



Appendix A:

# Equity Maps



## Surrey Equity Maps

The eight maps featured here represent the initial step of SPRC's exploration into how to apply an equity lens to poverty reduction. The maps can be used alone to understand specific indicators, or in comparison to understand the intersections of indicators as they pertain to poverty in Surrey.

Map 1. Low-Income Measure

Map 2. Income Equality Ratio

Map 3. Low-Income and Seniors

Map 4. Low-Income and Single Parent Families

Map 5. Low Income and Racialized Individuals

Map 6. Housing Spend Burden

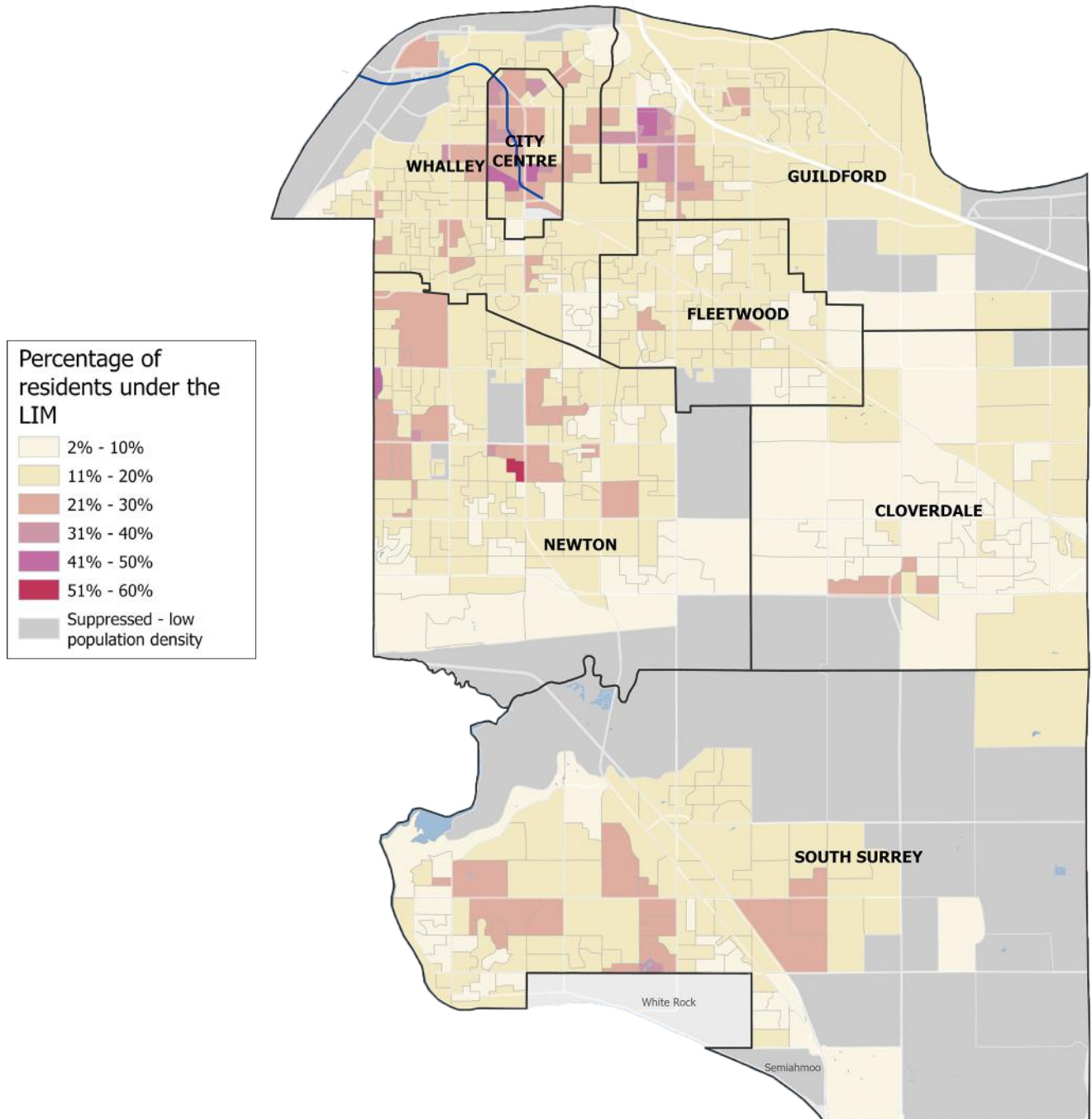
Map 7. Transportation Spend Burden

Map 8. Relative Transit Access

