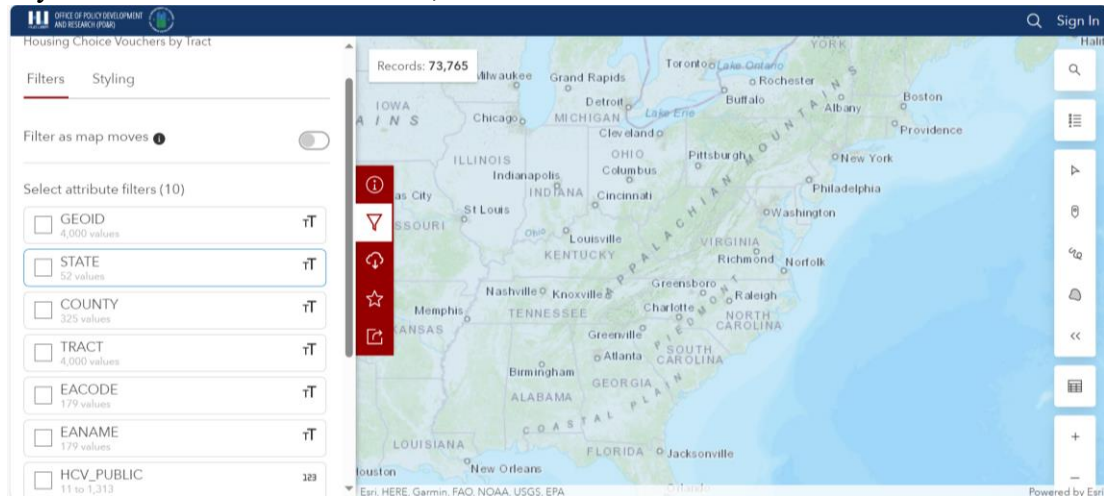
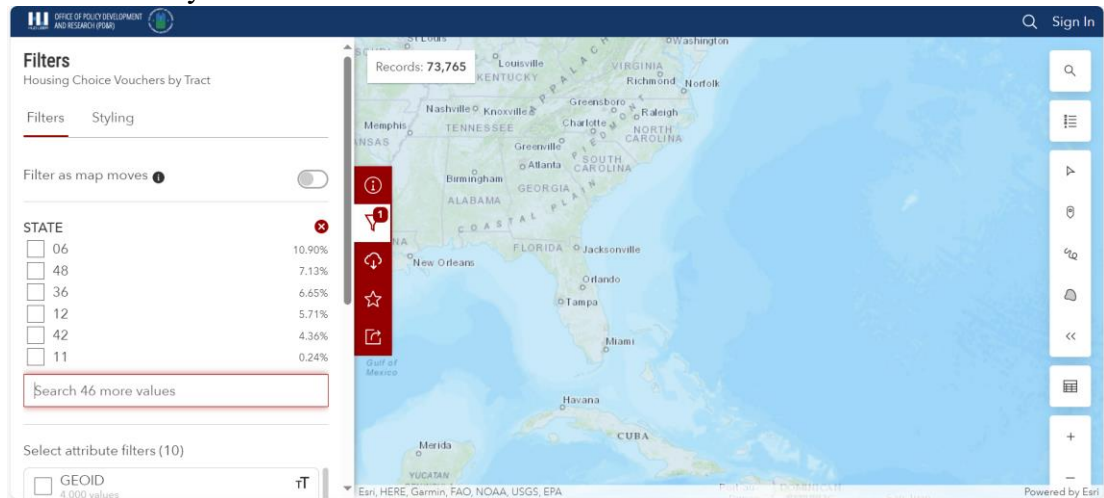


