HUMAN-CENTERED STRATEGIES FOR EFFECTIVE URBAN SPRAWL MANAGEMENT

Focused on Cache County, Utah

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For
Human Dimensions of Natural Resource Management class (ENVS 4000)

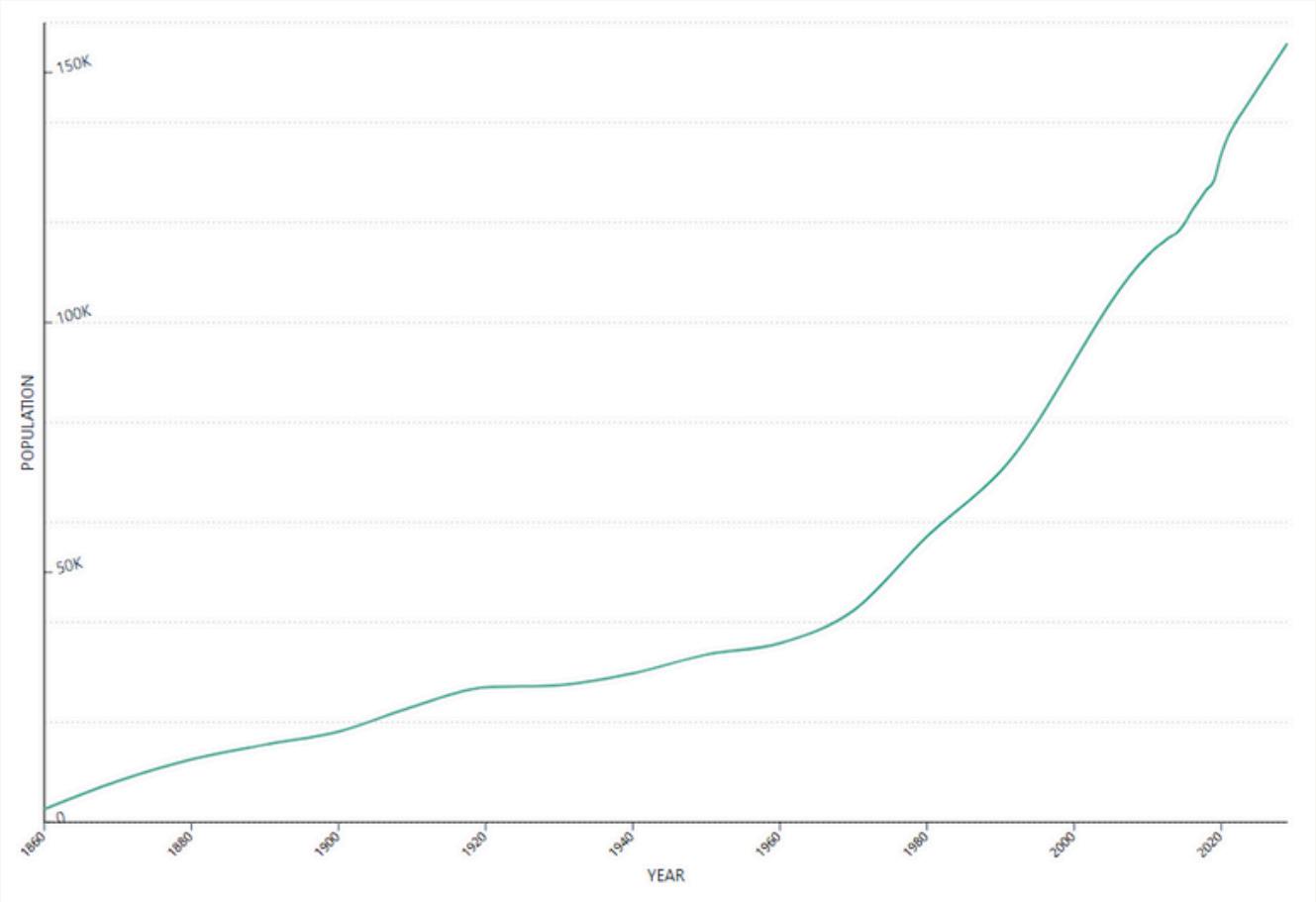
INTRODUCTION

NATURAL RESOURCE ISSUE, SETTING & LOCATION

One of my main concerns facing the mountain west is the relentless march of urban sprawl. When we sprawl, we destroy farmland, wetlands, prairie, and pretty much everything in our path. This is not an easy change to reverse either, and should be an issue we weigh heavier than we have in the past. There are several issues related to managing this issue, both real world issues and perceived human issues including traffic congestion, available housing units, cost of housing, food availability, habitat destruction, loss of ecosystem services, and pollution. There could easily be a list of even more issues, but that is more than enough points to briefly explain this issue.