## Map 1. Low-Income Measure

Overall, 14.8% of Surrey residents were considered low-income in 2015. This map uses data from the 2016 Census to show the proportion of people in low-income in neighbourhoods across Surrey. The darker coloured areas are neighbourhoods with higher proportions of low-income households.

The majority of Surrey's residents (84%) live in neighbourhoods where 20% or less residents are low income; 3% (approximately 19,000 residents) live in neighbourhoods where over 30% of residents are low income. The neighbourhoods in which a high proportion of residents are low income (over 40%) are located in Newton, City Centre and Guildford.

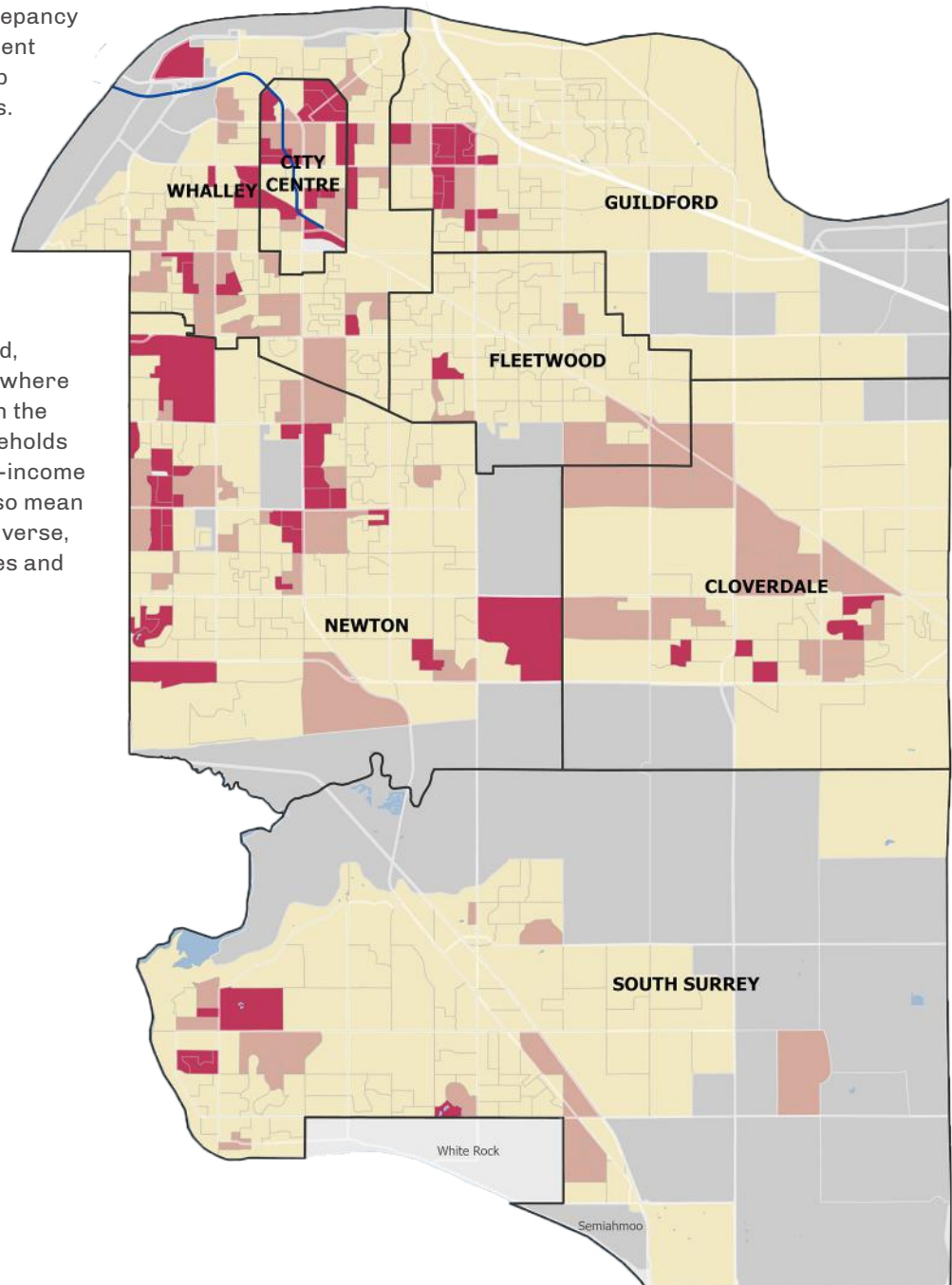
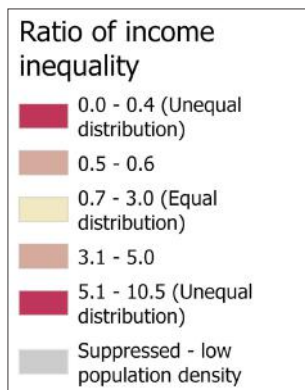


