

Data Scavenger Hunt – Environmental Justice & Health

In this activity, you will be guided through the CalEnviroScreen and Regional Opportunity Index online tools to find data and maps that speak to the intersections of environmental hazards, social vulnerability and health.

- 1) To access the CalEnviroScreen data mapping tool, open your browser and enter: <https://oehha.maps.arcgis.com/apps/webappviewer/index.html?id=4560cfbce7c745c299b2d0cb07044f5>. Click the “OK” button to close the pop-up window that appears.
- 2) Pick your home address as the focus for your investigation. To locate it on the map, type your address into the search bar at the top left corner of the map that says, “Find address or place”.
- 3) Now that your address is pinpointed, zoom out (using the “–” button in the top left corner of the map) until you can see your whole census tract and the census tracts surrounding it. Do a quick visual analysis of your neighborhood and the surrounding area. What color is the census tract where you live? How does it compare to the others around it in your community/region?

Color of my census tract	
Colors of surrounding census tracts	

- 4) Click anywhere within the boundaries of your home’s census tract to highlight it. A pop-up box will appear showing all of the tract’s CalEnviroScreen scores. How is your census tract doing overall? Record your findings below:

CalEnviroScreen 3.0 Percentile	
Pollution Burden Percentile	
Population Characteristics Percentile	

- 5) Within that same pop-up box for your census tract, scroll down to take a look at the individual scores for each pollution indicator (from “Ozone” to “Solid Waste”).

Pollution indicator with the highest score: _____ Score: _____

This means your census tract is doing worse than _____% of all the census tracts in the state for this issue. (insert score)

Pollution indicator with the lowest score: _____ Score: _____

This means your census tract is doing better than _____% of all the census tracts in the state for this issue. (subtract score from 100)



- 6) Continue scrolling down in the pop-up box to take a look at your census tract’s individual scores for each population indicator (from “Asthma” to “Housing Burden”).

Population indicator with the highest score: _____ Score: _____

This means your census tract is doing worse than _____% of all the census tracts in the state for this issue. (insert score)

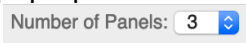
Population indicator with the lowest score: _____ Score: _____




This means your census tract is doing better than _____% of all the census tracts in the state for this issue. (subtract score from 100)

- 7) Scroll to the bottom of the pop-up box to take a look at the Race/Ethnicity & Age Profiles for your census tract.
- 8) Close the pop-up box for your census tract. To print and save a copy of this map to your computer, click on the “Print” button  in the lower left corner of the map. Once you hit the  button, your map will be generated and you can click on its icon to open it in a separate window and save it to your computer for use later.



- 9) Record your initial thoughts and reactions to this CalEnviroScreen data in the space below:


- 10) Now access the Regional Opportunity Index data mapping tool. Open another browser window and enter this web address: <https://interact.regionalchange.ucdavis.edu/roi/>. Click on “Interactive Maps” on the right-hand side of the page to enter the mapping site.

- 11) Close the initial pop-up box and reduce the number of map panels from 3 to 2 with the “Number of Panels” feature  in the top right corner of the map.


- 12) Find your home address again to focus your analysis. To locate it on the maps, start with the left map panel and click on the flag icon . Enter your address in the pop-up box and click on the search button . Do the same thing in the right map panel to highlight the location on both maps.
- 13) Do a quick visual analysis, analyzing both maps to see how your census tract is doing compared to the surrounding area when it comes to the resources and opportunities that residents possess (Regional Opportunity Index: People) and that the place itself provides (Regional Opportunity Index: Place).
- 14) Now that we have a general sense of the opportunities (or the lack of opportunities) in your area, let's dig a bit deeper to look specifically at health issues. In the left map panel click on the "Layer" button  to open a dropdown menu. Click on the "+" button next to "Health/Environment Opportunity: People" and click on "Health/Env-People: Years of Life Lost" to map the years of potential life lost, a measure of premature death. Close the "Layer" window, click on your home's census tract and record its values:

Years of Life Lost Census Tract Value: # of Years of Potential Life Lost Below 65	Years of Life Lost State Average: # of Years of Potential Life Lost Below 65

Remember, you can always click the "Legend" button  and the "Information" button  in the bottom left-hand corner of any map to give you more details about what you're looking at.

- 15) Let's print a copy of the map you've created. Click on the "Print Map" button  in the upper right-hand corner of this map's screen. When the pop-up box appears, find the printing options in the lower half of the box and select the bubble for "PDF." Click the "Print" button and your map will appear in a separate window. Download and save the image file to your computer for use later.
- 16) In the right map panel, click on the "Layer" button, click on the "+" button next to "Health/Environment Opportunity: Place" and click on "Health/Env-Place: Health Care Availability." Close the "Layer" window, click on your home's census tract and record its values:

Health Care Availability Tract Value: # of Providers per 1,000 within 5 miles	Health Care Availability State Average: # of Providers per 1,000 within 5 miles

Print and save an image of this map, too, using the print button  for this map panel.

- 17) Overall, how do your census tract's scores compare to the statewide averages? Do the state averages in these categories seem very high themselves?

18) How might this premature death and health care availability data be related to the pollution and population data you were just analyzing in CalEnviroScreen? How might all of these combined issues be connected to patterns of redlining, disadvantaged unincorporated communities, spatial segregation and structural racism?

19) Based on your experience living in this community and your knowledge of the experiences of your friends and neighbors, is this initial data in-line with what you expected to see? Why or why not?

20) After examining all these data, what additional questions come to mind that you might want to investigate further?
