

TOWARDS BUILDING COMPACT CITIES: MEASURING THE OUTCOMES OF WINNIPEG'S DEVELOPMENT PLANS



ROMEO ANKISIWAI AGOMINAB
UNIVERSITY OF MANITOBA
FACULTY OF ARCHITECTURE
DEPARTMENT OF CITY PLANNING

REASONS FOR RESEARCH

The City of Winnipeg is growing in terms of both its geographic footprint and population. Between 2001 and 2021, the city's land outpaced population growth, resulting in nearly 13% decrease in density amid a 6.3% increase in population. The rate of expansion of the city is associated with modest population growth which has implications for sustainable development. To build a sustainable city, the City of Winnipeg incorporates compact development policies in its plans to serve as a roadmap.

The purpose of this research is to evaluate the compact development policies in Plan Winnipeg and OurWinnipeg, and the extent to which the policies have been implemented.

RESEARCH QUESTIONS

1. How does Plan Winnipeg 2020 and OurWinnipeg address compact development?
2. To what extent has the policy documents led to increased density and supported compact development?
3. Has rural land been maintained for rural and agricultural uses over the planned period?

METHODS

Three research methods were used to answer the research questions. They include: content analysis, mapping, and spatial analysis

Content Analysis

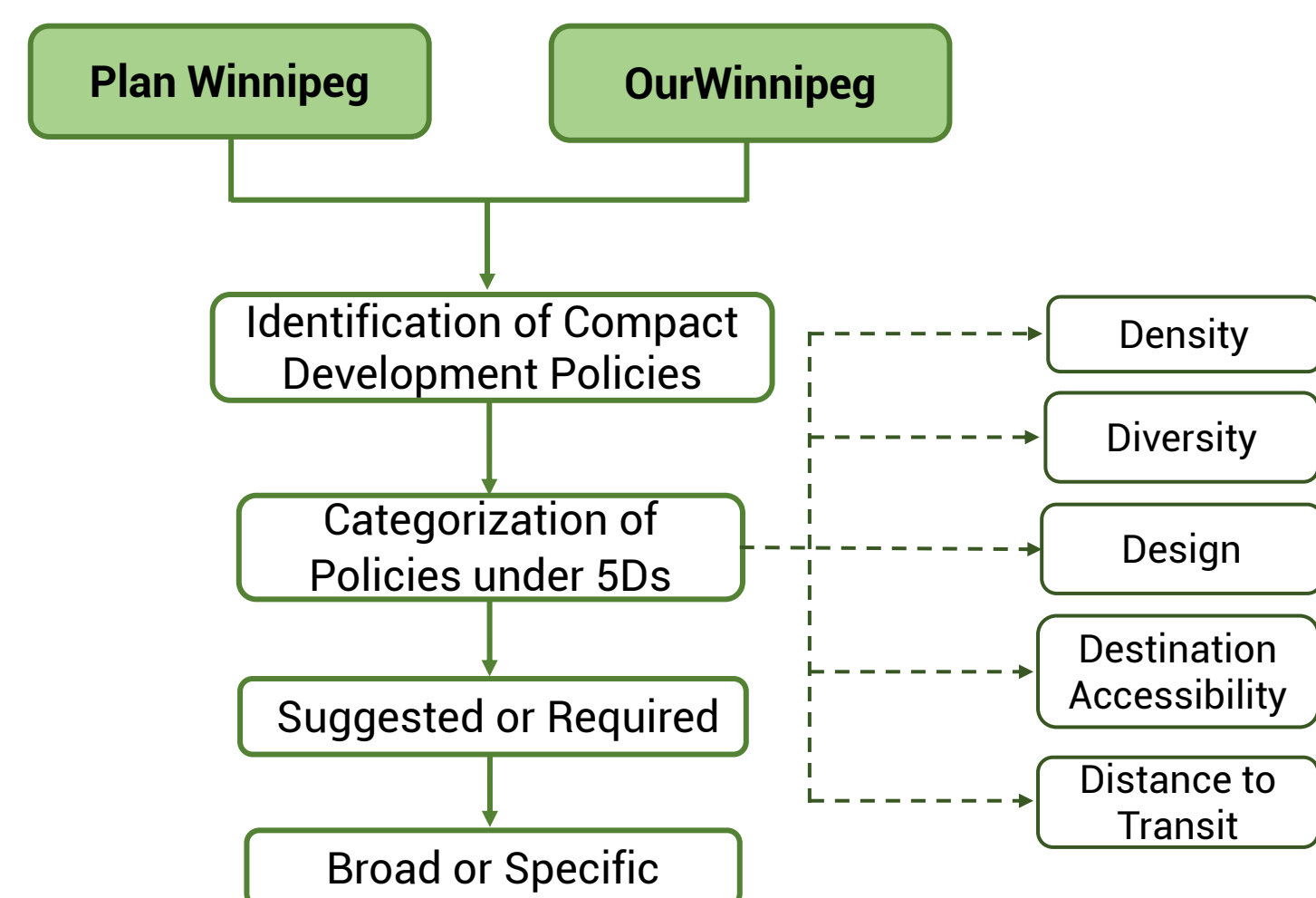


Figure 1: Framework used for Content Analysis

Mapping

Mapping was used to visualize population density, era of development, distribution of development permits and the rate of change of the built form when the plans were adopted.

Spatial Analysis

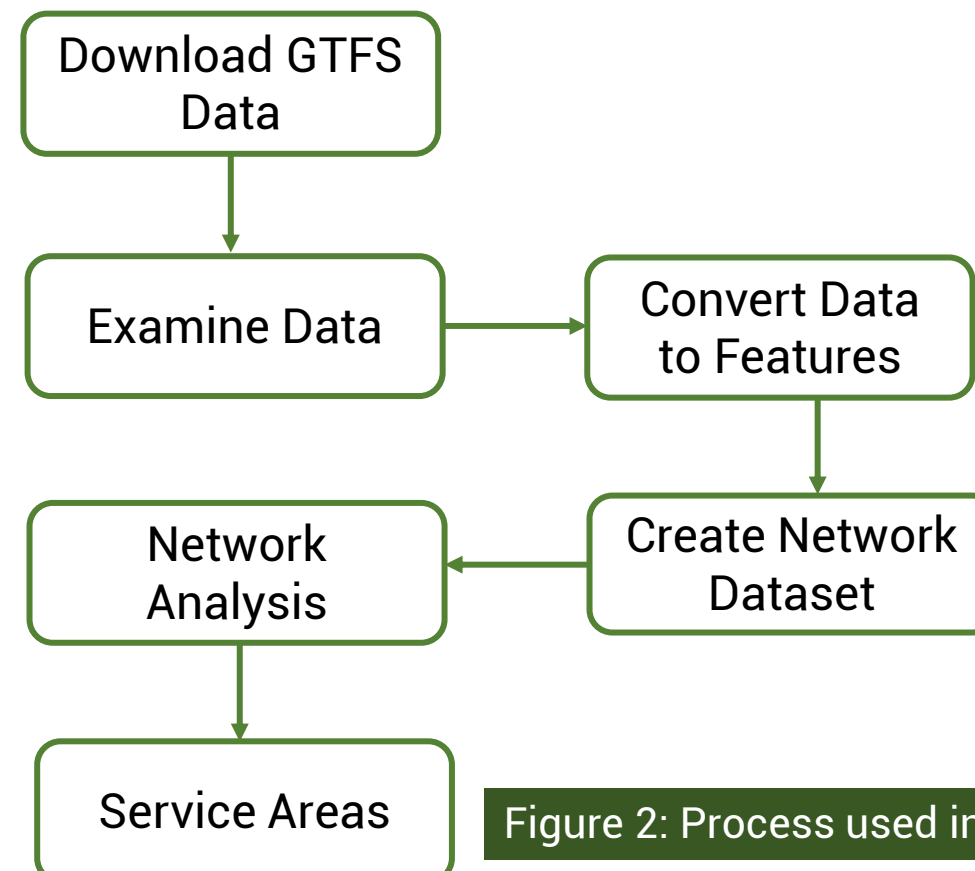


Figure 2: Process used in conducting Spatial Analysis

RESULTS & ANALYSIS

1. Most of the policies focused on multiple features of compact urban form:

Most of the policies in the development plans focused on promoting multiple features of compact urban form. For instance, a policy such as "dynamically integrate transportation with land use" (OurWinnipeg 2011, p. 31) covers multiple features. This is important for reducing infrastructure cost since multiple features will have to be integrated into developments.