Data source: Statistics Canada 2016 Census of Population

## Map 2. Income Equality Ratio

The Income Equality Ratio is a measure of the dispersion of incomes within the community. The total population is divided into 10 equal parts (deciles), with the 1st decile being households with the lowest 10% of household income and the 10th decile being households with the highest 10% of household income. The Income Equality Ratio uses the 2016 Census data to compare the 8th income decile to the 2nd income decile, creating a score indicating the relative proportions of highest and lowest earners.

Areas that are red indicate areas where there is a large discrepancy between the two measurement points, meaning a larger gap between household incomes. Areas that are yellow indicate that there is little difference between household incomes, with most households in a similar income bracket. A higher income inequality ratio could, for example, indicate areas where gentrification is occurring in the City, with high-income households moving to historically lower-income neighbourhoods; it could also mean that the neighbourhood is diverse, with a mix of household types and incomes.

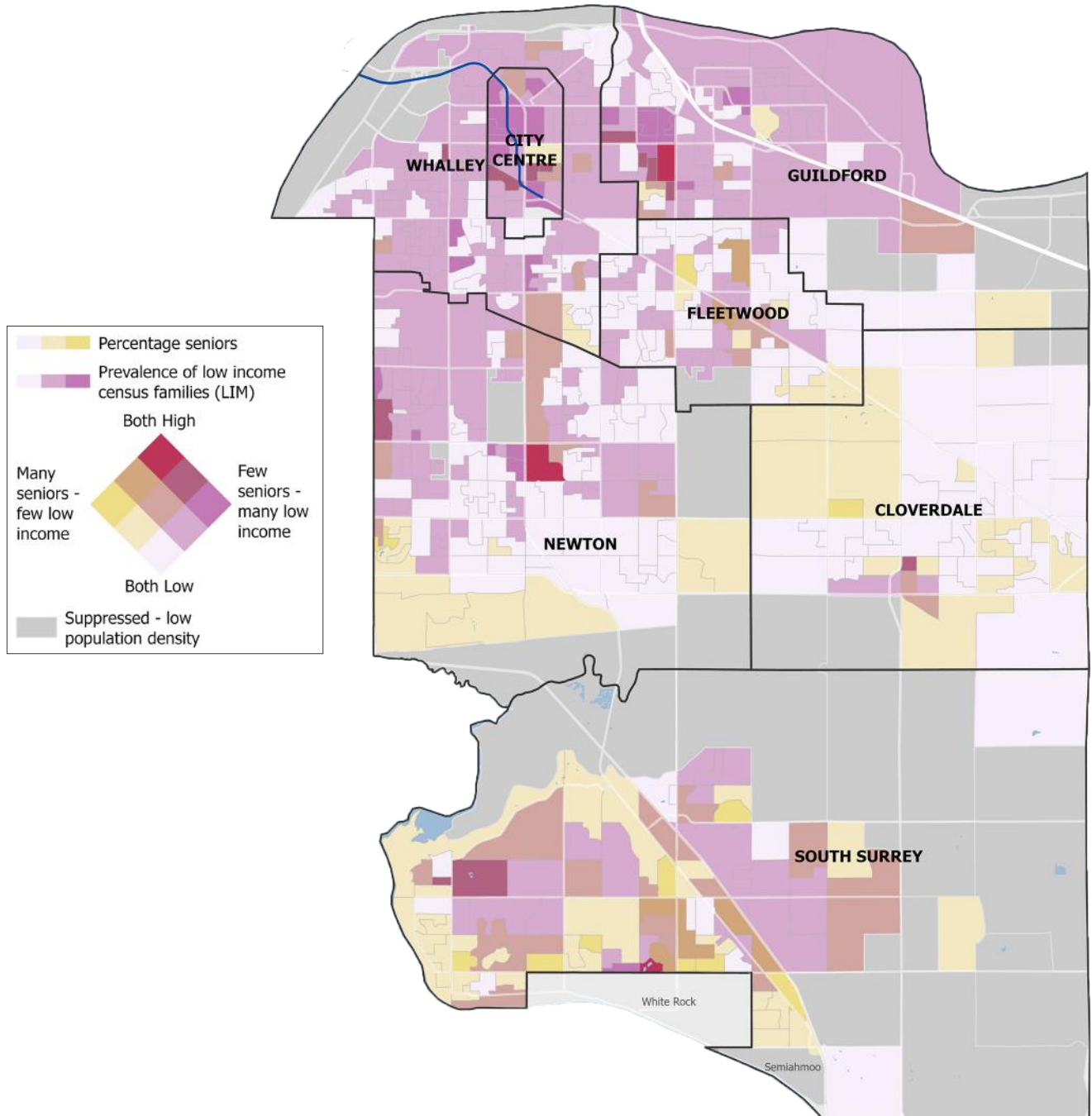


Data source: Statistics Canada 2016 Census of Population

### Map 3. Low-Income and Seniors

Seniors<sup>1</sup>, especially those who live alone, are often on limited or fixed incomes and at a higher risk of poverty. This map shows both the proportion of seniors and the proportion of low income households by neighbourhood. The red areas are where there is both a high concentration of seniors and a high concentration of people who are low-income. The overlap of the highest pockets of both factors represents almost 4,500 residents, or 1% of the population of Surrey.

Neighbourhoods in Guildford Town Centre and central Newton are areas where there is a high concentration of both seniors and people who are low-income. While South Surrey has a higher concentration of seniors than other places in Surrey, many neighbourhoods have few low-income households (yellow areas).