5. If you want to view a whole state, click on the box next to “State”



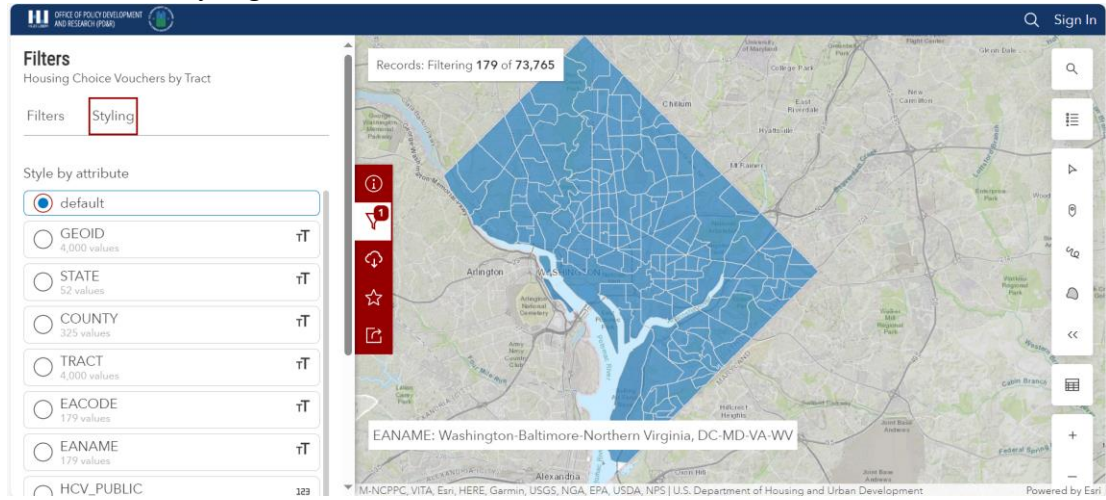
6. Find the state you want to view



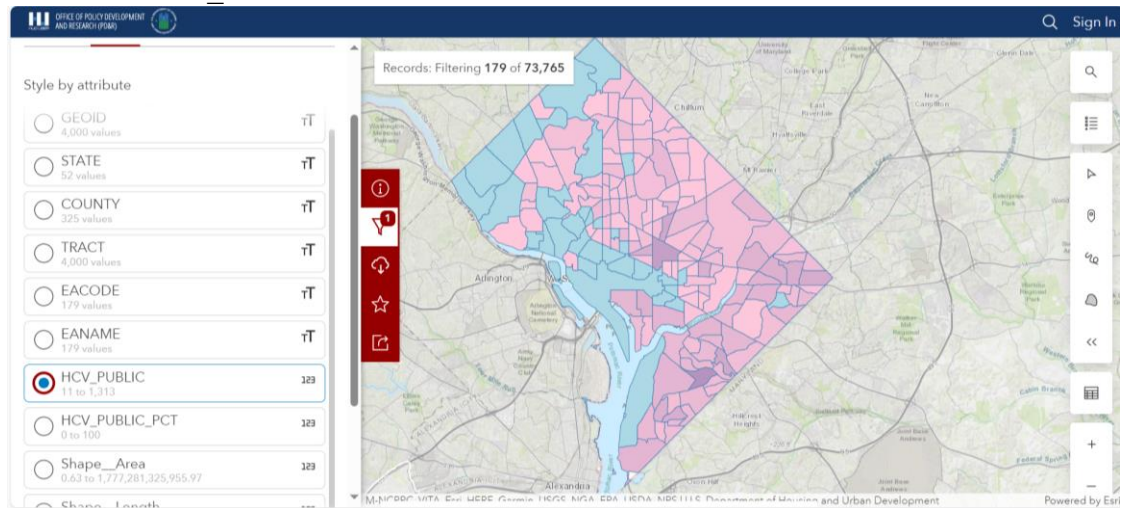
- i. Use the Excel file you previously downloaded to find the state code for which state you want to view and type that number in the search bar.
- ii. For this case study, we will be looking at Washington DC, which is coded as 11 in the State field.

