GENTRIFICATION RELATED DEMOGRAPHIC SHIFTS SURROUNDING LIGHT RAIL TRANSIT STATIONS IN EDMONTON, ALBERTA
© Jesse Willem Pieter Tjepkema, 2021
Master of Science
in
Urban & Regional Planning
University of Alberta

Executive Summary

Introduction

Transportation is a highly complex issue that is heavily studied by policy makers and academics alike. It is generally accepted by both groups that there is a need to balance economic and social growth for a city, and equitable public transportation can be one of the key elements in helping achieve that. However, there is a danger that areas with great access to public transit can be a victim of their own success. If a lower socioeconomic area containing high levels of transit accessibility becomes too popular, there is a danger that many residents can be pushed out; a process known as gentrification. This can help contribute to increased social inequality and tension within a city. Studies done investigating the correlation between public transit and gentrification have found that it is a very localized phenomenon based on the specific circumstances of the area.

Edmonton has had a Light Rail Transit (LRT) system in use since the late 1970s and is in the middle of a major expansion. In other Canadian cities with urban rail lines, there have been studies supporting the appearance of gentrification in the neighborhoods surrounding the station areas when looking at changing demographics,

housing costs, or resident perceptions. Currently, there are very few resources looking at how neighborhoods around the original Edmonton LRT stations have changed over the last four decades, and this study is looking to see if there have been demographic shifts in the neighborhoods within walking distance of the station areas that show indications of gentrification.

Analysis

Based on a literature review, it was determined that demographic shifts in the neighborhood levels of immigrants, university degree holders, rental dwellings, and families paying over 30% of their income on housing could indicate signs of gentrification. These variables were also chosen due to the fact that they have been consistently asked on the quinquennial Canada Census during the study period. Data was then collected from Statistics Canada at the Census Tract (CT) level for Edmonton between 1981 and 2016, with minor adjustments made to account for shifting CT boundaries. For the sake of this study, it was determined that research would be limited to the areas surrounding the original group of LRT stations developed in the downtown and north end of Edmonton. These areas have been impacted by the presence of urban rail stations for between 30-40 years and present a long term look at neighborhood changes.

Once complete, a network analysis was performed to determine CTs that contained areas that were within a 10-minute walk /800 meters from LRT station, based on the City of Edmonton's standards for Transit Oriented Developments. Due to their

close proximity and overlapping network areas, all of Edmonton's downtown stations were combined into one area, leaving a total of five study areas: Downtown, Stadium Station, Coliseum Station, Belvedere Station, and Clareview Station.

A location quotient analysis was then then conducted, which compared the ratio of gentrification related variables in the study areas to that of the City of Edmonton as a whole. Location quotients were compared to how they were in 1981 and how they compared to their 2016 ratios.

Results

When comparing the changes for the north end, there was little evidence of gentrification when comparing the Location Quotients between 1981 and 2016. The LRT census tract areas surrounding the four north end stations retained a higher concentration of rental dwellings and lower levels of people overpaying for housing. There was a general decrease in the levels of immigrants and an increase of people with university degrees, however, the LQ ratios remained within levels consistent with the rest of Edmonton.

There was a large shift in the combined downtown area stations, which suggests that there is some level of gentrification happening. There were massive jumps in the ratio of degree holders, and people who are housing-poor, while the LQ for immigrants dropped. Rental dwellings remained consistent during this time. These shifts are likely due to the increased attractiveness and development of the downtown area since the 1980s.

Overall, the results were mixed, but it appears that there is a level of gentrification occurring in downtown Edmonton around the LRT stations, but that trend is not seen in the suburban areas to the northeast.