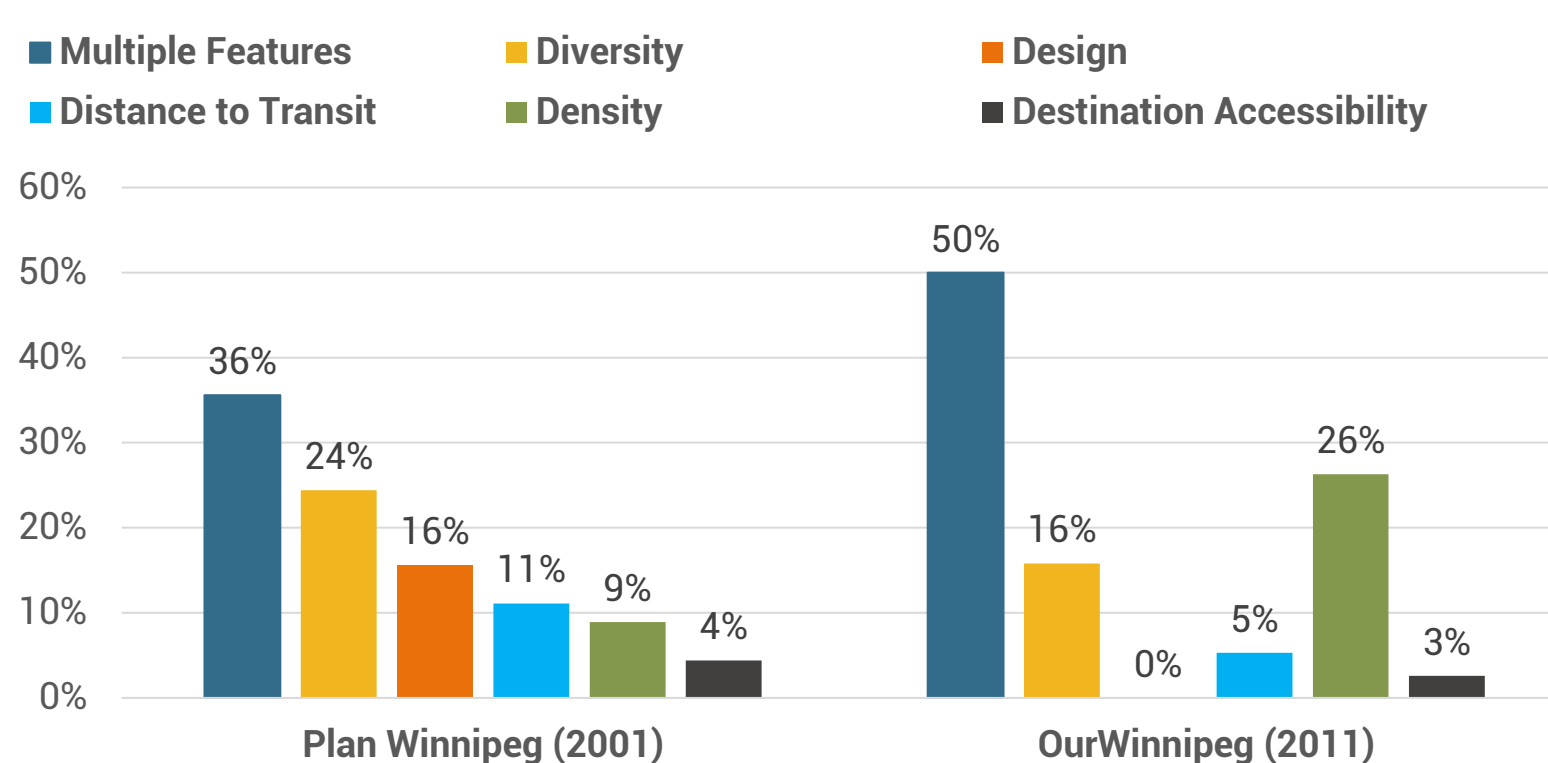


Figure 3: Categorization of Policies in Development Plans

2. Plan Winnipeg (2001) had more specific policies than OurWinnipeg (2011):

The study found that Plan Winnipeg had a higher percentage (67%) of specific compact development policies compared to OurWinnipeg (24%). OurWinnipeg had more ambiguous language and lacked clearly defined goals. Having specific policies provides clear guidance for stakeholders to achieve desired outcomes in development.