7. Zoom in on the map to the state you are wanting to view to see the data begin to populate.

8. Click on the Styling tab

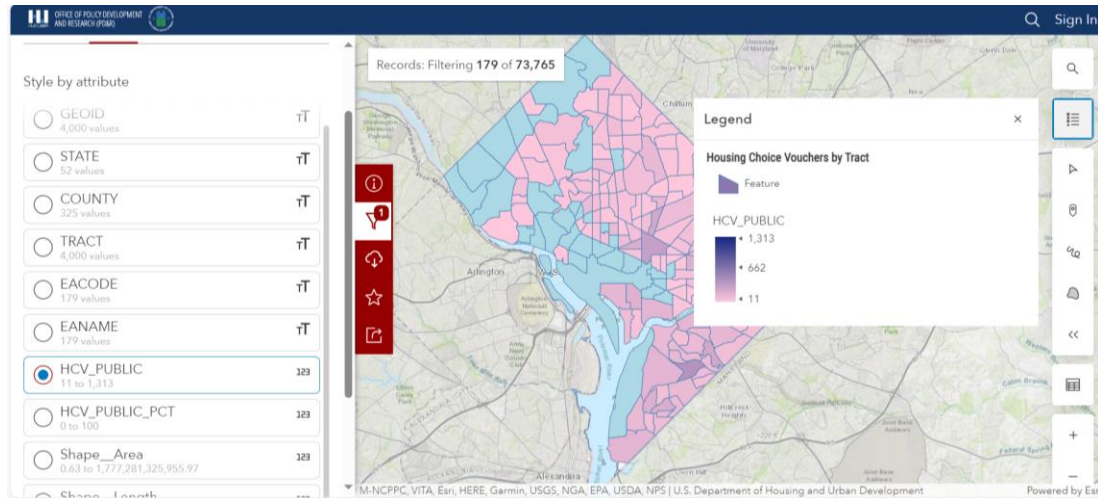


9. Select the HCV_Public field



10. You now have a Heat Map that shows how many vouchers are being used in each tract in your state. Click on the Legend button on the right side to see the overall range of

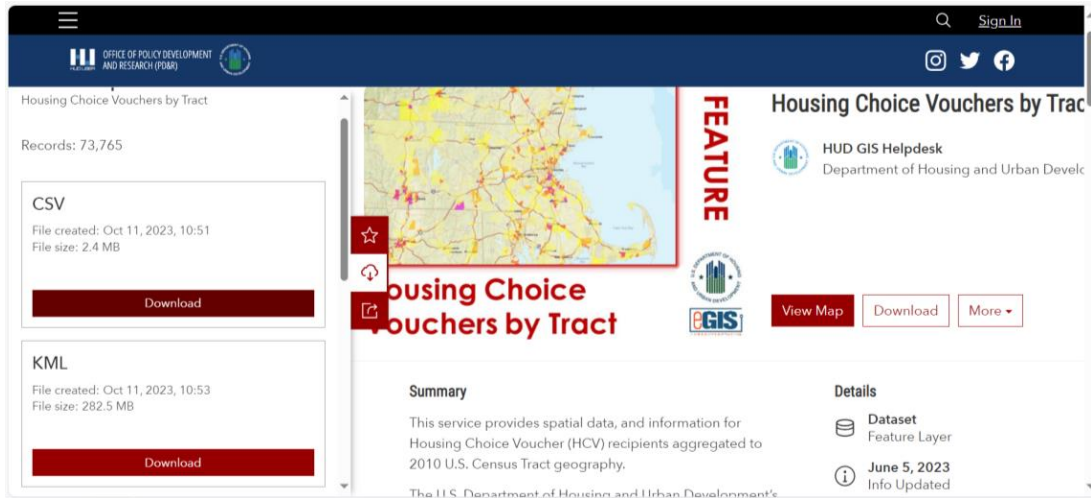
vouchers being used in the state. You can hover over each tract to see the number of vouchers used in that tract.



- i. You can get this same map by County, Tract or Region by using their respective fields to filter by instead of State. Just find which of these you would like to filter by and follow the same instructions, just replacing State with the desired filter. Use the Excel sheet to figure out which codes/names are used for your desired outcome.

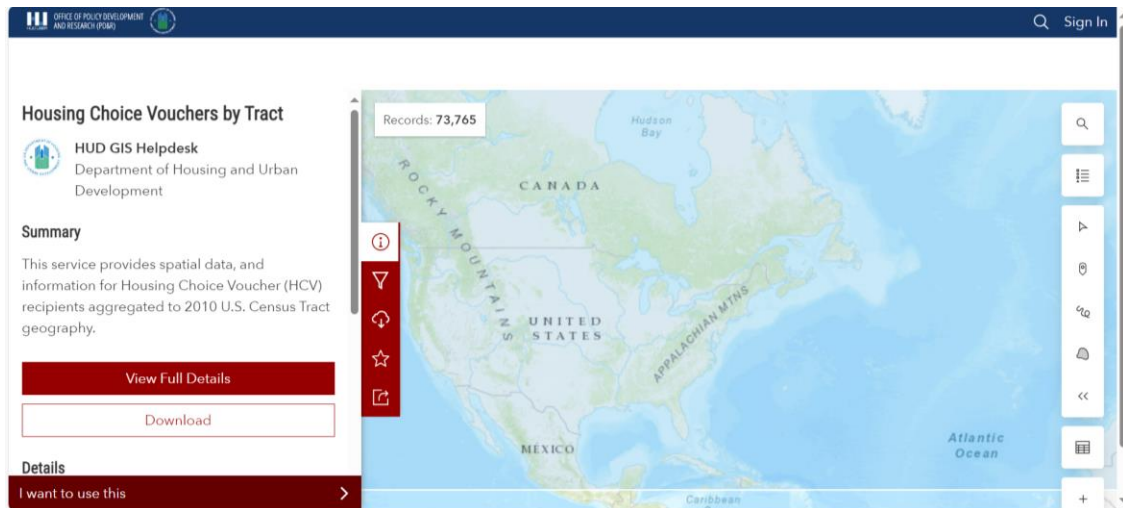
Housing Choice Vouchers per Census Tract by State (Using ArcGIS)

