**Course Assignment**

**Spatially Assessing Vulnerability and Increasing Resiliency**

**Assignment Goal:** The goal of the assignment is to learn to identify populations at risk during natural disasters, choose data indicators to find people facing vulnerability, develop categories of risks based on federally designated standards, and propose recommendations based on that information. Teams will submit PowerPoint presentations including maps and a two-page summary report with findings and recommendations.

**Assignment Background:** This past year, we’ve seen devastating hurricanes, floods, fires, and other disasters affect communities throughout the country. Reducing health risks from and increasing resilience to extreme weather events depends on three interrelated components: vulnerability, exposure, and resilience. Each component varies by location, meaning that mapping is critical to risk reduction. For cities to be resilient, they need to be prepared to deliver services to residents affected by these events and to do that, they need data about their residents.

**Tasks**

1. Become familiar with PolicyMap. PolicyMap can be accessed through the library’s website. If you haven’t already, you may want to complete this introductory assignment: <https://www.policymap.com/wp-content/uploads/2019/05/Introduction-to-PolicyMap.docx>. You can also watch a brief demo here: <https://www.policymap.com/support/demo/>.
2. Choose a specific disaster or extreme weather event for your project (e.g. flood, fire, heat wave, tornado).
3. Identify which populations are vulnerable to that type of disaster. Find areas where these populations live in the area.
4. Identify which populations are exposed to that type of disaster. Consider both physical and social factors, if certain people are likely to be more susceptible.
5. Use PolicyMap to link together vulnerable populations and areas to the disaster you chose to study (i.e. explain *why* and *how* those populations are vulnerable, using data).
6. Develop strategies for how to best respond to the disaster and increase resiliency in these areas. Identify existing assets that could be leveraged to increase resiliency, as well as any new resources that may be necessary.
7. Write a group summary report (2 pages).
8. Create a PowerPoint presentation, including maps of vulnerable

**Resources**

<https://www.policymap.com/2019/03/preparing-for-disasters-with-socially-vulnerable-populations/>

<https://www.policymap.com/support/demo/>