In Prof. Beth DeSombre’s Environmental Policy seminar I had the opportunity to design and execute an original research project. Growing up in Portland, Oregon, green space had been central to my environment. On my many roadtrips from home to Wellesley, I had observed that my experience was likely not a universal one, which motivated me to explore why green space varies across American cities, and therefore what factors advocates might focus on in pushing for green space. The question felt daunting--so many factors might account for the variation. Using the library database, I versed myself in the literature on urban green space, city politics and environmental issues, and mulled over my own hunches, finally narrowing down the potential factors to five: racial demographics, wealth, political leaning, population density, and historic park space.

Once I had an idea of the landscape of my topic, I thought about how to collect the information I needed. My first challenge was deciding how to define and measure green space. The options seemed endless--should I consider only public park space? What about private lawns or community gardens? A clear consensus had not emerged through my literature review, so I initially chose to focus on public space, since it seemed the most relevant for informing activists. Still, it was unclear how I would find the data, since I didn't have time to collect it myself. Serendipitously, I found a comprehensive Environmental Protection Agency GISmap that included an urban green space measure for a set of United States cities. Though the EPA defined green space by including private green space, I chose to use their data and definition due to time limitations and because I could be sure of a consistently measured set of case studies.

Researching the factors that might account for variation in green space created another set of challenges. Some factors were relatively straightforward: racial demographics, median income, and population density are all collected by the US Census Bureau. Political affiliation and historic green space were trickier. Both were relatively understudied, which my early literature review had signaled. First I tried to measure political leaning by combing through city council records, but realized it wouldn’t work since many councils allow individuals to run as non-partisan. When I contacted peers investigating the same factor, I learned they too struggled to find satisfactory data. Together we worked out that using the 2016 presidential popular vote gave us the most useful data, and could be a proxy for city political leaning. All I had left to tackle was historic green space. Ideally, I would be able to find an absolute measure directly comparable to current green space. But again, I found that very few cities had that information,
and no previous researcher had measured it themselves. So I had to get creative. Rather than use an absolute measure, I created a categorical one: high, medium, and low amounts of green space. Then I searched for the oldest available maps of each city and made an estimation of which category it fell into. Searching for maps was one of the most fun aspects of my project, taking me through government archives, state museums, private collections, and even fire insurance maps.

After data collection, I could start to draw relationships between my variables. As relationships emerged, I turned again to library research to understand how they mapped onto the real world. For instance, I found that cities with the highest historic park space tend to have the most green space today. Yet, some cities with historically low park space also had high amounts of green space today--why? Drawing on seminal environmental scholars, like Dorceta Taylor, I found support for the argument that cities like New York, which had not originally planned much green space, had difficulty creating it later. Yet, today, New York has more green space than expected. Exploring news media led me to search for more recent work on New York parks, and I found that the city has worked to reclaim industrial spaces through projects like High Line Park. New York’s case suggested that cities can increase green space, an encouraging finding for those seeking change.

This project taught me how to work within limitations, think creatively and collaboratively, and use past literature to strengthen my observations, then, in turn, craft conclusions applicable to issues beyond my own topic. Research is about asking questions and figuring out how to answer them, through this project I had the opportunity to do that.
Research Process

- How did you think about and refine your preliminary research topic? Did you have to change or adapt your topic based on the needs or restrictions of the assignment, or the nature of the information found in your research? What might you have done differently?
  - Had to explore the literature to look into definitions of green space
  - Ultimately landed on the one with the most public data, even though it wasn’t my original definition
  - Similarly had to adapt the case studies I used based on available data
- What specific strategies did you develop for finding relevant information? Were these strategies successful? Did you make any discoveries through serendipity rather than strategy? What was the path your research took?
  - Thinking a little bit creatively → looking at maps to gain insight into historic trends, not a precise technique so adapted the measure (categories vs percentages)
- What tools and techniques did you use for research in the library? Why? What worked, and what didn’t? What might you have done differently?
  - Serendipity -- had learned from a visitor to my philosophy class about different community projects in Detroit which helped me better understand trends that were originally confusing

Sources

- What sources did you use? Which were the most helpful (or least helpful), and why? Did you gravitate to particular types or formats? If so, why?
  - Journal articles, primary sources, gov databases, map databases
- What criteria did you use for selecting and evaluating your sources?
- Did your assumptions about what information would be available or useful change during the research process?
  - Thought there would be much more information about greenspace
  - Thought there would be much more specific info about voting trends/demographics ---> originally worked on council party makeup, but not enough info so switched to a voter demographic measure and used a single database as much as possible to have comparable info
- What did you learn about finding information on your topic—or in your discipline?
  - There are still very real data gaps! It’s challenging and takes creativity

Thesis and Synthesis

- How did you use your sources to support your thesis?
- Did you make any refinements to your thesis as a result of your research? What original ideas stemmed from the synthesis of your research?

What lessons about the research process did you take away from the experience?
• What might you change about the research process that you did for this project, if given the chance to do it over?
• What have you learned about yourself as a researcher?
  ○ I am persistent and have a desire to find perfectly accurate info and relevant information, but that’s not always how it goes
• What research expertise have you gained? What do you feel you still need to learn?
  ○ I’ve learned a lot more about how research within a discipline can build on each other, learned about how to make my research more broadly applicable to similar topics within the field