1. Open [Housing Choice Vouchers by Tract | HUD Open Data Site \(arcris.com\)](https://arcris.com)
2. Click “Download” and select CSV

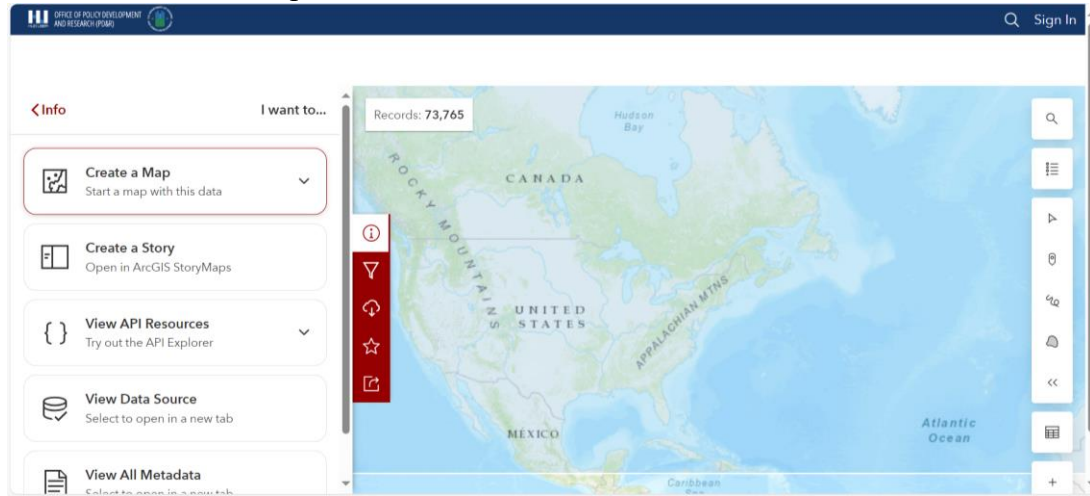


- i. This will give you an Excel file of the data. This will be helpful for filtering for the region/state you are wanting to view.

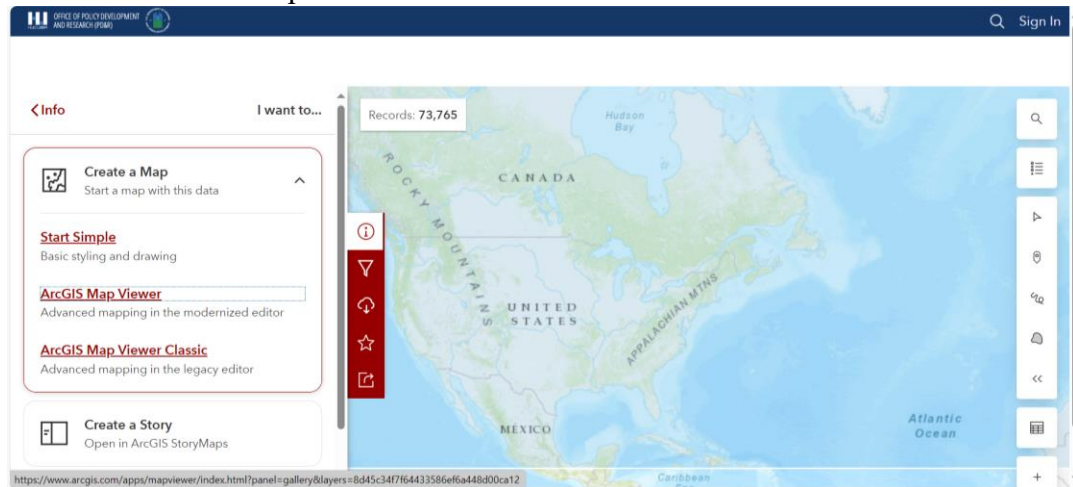
3. Click on “View Map”
4. Click on “I want to use this”