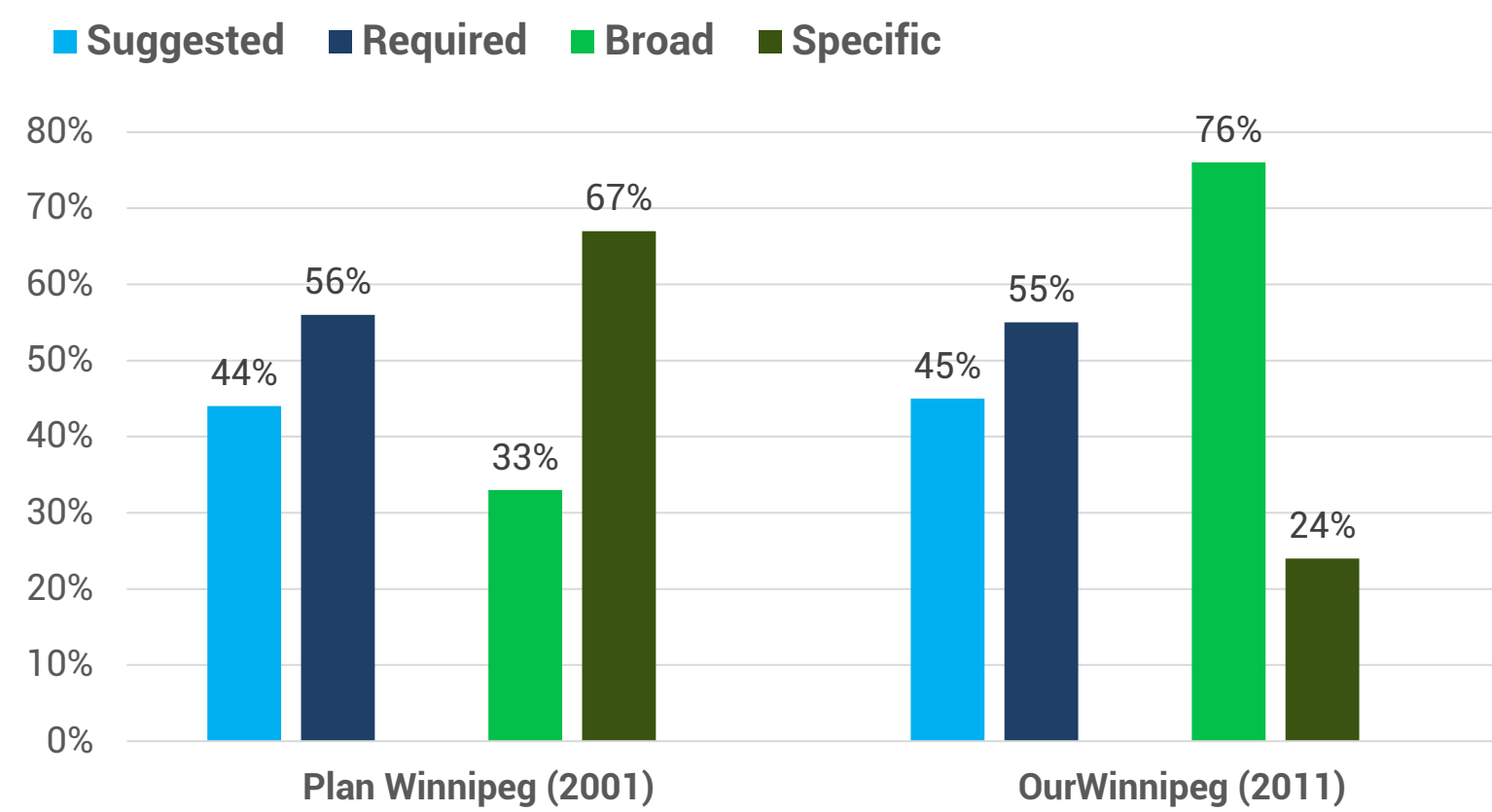


Figure 4: Policy Language in Development Plans

3. Reduction in rural and agricultural land: There has been a decline in the amount of agricultural land as can be seen in Figure 5. The reduction can be attributed to urbanization and political decisions which have led to the conversion of agricultural land for non-agricultural uses. The loss of agricultural land may have adverse environmental consequences and can also cause food insecurity.

