628162 | 50 | Alaska (AK) | 738068 |
| 23 | South Carolina (SC) | 5088916 | 51 | Washington DC (DC) | 703608 |
| 24 | Alabama (AL) | 4888949 | 52 | Vermont (VT) | 623960 |
| 25 | Louisiana (LA) | 4682509 | 53 | Wyoming (WY) | 573720 |
| 26 | Kentucky (KY) | 4472265 | 54 | Virgin Islands (VI) | 101365 |
| 27 | Oregon (OR) | 4199563 | 55 | Northern Mariana Islands (MP) | 50304 |
| 28 | Oklahoma (OK) | 3940521 |  |  |  |

**United States and Territories 2-letter Abbreviations**