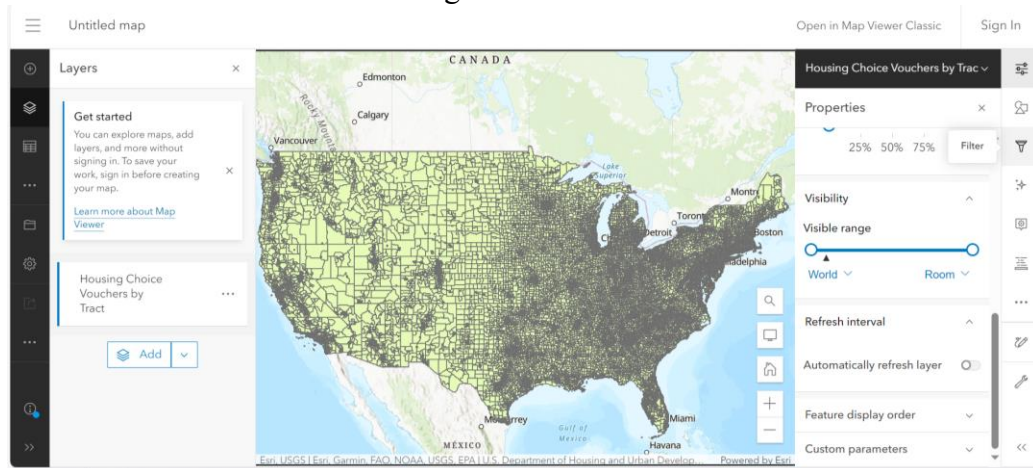
5. Click on “Create a map”



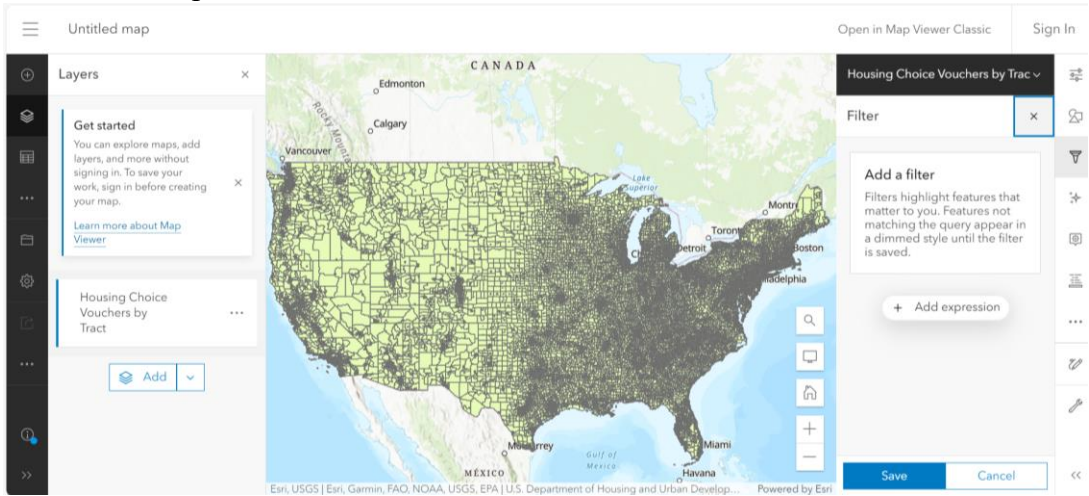
6. Click on “ArcGIS Map Viewer”