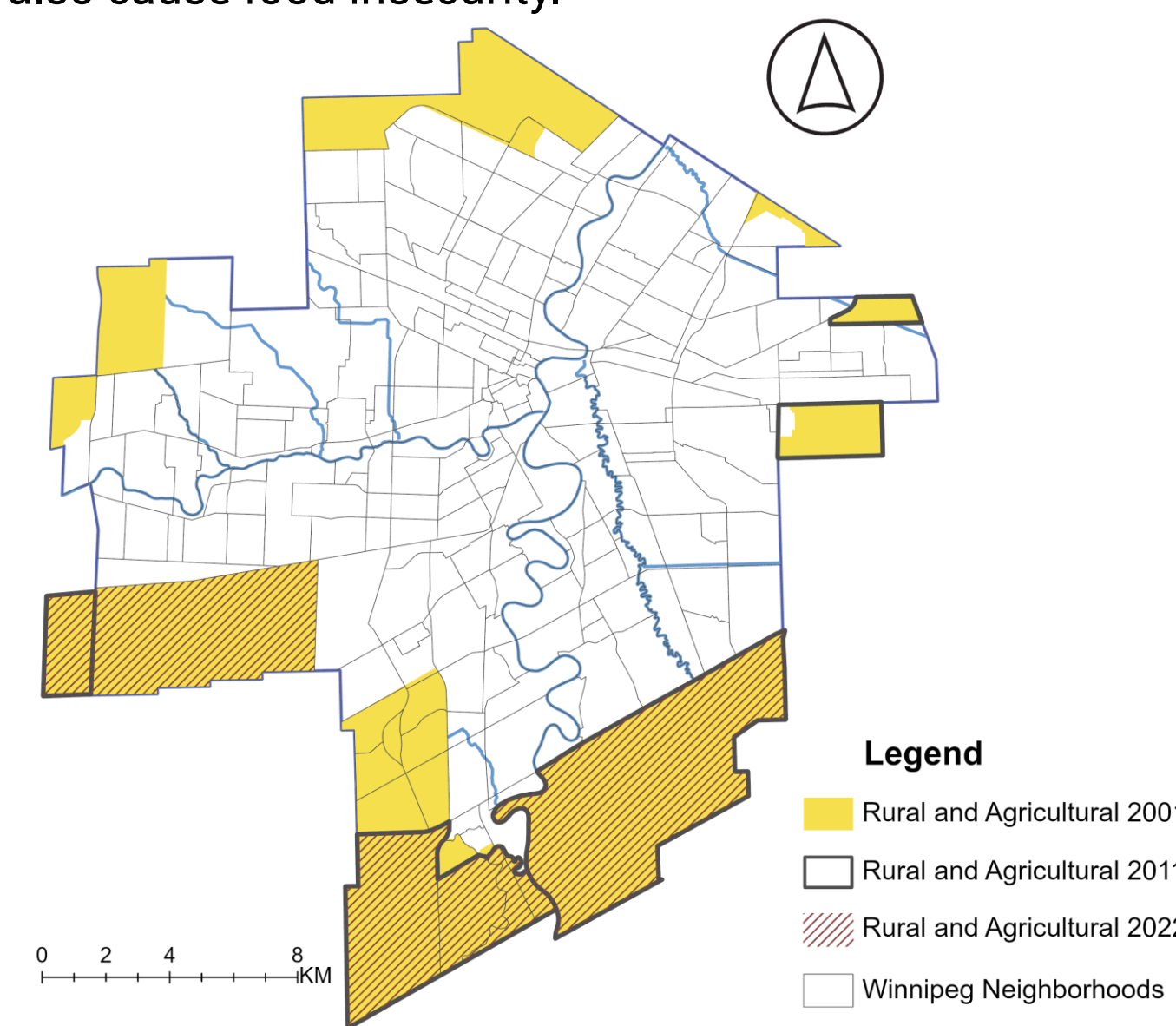


Figure 5: Changes in Rural and Agricultural Land

4. Both plans resulted in growth: Despite Plan Winnipeg having more specific policies than OurWinnipeg, the former has influenced growth and development more than the latter. This can be attributed to the ambiguous language of the policies which allowed for developers and planners to interpret the policies in a way that will benefit their actions or proposals. Figure 6 shows that the development permits that were approved for new residential development between 2012 and 2022 were mostly on the fringes. This indicates the extent to which the plans have influenced urban sprawl.