<sup>1</sup> Residents aged 65+

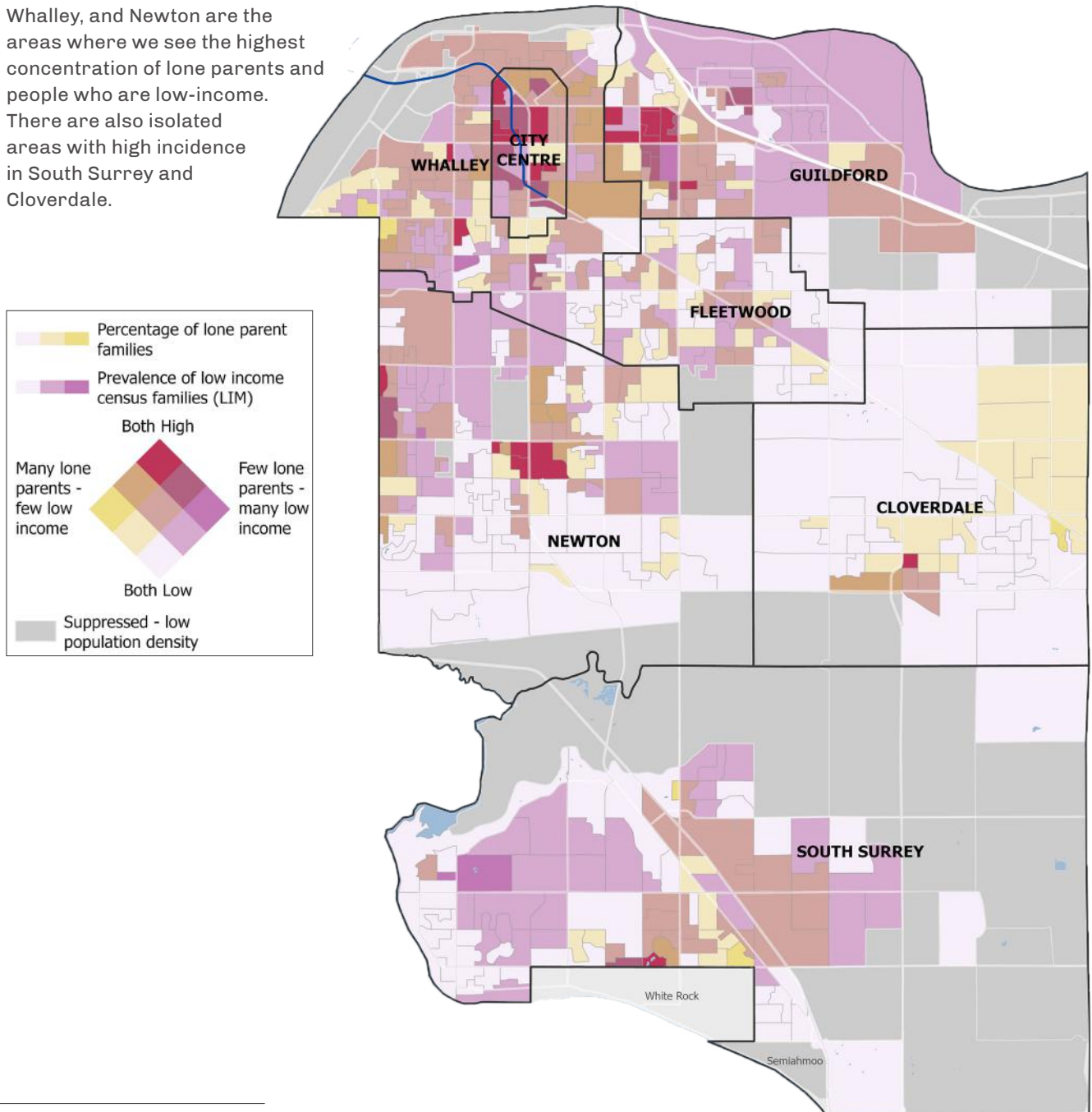
Data source: Statistics Canada 2016 Census of Population

## Map 4. Low-Income and Single Parent Families

Single, or lone parent families, have a reduced earning potential in comparison to a two-parent family. In 2015, 28% percent of lone parents<sup>2</sup>, or 5,975 people, were considered low-income in Surrey; 85% of whom were women.

This map shows both the proportion of lone parents and the proportion of low-income households by neighbourhood. The red areas are where there is both a high concentration of lone parents and a high concentration of people who are low-income. The overlap of the highest pockets of both factors represents almost 22,000 residents, or 4% of Surrey’s population.

City Centre, Guildford Town Centre, Whalley, and Newton are the areas where we see the highest concentration of lone parents and people who are low-income. There are also isolated areas with high incidence in South Surrey and Cloverdale.