The main focus of this paper is Cache County in Utah, , which is expected to gain 90,000 residents by 2060 (Kem C. Gardner Policy Institute, 2022) which is a fairly conservative estimate. Population growth is trending up compared to historical average, which can be seen in figure 7. It's important to note when talking about population that the growth is not driven by Californians moving to the valley, but rather the population growth is driven by natural increase, or people having large numbers of kids who stay in the valley. A little over 80% of growth is driven this way in the valley (Cache County Housing Crisis Task Force, 2023). The main focus is urban sprawl wiping out privately owned farmland due to the fact that the land is valued more for development than farming. Naturally some farmers want to sell their land, but for most they are somewhat forced to by these economic factors. Regardless of what we do and how it happens, growth is going to continue in our community.

FIGURE 7



This figure shows the population growth of Cache County since its founding in the mid 1800's. The population has shot up since 1970 and is projected to double within the next half century. This growth has currently been sustained by natural population increase and urban sprawl.

HISTORY & BACKGROUND

The history of urban sprawl comes from the postwar boom in the United States, where we started building subdivisions, implemented Euclidean zoning, and adopted automobiles as the primary mode of transit (The Yale Ledger, 2021). There are a lot of racial issues tied up in urbanization and highway development, with white flight and redlining, but that is way out of scope of this paper. urban sprawl has continued ever since, increasing more in the 70s and becoming a part of the American dream at the time. This development has almost always destroyed habitat and farmland, decreasing the amount of food grown locally and separating us from our food systems. The farmland and surrounding wetland (the line is frequently blurred), also provide important ecosystem services that should not be left out of the conversation. These services should be voiced using the ten assessment criteria as outlined in Ervin et al., 2014.

This natural resource issue is particularly human-centric because it affects everyone in some way. Farmers, naturally, do not want to give up their way of life, people want to move to the valley and need a place to live, and we have an obligation to protect wetlands, habitat, and open space. The main destruction of our land natural resource is from urban sprawl, which is when we build housing further and further away from the city because of the low density we are building at. There are many ways we can combat and manage this growth, while protecting this natural resource, but it's extremely difficult because of how intertwined we are with land and the economy. Expanding on this issue of sprawl, it “leads to increased traffic congestion and higher levels of pollution [along with] a high demand for parking spaces in the city centers, which places a strain on the land available for other uses” (The Yale Ledger, 2021). In a valley that already suffers from inversions, additional sources of air pollution will only make the problem worse, not to mention the noise pollution from cars and light pollution from development. With less farmland in the valley, we will face a further separation from our already complicated food system. Overall, there are numerous issues that come from both sprawling, and not sprawling, but there are ways to manage this issue.

ADJACENT LAND/RESOURCE USE & BROADER CONTEXT

In Cache County, due to its slow growth compared to larger metro areas like Salt Lake City, we have a large proportion of farmland intact, which means we are at a crucially important crossroads in our development. You can see the current growth over 30 years in *Figures 1-4*, where development has blurred the lines between towns like Millville, Smithfield, and Hyde Park and the same growth of Southwest Salt Lake County in the same time period in *Figures 5 and 6*. You can see where former farmland has turned into neatly packaged suburbs, which contribute to traffic in town, but also make roads less safe for everyone (Yeo et al., 2014). With plans to build a *second* bypass to Logan's Main street in the attempt to decrease traffic congestion (UDOT | Avenue Consultants, 2023), this could potentially lead to further and easier development of the west side of town (Ewing, 2008). This could be mitigated by giving rights to the county's wetlands, which has been gaining traction globally according to Chapron et al., but this might not be feasible in a state like Utah.