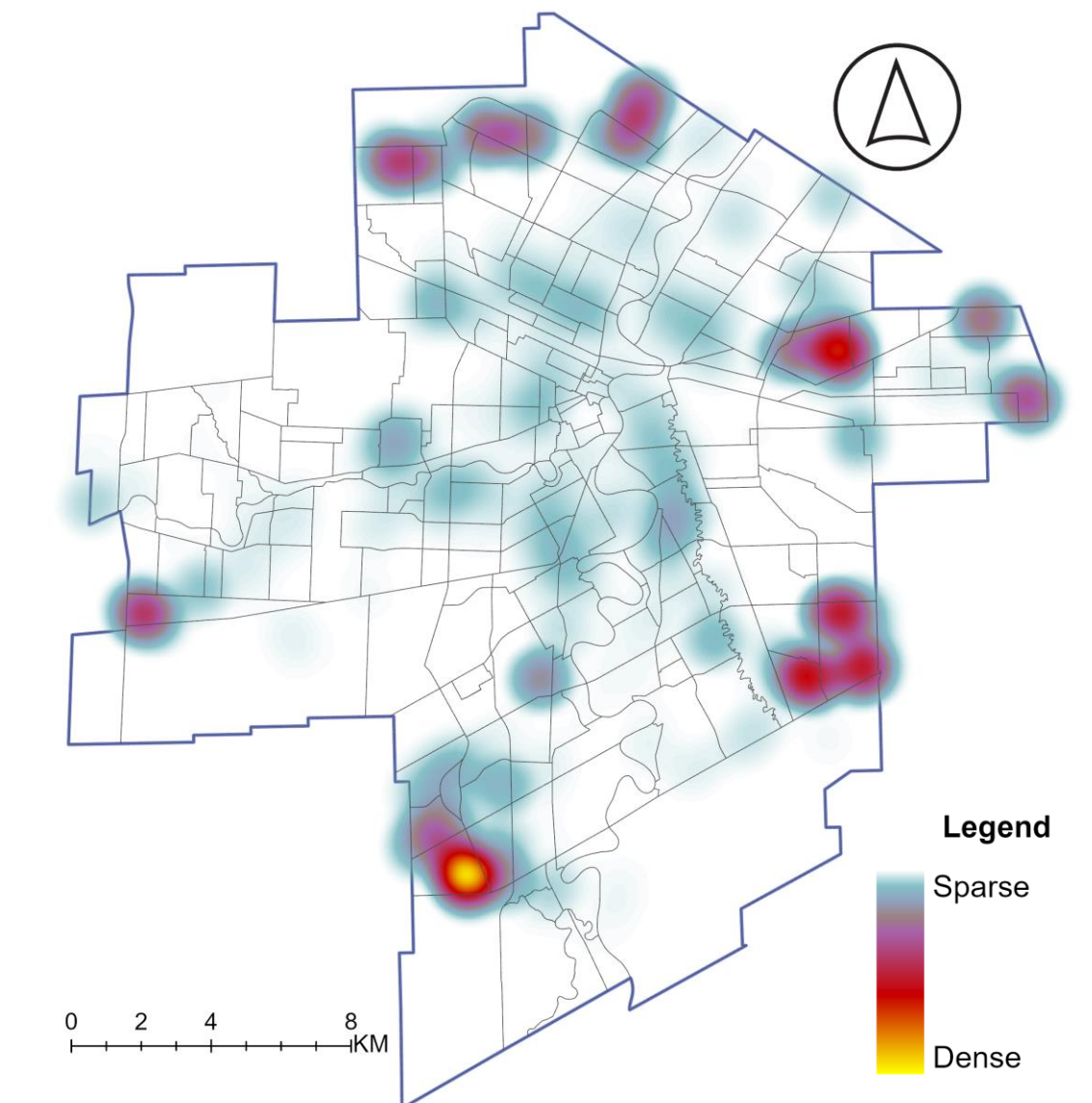


Figure 6: Distribution of Development Permits (2012 – 2022)

5. Improvement in public transit services: Although transit ridership decreased from 14.9% to 9.3% between 2016 and 2021, the analysis shows that there has been an increase in transit coverage. The decrease in ridership could be attributed to the outbreak of the Covid 19 pandemic which resulted in lockdowns. On the other hand, transit services improved as a result of the completion of the rapid transit corridor in 2020. Figure 7 shows convenient access to public transit services within 500 meters—approximately a 6 minute walk to a bus stop.

