The Setting
The Midwest is an anomaly because currently it is not conforming to the almost globally consistent trend of urbanization. In fact, most of the major Midwest cities have been declining in population since the 1970's. This trend is additionally surprising because the Midwest still boasts some impressive numbers of work force, GDP contribution, Fortune 500 companies, and rich natural resources. The task of researching the existing condition of the Midwest, without a brief or design project in mind, in order to understand the contributing factors and identify opportunities for change seemed like a fascinating and unique challenge.

The Research
The entire first semester was dedicated to researching the condition of the Midwest, it’s major challenges and potential opportunities within the themes of infrastructure, energy, and landscape. After 5 months of research and analysis, the studio produced a 2050 Structural Masterplan for the Midwest. This masterplan involved a strategy for creating a unified, economically strengthened region along with a set of proposals that highlighted potential solutions to some of the major challenges. This was executed through the lens of large-scale, top-down, future vision planning in order to address very complex and challenging issues.

The Project
Following the research and Masterplan design, each student selected their own site, project, and program within the context of the Midwest: a multi-modal transit hub (highlighting the increased value of passenger rail and the introduction of a maglev high speed rail) within St Louis (at the location of the existing passenger train station). The goal of the this project existed within three scales of approach. The first goal was to test the ideas of the 2050 Structural Masterplan of the Midwest within a city context and at a building scale. This transition from a huge regional plan down to a single project produced this underlying, yet critical, research question:

How can this proposal translate the whole of the Masterplan ideas? How can this intervention educated the citizens of St Louis about the current crises and convince them to adopt the potential opportunities?

The second and third scales (city and site) created sub-questions to support this main ambition:

How can the train station and multi-modal hub offer an inviting, impressive, and integrated entry experience into the city of St Louis?

How can this intervention improve pedestrian experience of this site, connect the disjoined sides of the tracks, and stimulate the vitality of the surrounding neighborhoods?

These research questions laid the foundation for the research and urban analysis which included the city’s history, culture, climate, demographics, perception, and the site’s infrastructure, amenities, and landmarks. This research was accompanied by a constant consideration of potential program. The train station was a given and the existing conditions of the site already presented the nodes of many transportation modes, but the rest of the program was determined through researching the city, site, needs and opportunities (as well as the considerations from the masterplan). The design was largely controlled by the demanding logistics of the many transportation modes, yet keeping the research questions in mind to achieve more than just an engineering project. The design process was guided by constant hypotheses presented, tested, and adapted. This happened through the analysis of 3D models, physical models, routing diagrams, and perspectives. Additionally, the design choices, at all scales, were guided by the concept.
**The Concept**
Through the research of St Louis and train stations, in general, a common theme of gateways kept surfacing. St Louis is called, “The Gateway to the West”, it’s most famous icon is the Gateway Arch (the largest man-made monument in the Unites States), and the train station is often termed a gateway into the city.

This gateway experience became a guiding concept for the project, offering a gateway for the pedestrian, a gateway for the trains, and a symbolic gateway moment for the inhabitants of St Louis: a moment of passing from one mentality to another (an opportunity to offer education, awareness, and understanding about the challenges and opportunities). A gateway in three dimensions.

**The Reflection**
In reflecting over the first semester of research, the greatest disappointment was simply a lack of horse power (only three students in the class) and time. In addressing a region which has a land area that is fifty-one times the size of the Netherlands, it is impossible to fully grasp the variables and complexity of the situation. That being said, I really appreciated the unique challenge of designing in a scale many, many times outside of my comfort zone and experience. Considering the limited size of the group, I am quite satisfied with the quantity of research and the quality of our research book. However, the actual proposals and ultimate Masterplan could have been developed to much greater extent. The time contributed to the research versus the design should probably have been divided more evenly to allow for more design development. This highlights one of the largest weaknesses with these types of research-without-a-brief projects: the research can be endless.

The flexibility of choosing my own project, site and program allowed for personal interest and fascination, but reflected the same problem: without constraints, the opportunities are endless. This process of determining programmatic considerations through research was a good experience, allowing for outside considerations of city needs, sustainability, energy, and landscape, but ultimately, delayed the moment I began working at a building scale. This means that my building development has been dramatically hindered, purely through the reduced time available.

The design process of testing hypotheses and proposals within different mediums of 3D models, physical models, and perspectives was relatively successful, with each medium offering of different strength within analysis and understanding. A careful balance of the mediums allowed for the wholistic development of the project.

Within a larger social context, I believe this studio is relevant in terms of the changing role of the architect. The forces of globalization, specialization, digitalization, as well as the economic crises are causing substantial transformations in the position of the traditional architect. The architect must adapt and this studio offered an exploration into one option: addressing large-scale, environmental issues and a degree of complexity that is not traditionally the responsibility of the traditional architect. In subject, the future of the Midwest is very important on a social and economic scale. The success of this region is in question and the end-product of this studio offers some intriguing proposals for distinguishing the region and promoting its future success.