This is a split image of figures 1 and 2. All figures are in full at the end of the report.

PROSPECTIVE PARTNERS & STAKEHOLDERS

Prospective partners that are the most important to collaborate on with this issue are Farmers/Ranchers, Politicians (city council, county government, and state), Environmentalists, and Developers. Following the collaboration guide published by the USDA, we would engage these groups by "partnering with [them] in each aspect of the decision, including the development of alternatives and the identification of the preferred solution" (US Department of Agriculture, 2021). While there are more relevant and potentially powerful groups, they either have power derived from these entities or play second fiddle on the issue and would be better people to inform or consult with during the early stages of this management plan. The full list of stakeholders has been mapped out using the Interest–influence matrix as outlined in Reed et al., 2009. Interviews with specific groups, especially developers and farmers will be crucial in this management plan, and should be using standard open ended questions (Turner, 2010) to gauge peoples opinions and values across the shareholder spectrum.

The following list entails several potential objectives to better manage this natural resource, and while some may be better than others to a certain group, the goal will be that the collaboration between all groups will create the best outcome for everyone involved.

- Develop an Urban Growth Boundary for the County to protect farmland and habitat by restricting where development can be done.
- Allow for ADUs (additional dwelling units) to be built on property. Increases housing supply and affordability without developing new land.
- Remove Height Restrictions, allows for taller buildings, and in turn, more housing units.
- Get rid of Parking Minimums, which allows for more buildings. This only works well with comprehensive public transportation.
- Give rights to the county's wetlands

HUMAN DIMENSIONS MANAGEMENT CHALLENGES, OBJECTIVES & RECOMMENDED ACTIONS

CHALLENGES

The primary challenge with this plan will be getting everyone together in a room. It is abundantly clear right now that the current course we are on does not consider all sides of the issue (political, environmental, economically, and personally), and that certain groups are ahead of others. To get all sides of the issue to the table may be difficult due to the current inequality of outcomes, but with proper authority and legitimacy surrounding the stakeholder meetings, it would be unwise for these shareholders to not come to the table.

Another challenge with this natural resource management will likely be one of values. While the rancher might have ties to the land through family history and heritage, the developer may only see money to be made while the environmentalist may see the species on that land and the intrinsic value it holds. Because of this diversity of values, it will not be an easy feat to get people to agree on what to do. However, we do seem to be at a unique point in time where managing this resource seems to be more achievable with Utah shifting more into a mutualism and away from a domination mindset in regards to the environment (Manfredo et al., 2020). There are cases where groups of individuals that have never seemed to have anything in common, sit down and compromise on an issue. The Monroe Mountain management plan is a great example of this, spearheaded by Dr. Steve Daniels, where ranchers, environmentalists, and hunters all came together to create a plan that nobody had ever thought to be possible. There is precedent for such a management success, and by engaging these shareholders, getting them in a room and acquainted, and going slow, it is possible.

CHALLENGES

Specifically regarding some of the potential solutions to limit urban sprawl, there are several issues that might come up with each one. The first potential problem with the Urban Growth Boundary solution is that it is seen as government overreach in conservative states, and against the free market (Lewyn, 2000). UGB implementation has also been linked to higher housing prices (Mathur, 2019), but the housing market is such a complex issue that it's not an exclusive reason. I also believe that a city like Logan should have nowhere near the housing demand that a city like Portland would have. ADU's are a less contentious issue and passed recently in Logan, but should be implemented countywide with better rules to have a meaningful impact. Removing height restrictions would in theory not be unpopular, but in practice is very unpopular, as is the case with removing parking minimums. These are only suggestions and are riddled with problems Ideally the stakeholders would be able to creatively and equitably work around these problems.

OBJECTIVES

The goal of this natural resource management plan is to engage and empower the stakeholders to come together and create an equitable and long term solution to urban sprawl and land management issues within the county. It is important that this is county wide as limiting sprawl on a city basis can just force that sprawl elsewhere to places that are even less equipped to handle the demand and development.

Ideally, the stakeholders would be able to come up with a feasible management plan within a two or fewer years, as the threat of urban sprawl will continue to intensify as time goes on and the population increases. The group would hopefully be able to blend their values to create a plan that addresses environmental protection, land preservation, economic growth, and individual rights. Because there is no one size fits all solution, it will likely be a rather complex, tiered plan for hopefully at least the next 20 years or beyond.