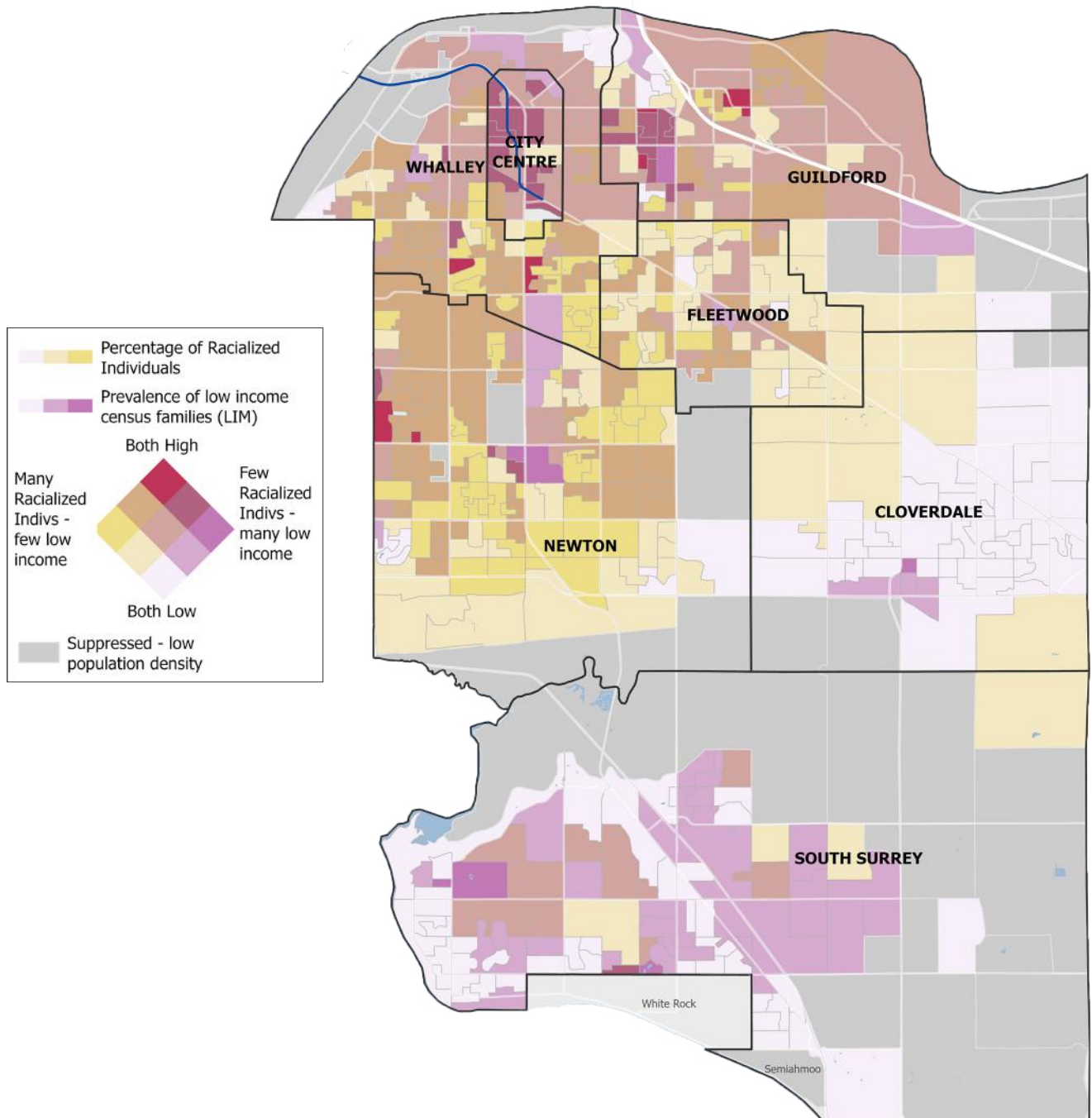
<sup>2</sup> A single or lone parent is defined as an individual of any marital status with at least one child living in the same dwelling.

Data source: Statistics Canada 2016 Census of Population

## Map 5. Low Income and Racialized Individuals

According to the 2016 Census, racialized people experience poverty at greater rates than White residents in Surrey. This map shows both the proportion of racialized people (or “visible minority”, according to the Census classification) and proportion of low-income households by neighbourhood. The red areas are where there is both a high concentration of racialized people and a high concentration of people who are low-income. The overlap of the highest pockets of both factors represents about 6000 residents, or 1% of the population of Surrey.

Newton and Fleetwood have proportionately high concentrations of racialized residents but Whalley and West Newton are the areas where there is both a high concentration of racialized residents and a high prevalence of low-income households.

