

17.0 Reflections

In the beginnings of the Master's thesis, I was determined to explore the themes of urban planning and urban metabolism within the suburban context. The exploration of these themes expanded into the existing lack of theory within Canadian suburban development and the failure of policies to achieve sustainable growth within the region. There was a clear gap in research and theory on Canadian suburban development which takes a complex, systems-thinking approach to the expansion of peripheral regions. I intended to study the GTA through the lens of Urban metabolism to create a more progressive understanding of the region beyond traditional concepts of urban sprawl and the unequal balance of resource consumption. The intent was always to create solutions, but more importantly, create quantifiable evidence in order to understand the reality of our growth patterns and an urgency for change.

The next phase of the project was to explore whether many claims of 'unsustainability' and suburbia were true within Ontario and the GTA. To do this I had used Ecological Footprint and Biocapacity data. Of course, these datasets are quite broad and quite limited, but the amount of consistent data within these EF studies were the strongest research studies which could target broader issues in the Province and the Region. I then chose the 4 highest indicators within EF: food, mobility, goods, and housing. After careful consideration and research on the ability of urban planning to affect these issues, I had decided to consider only 3 indicators. The research would not include the subject of goods as it is incredibly difficult to track at a regional scale, and is mostly affected by income. The following section included a brief preliminary analysis on EF within these three indicators as well as the extent that biocapacity is being changed by suburban development.

When it came to preparing a methodology, I initially intended to develop the DPSIR approach into my research framework. While I did study the drivers, pressures the usefulness of the approach in this given project did not seem to be beneficial enough to continue. Continuing the analysis of the state, impact, and therefore responses were beginning to have obvious conclusions and became unnecessary for the research. Nonetheless, I continued with developing the indicators for sustainability within the suburban region. I expanded upon the 3 indicators within the ecological footprint, developed an Ecosystems Service approach for biocapacity and finally, introduced livability through design and policy analysis. Though the livability section in itself is lacking demographic analysis, the general conclusions consider the opportunity to reflect on this within place-based design.

The next step was to compare these indicators to the actual recent growth patterns which have taken place over the past 15 years. This established three growth types: Urban Intensification, Inner Ring Expansion, and Outer Ring expansion. The development of the growth types allowed the project to analyze the performance indicators in a more detailed and critical way.

Once conclusions had been drawn on past development, future growth, and the performance of these areas within my analysis, the research moved onto strategy development.

The strategies continued to focus on the growth typologies, as the spatial conditions and spatial opportunities in these areas differ so significantly. The strategies were developed based on the most obvious issues and opportunities within the analysis. Of course, more strategies could be (and should be) drawn on a building level scale within zoning policies, yet building performance and construction were out of the realm of this design framework.

The project then used 'What if' scenarios to explore design. This decision process was where there was the most difficulty in decision making. With the assistance of my mentors, the decision to use What if scenarios rather than a traditional strategy and vision was due to the complexity of the large region. Identifying strict boundaries and solutions without identifying the realities of those decisions could easily invalidate my thesis research. What if scenarios provided the opportunity to criticize and optimize the strategies which I created for design with a more critical lens and to create more educated conclusions on regional design. These scenarios have allowed me to create conclusions on regional growth strategies for the region. Though the conclusions are rather broad, they are lessons which I have learned about the region of Toronto throughout my research process.

The last step in my research is implemented in this written section. The need to reflect on the process of my research project and the need to relate it to the broader societal and scientific context. It is possibly unnecessary to explain the shifts within planetary systems and vast global urbanization within this section, as this should be evident given the current global condition. In relation, the loss of land and resources and the dangers of climate change are well known and the need for sustainable design is far ranging. The intent of this thesis is to explore these issues of sustainability through the specific lens of the suburban system and expand on the limited theories of sustainability and suburbia within North American cities and to go beyond new urbanism.

The last thoughts within my reflection pertain to the ethical issues and limitations within my thesis. The largest and most obvious set back of my research is the lack of study of people and of demographics. Yet, this was also partly purposeful. Being from Greater Toronto has given me the prior understanding that the region has a wide spanning range of demographics. Knowing this complexity, I did not want to indicate large generalizations about certain populations. The intent was to focus on creating a livable and affordable area for all people. My intention was to avoid generalizations, but this also occurred of course within other sections of the thesis. This was bound to occur considering the scale of the study area and the available data, but critical consideration should be taken when furthering this research beyond this thesis. Lastly, other than government actors and developers, actors and stakeholders were not specifically identified within my scenarios. This is because many of the actors and stakeholders were consistently land owners, residents, municipalities, community groups and regional bodies. These stakeholders are already linked to the current planning process within the GTA and in turn, including an analysis would only lead to similar solutions and structures which are already practiced in the region and the planning structure.

Finally, the 2019 version of the Growth Plan has been introduced in June during the creation of my thesis. Comments on this and Bill 108 were loosely touched upon throughout the thesis, but given that this plan has yet to be implemented or prove its significance, the report does not provide an analysis.