RECOMMENDED ACTIONS

I would recommend that the stakeholders that are engaged travel to other cities and counties with UBGs, progressive housing reform, and unbounded sprawl to see the effects that the management plan can, and can not have. It would also be recommended to keep frequent meetings even if minimal changes occur, and social meetings where stakeholders can 'break bread' with each other to break down some social barriers. It could also be powerful and helpful to implement some indigenous, long term planning strategies like the seven generations method, which "counsels decision-makers not to make any decisions without considering the effects on those living seven generations ahead" (Soyer & Hart, 2021). This is an ambitious management plan because unlike most environmental issues, this is a lot more forward and public facing as it impacts where people work, live, and play.

EVALUATION PLAN

The management plan should be evaluated based on criteria that the stakeholders come up with and agree on as a group. It would be unfair and biased for me to come up with criteria because like everyone, I have bias, however I do have a few ideas. I would suggest that the group leans more into the citizens' ideas for an evaluation method, as everyday people are going to be most affected by the plan that is created, and interviews would be suggested to get people's opinions on what the outcome should be. The outcome should be a longer term plan with potential for revision based on data, and should be reevaluated every year or two.

FIGURES

Figure 1. Between Logan and Smithfield in 2023

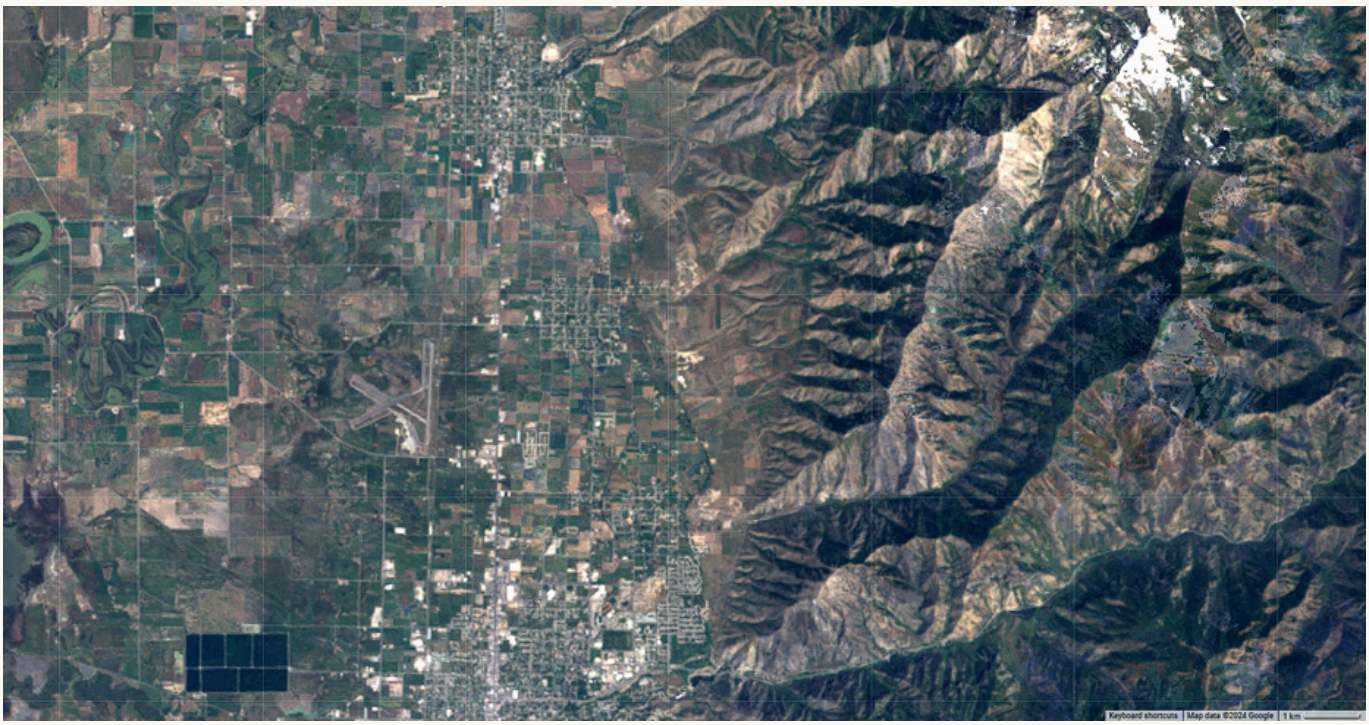