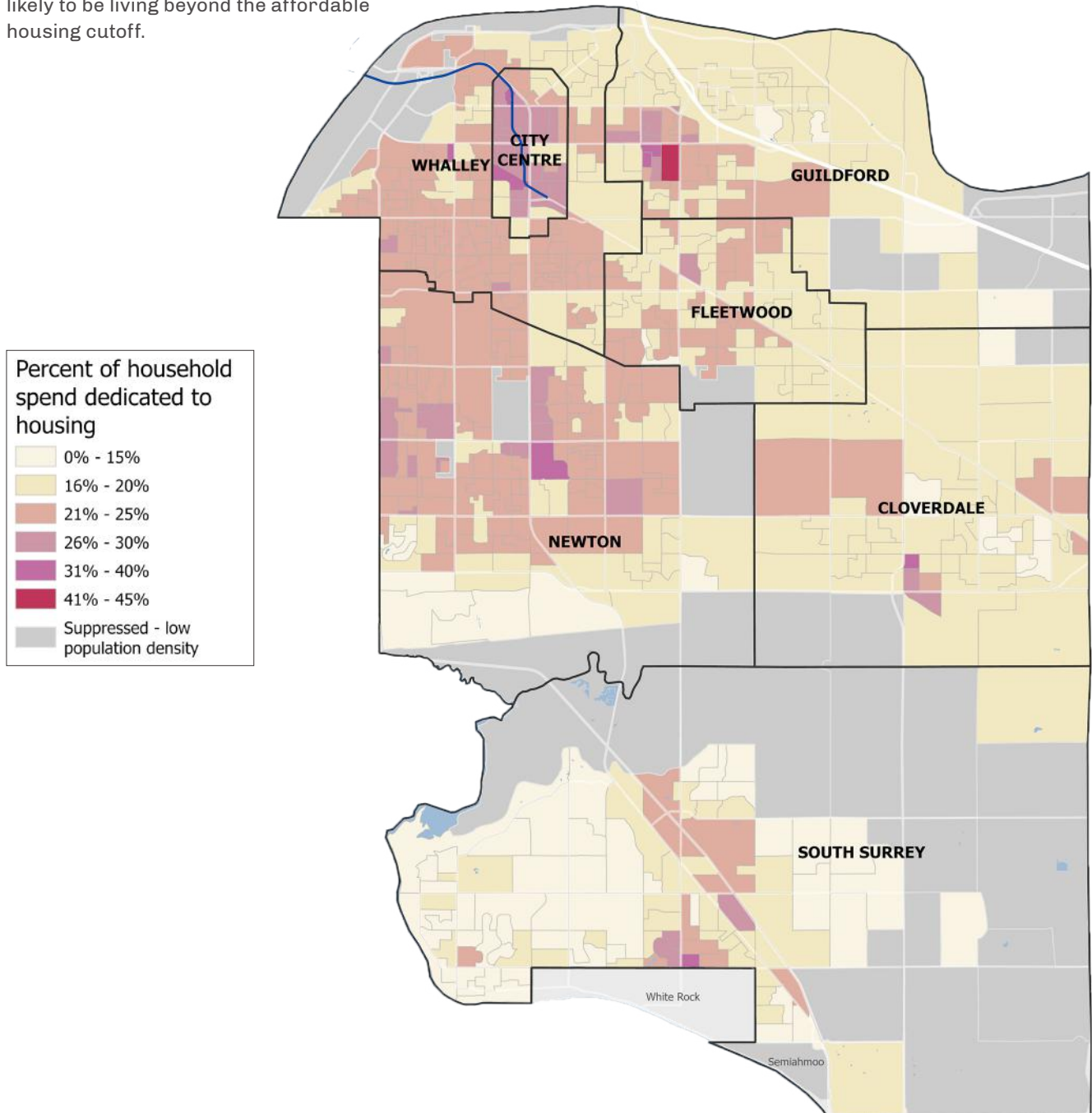


Data source: Statistics Canada 2016 Census of Population

## Map 6. Housing Spend Burden

The “Housing Spend Burden” is the proportion of a household’s income that is devoted to housing-related costs, including mortgage or rent, utilities, etc. It is generally accepted that housing costs should not exceed 30% of a household’s income so that households are able to cover other costs of living such as childcare and transportation.

The highest proportion of households spending 30% or more of income on housing costs is found in a Guildford Town Centre area neighbourhood. Several other areas in Surrey showing a housing cost burden exceeding the 30% affordability threshold are in: City Centre, Newton, South Surrey, and Cloverdale. 11,000 residents (or 2.4% of Surrey’s population) live in areas that are colour-coded red and purple on this map; these residents are more likely to be living beyond the affordable housing cutoff.