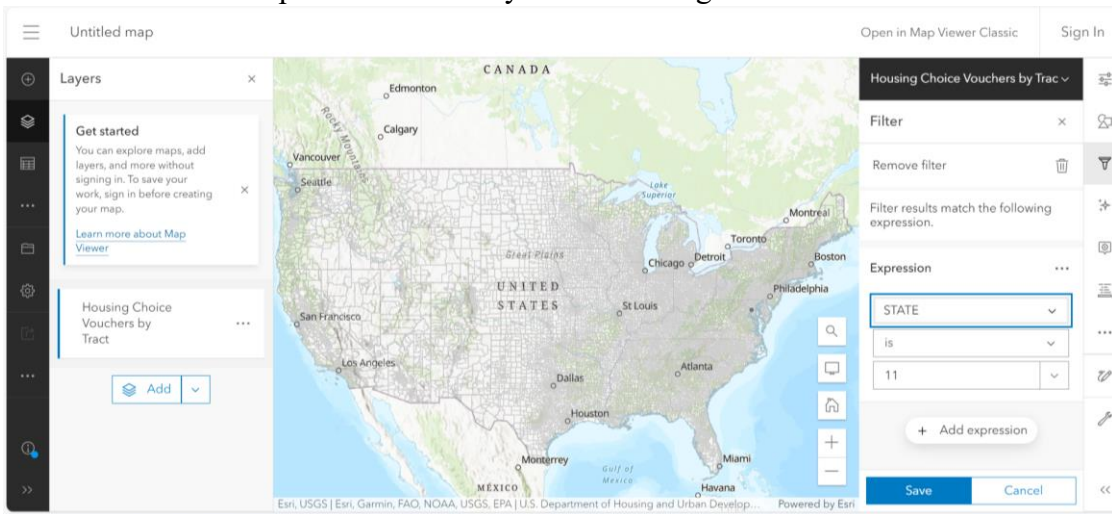
7. Click on the Filter button on the right side of the screen



8. Click “Add Expression”



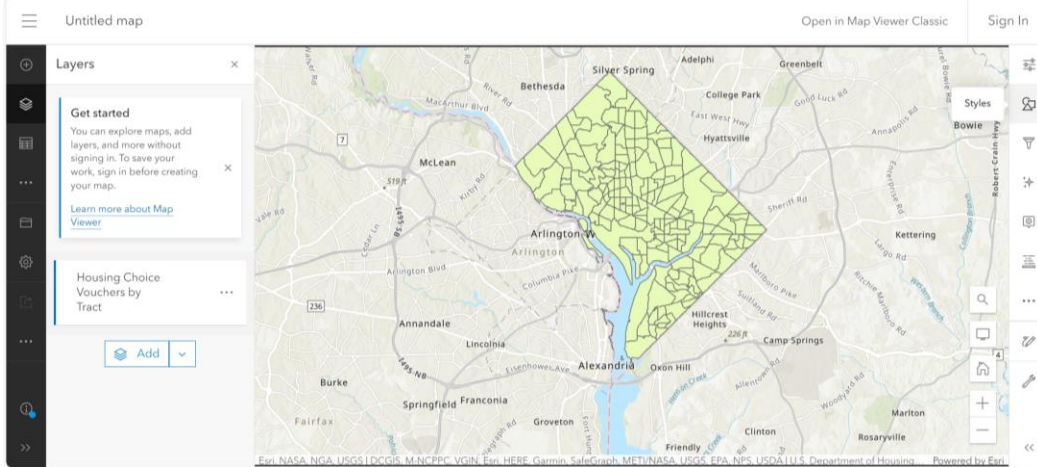
9. Change the field from GEOID to State and use the Excel table previously downloaded to find which number represents the state you are wanting to view



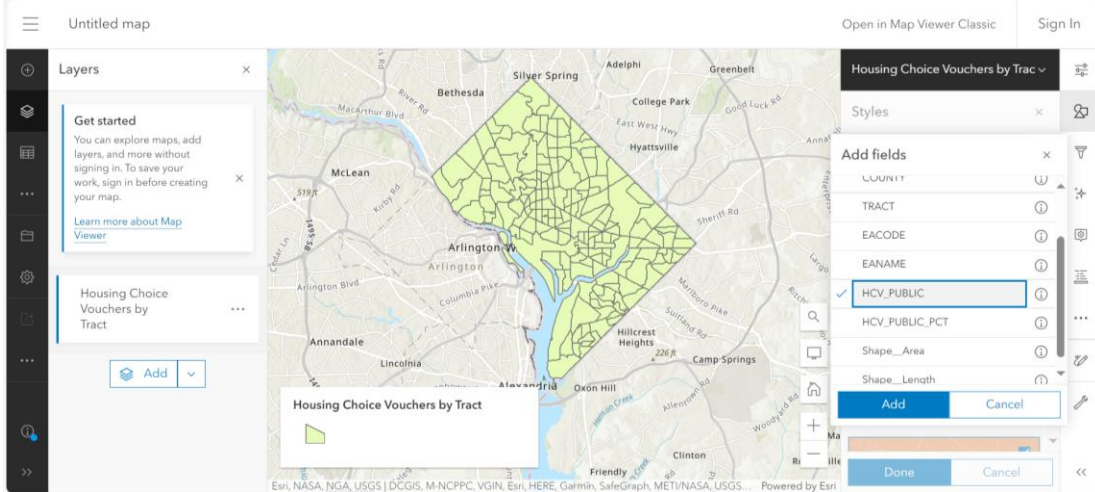
i. For this tutorial, we are using Washington, DC which is coded as 11.