Figure 2. Between Logan and Smithfield in 1993

FIGURES

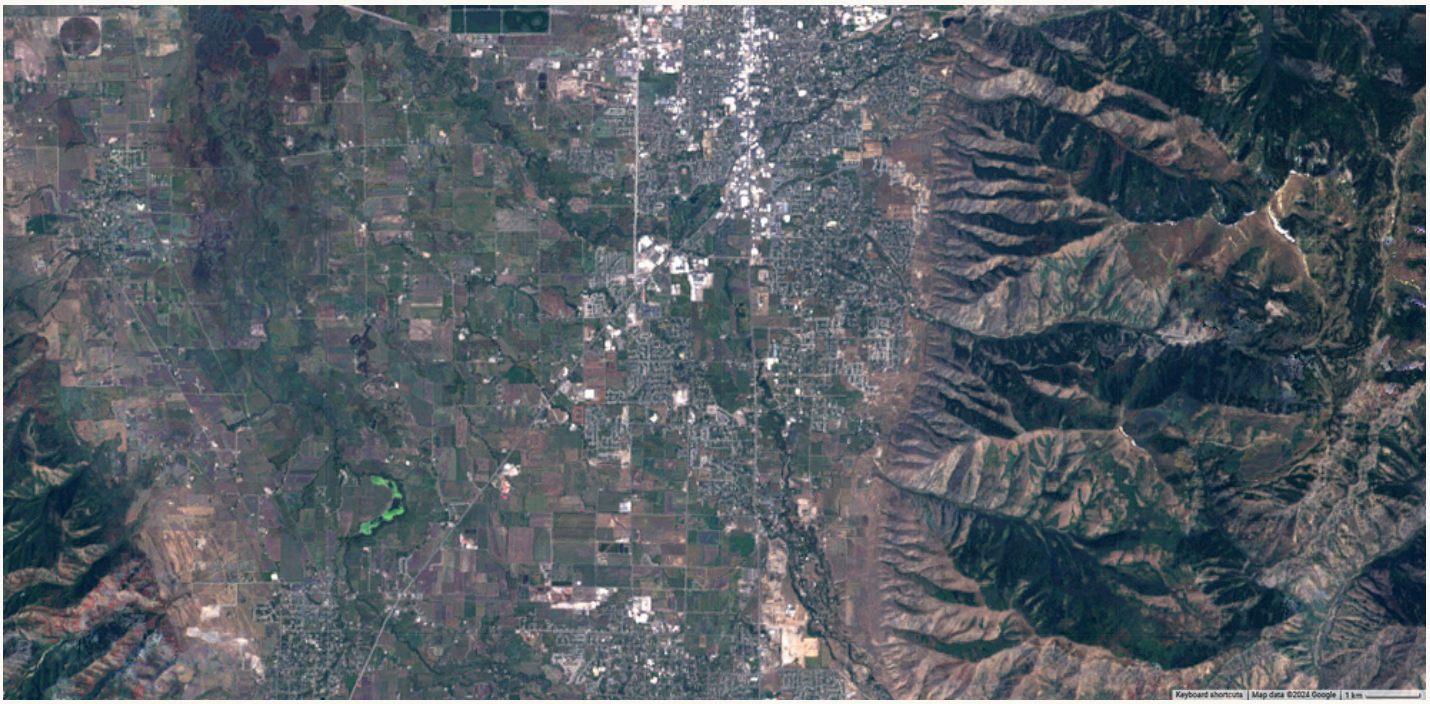


Figure 3. Between Logan and Hyrum 2023

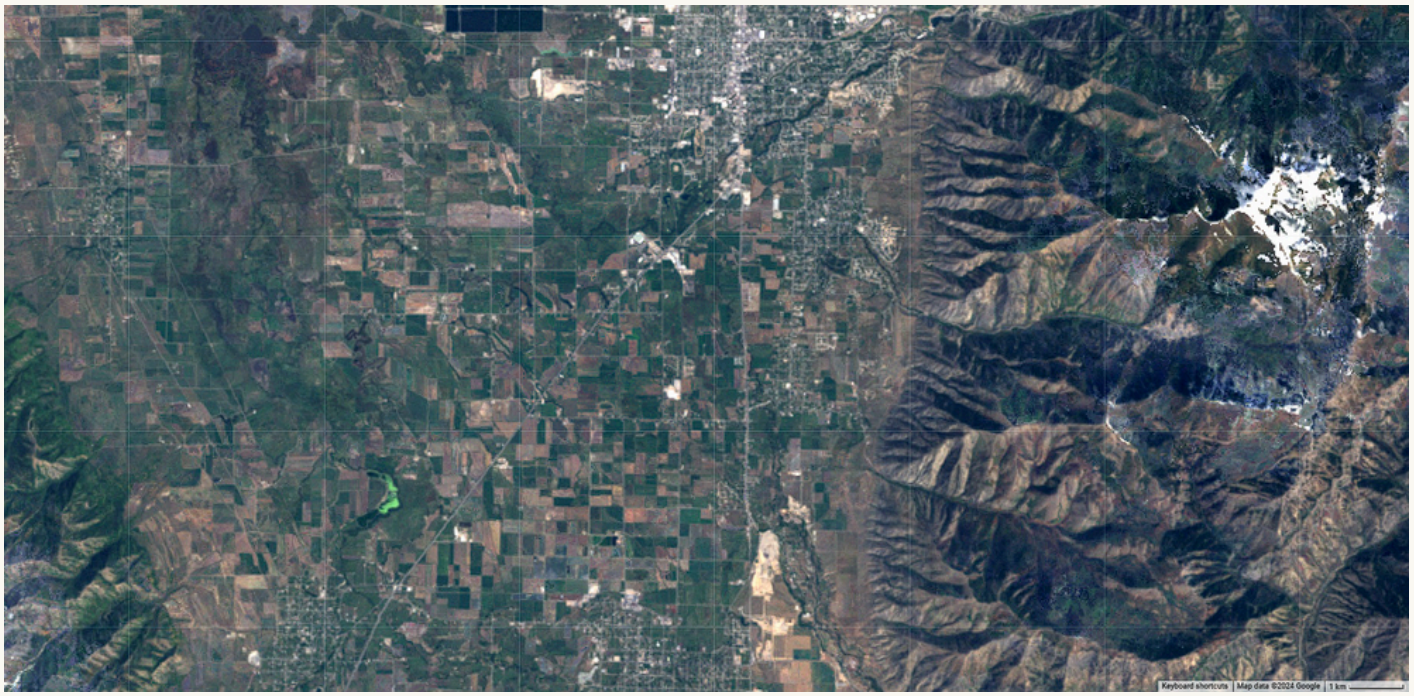


Figure 4. Between Logan and Hyrum in 1993

FIGURES

Figure 5. Salt Lake County in 2023

Figure 6. Salt Lake County in 1993

FIGURES

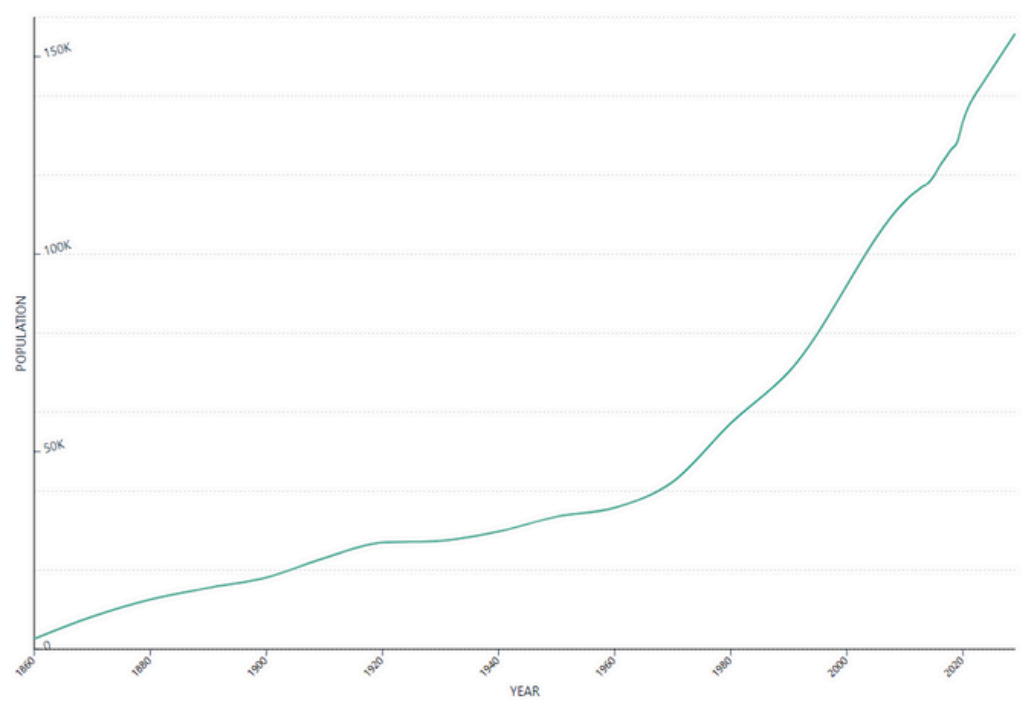
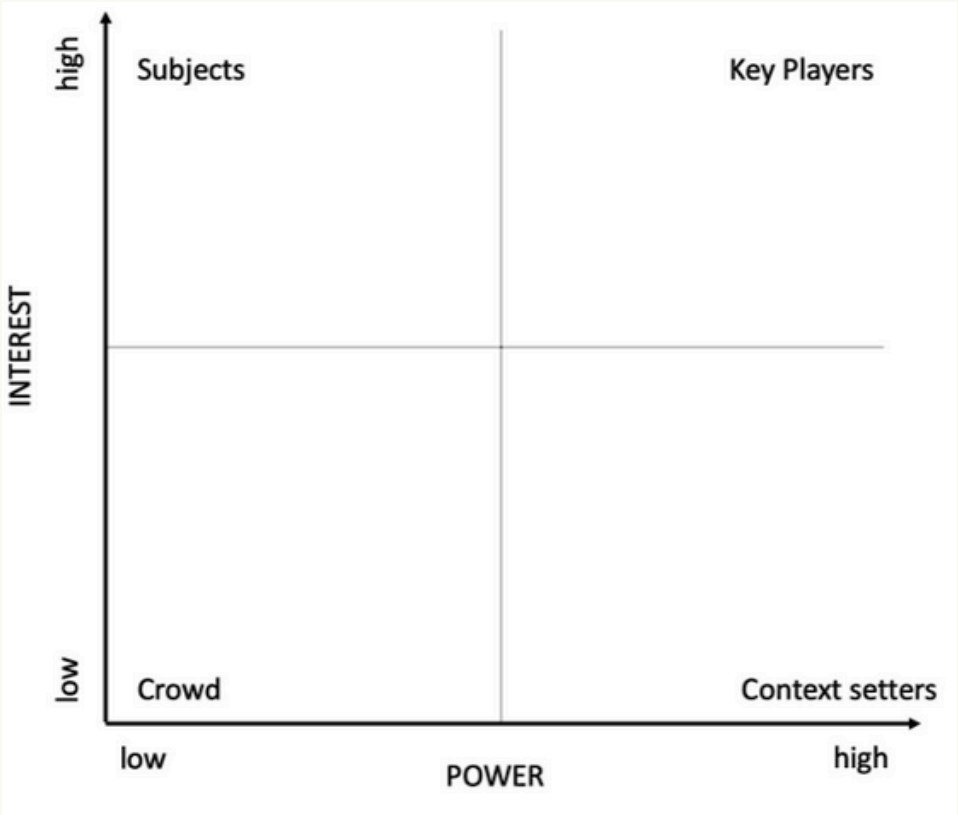


Figure 7. Cache County population growth to present

Figure 8. Relevant groups to urban sprawl.



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