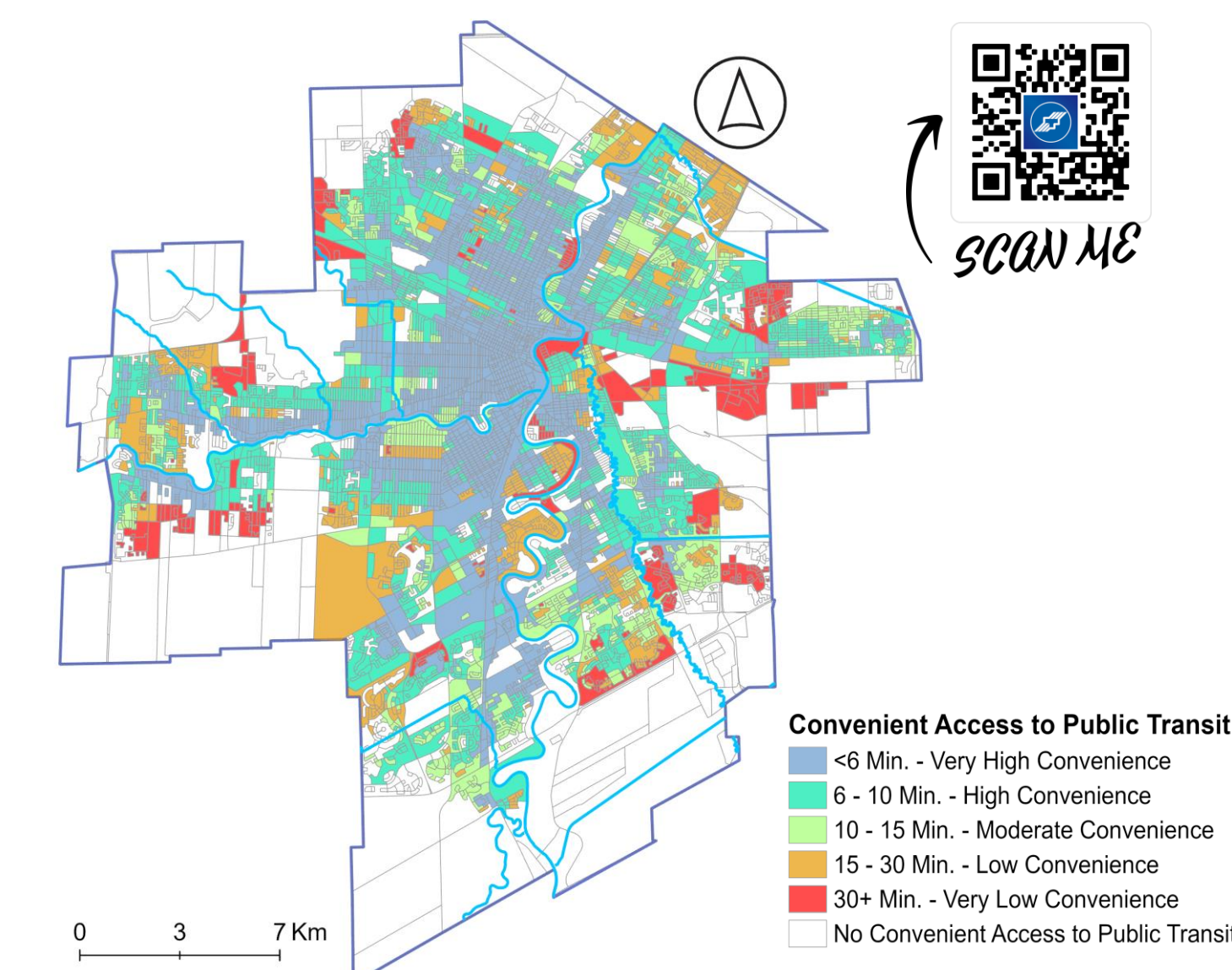


Figure 7: Convenient Access to Public Transit in 2022

Conclusion

- ❖ Broad policies result in undesired growth
- ❖ Policies focused on multiple features of compact urban form
- ❖ Existing neighborhoods did not receive most development