10. Click “Save” and zoom in on the state you are wanting to view.

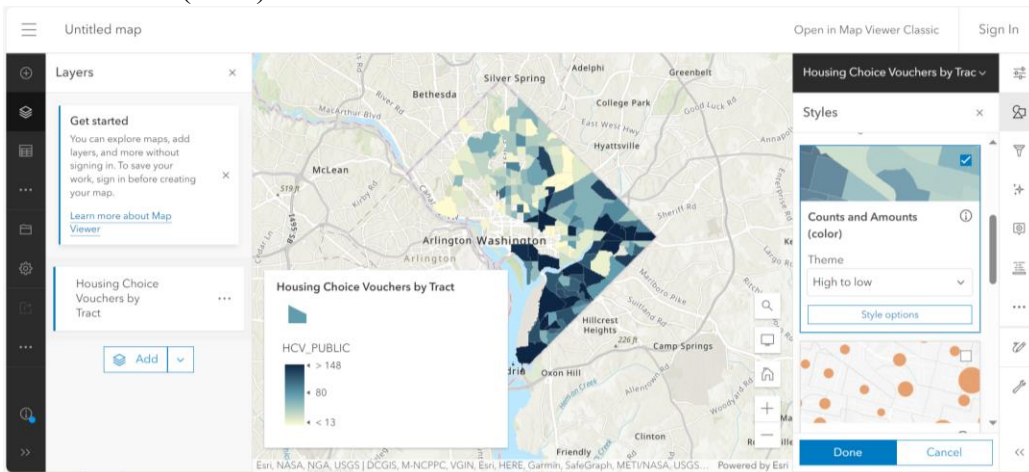
11. Click on the “Styles” button the right side of the screen



12. Click on “+ Field”, click on “HCV_Public” from the list of fields, and then click Add.

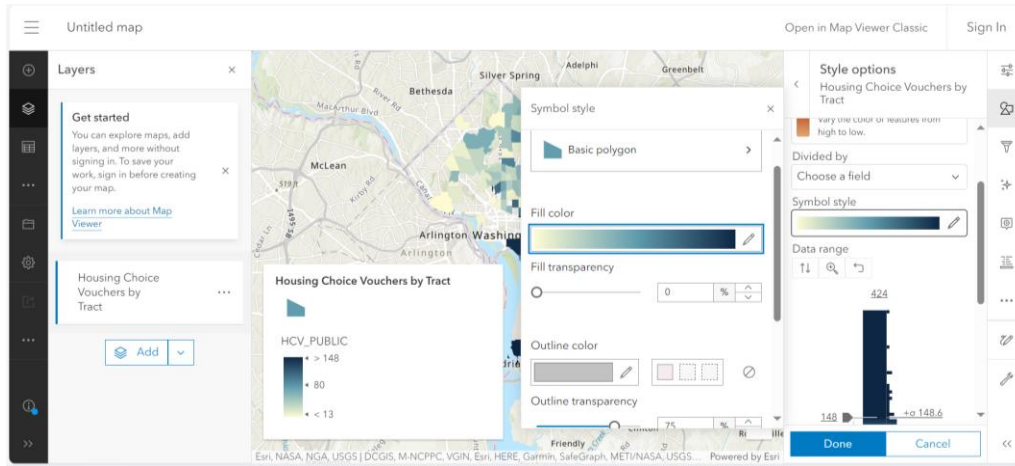


13. Once you click Add, it will automatically take you to the Styles box. Click on “Counts and Amounts (color)”

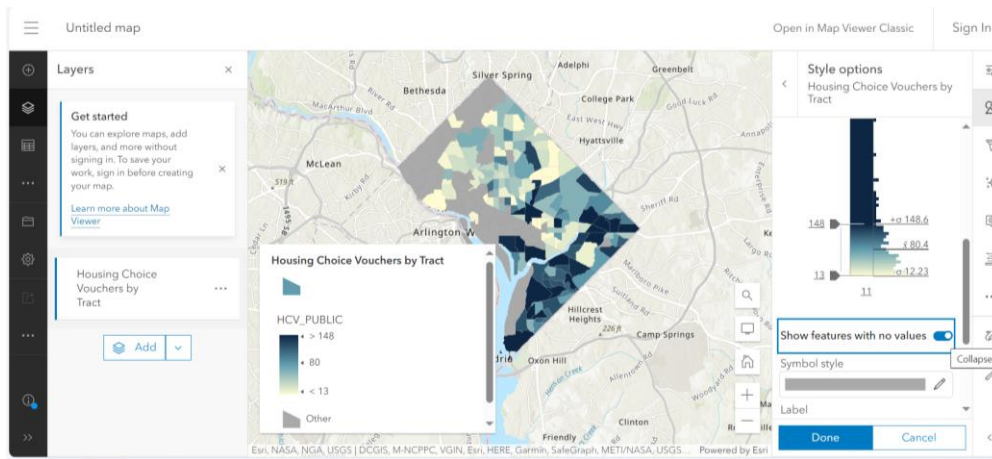


i. Keep the Theme as “high to low.”

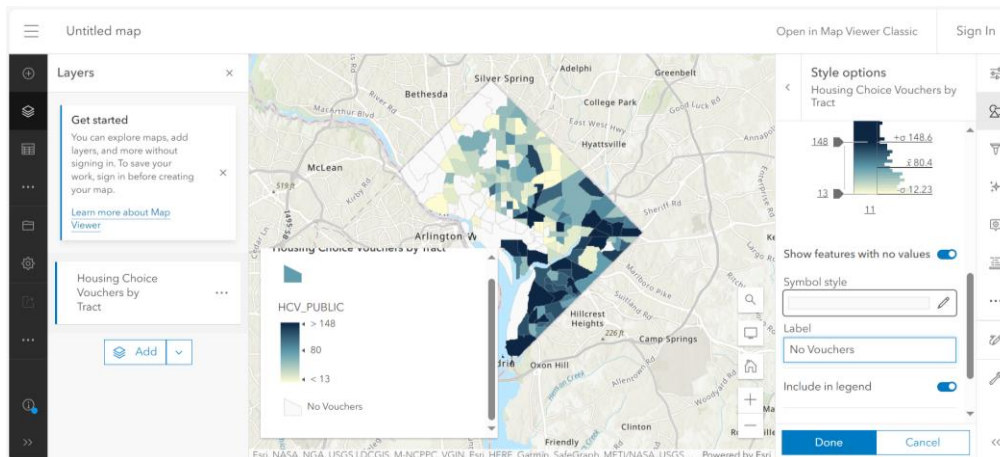
- ii. You can click on “Style Options” and use the “Symbol Style” option to change the colors of the map if you would like.



- iii. You can also Toggle on “show features with no values” if you would like census tracts without any vouchers being used to still be filled in on the map.



- iv. You can change the color and label of the tracts with no values as well using the “Symbol style” and “Label” fields right under the toggle.



14. Once you have made all your style changes, you can hit done to close out of the Styling tabs.

15. You now have a Heat Map that shows how many vouchers are being used in each tract in your state. You can click on a tract to bring up a table of information about the tract.

The screenshot shows a map application interface. On the left is a sidebar with menu items: Map properties, Background, Enable background color, Map view, Preserve map scale, Time, and Time slider options. On the right is a toolbar with icons for Properties, Styles, Filter, Effects, Pop-ups, Fields, More, Add sketch, Map tools, and Collapse. The main map area displays a heat map of a region. A pop-up window is open over a specific tract, titled "Washington-Baltimore-Northern Virginia, DC-MD-VA-WV". The pop-up contains a table with the following data:

Field	Value
STATE	11
COUNTY	001
TRACT	007200
EACODE	174
EANAME	Washington-Baltimore-Northern Virginia, DC-MD-VA-WV
HCV_PUBLIC	158
HCV_PUBLIC_PCT	10.280000