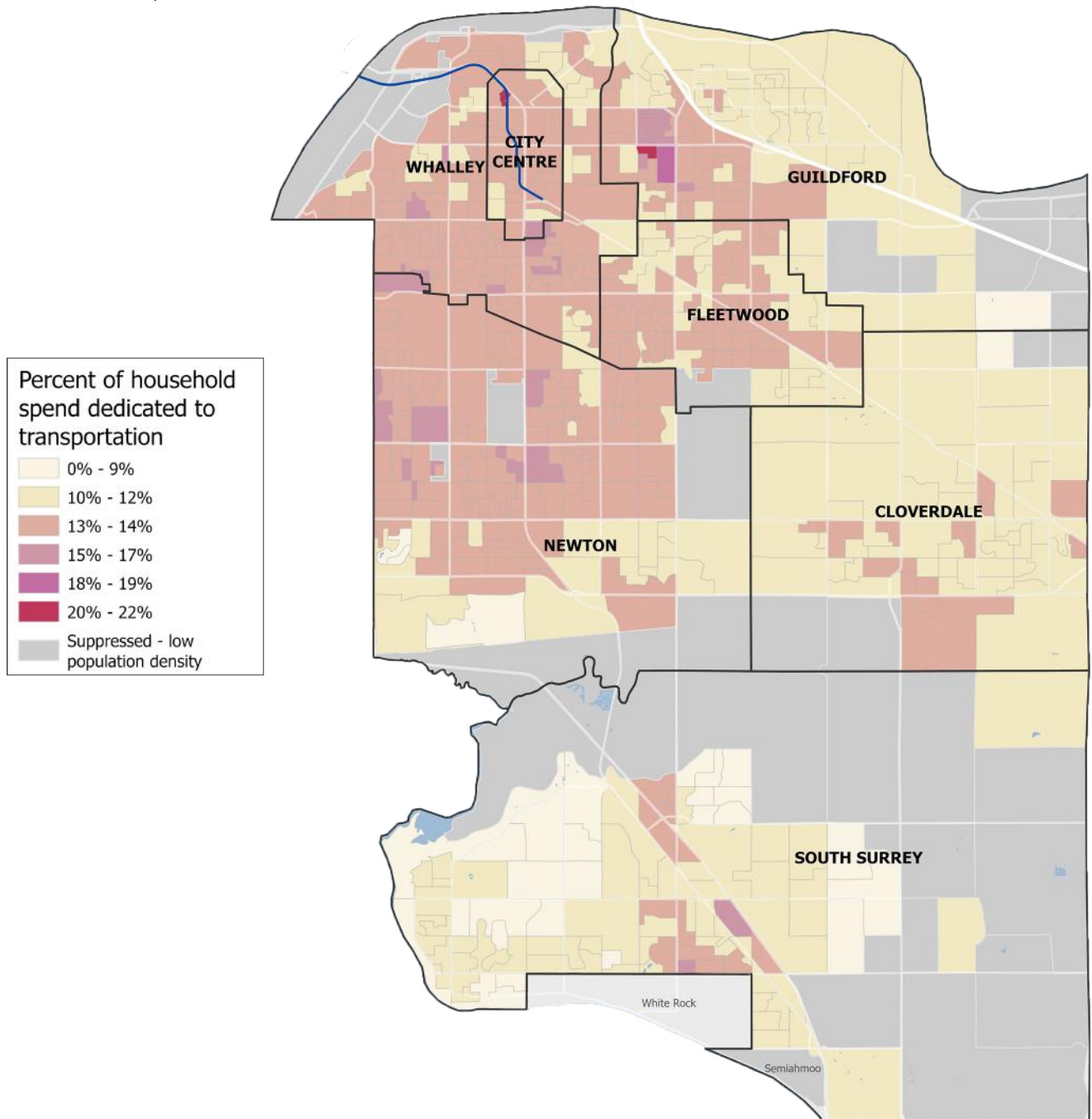
Enviroics Analytics, 2021



## Map 7. Transportation Spend Burden

The “Transportation Spend Burden” measures the proportion of a household’s income that is spent on transportation-related costs; these may include public transportation, car payments, or ride shares<sup>[iii]</sup>.

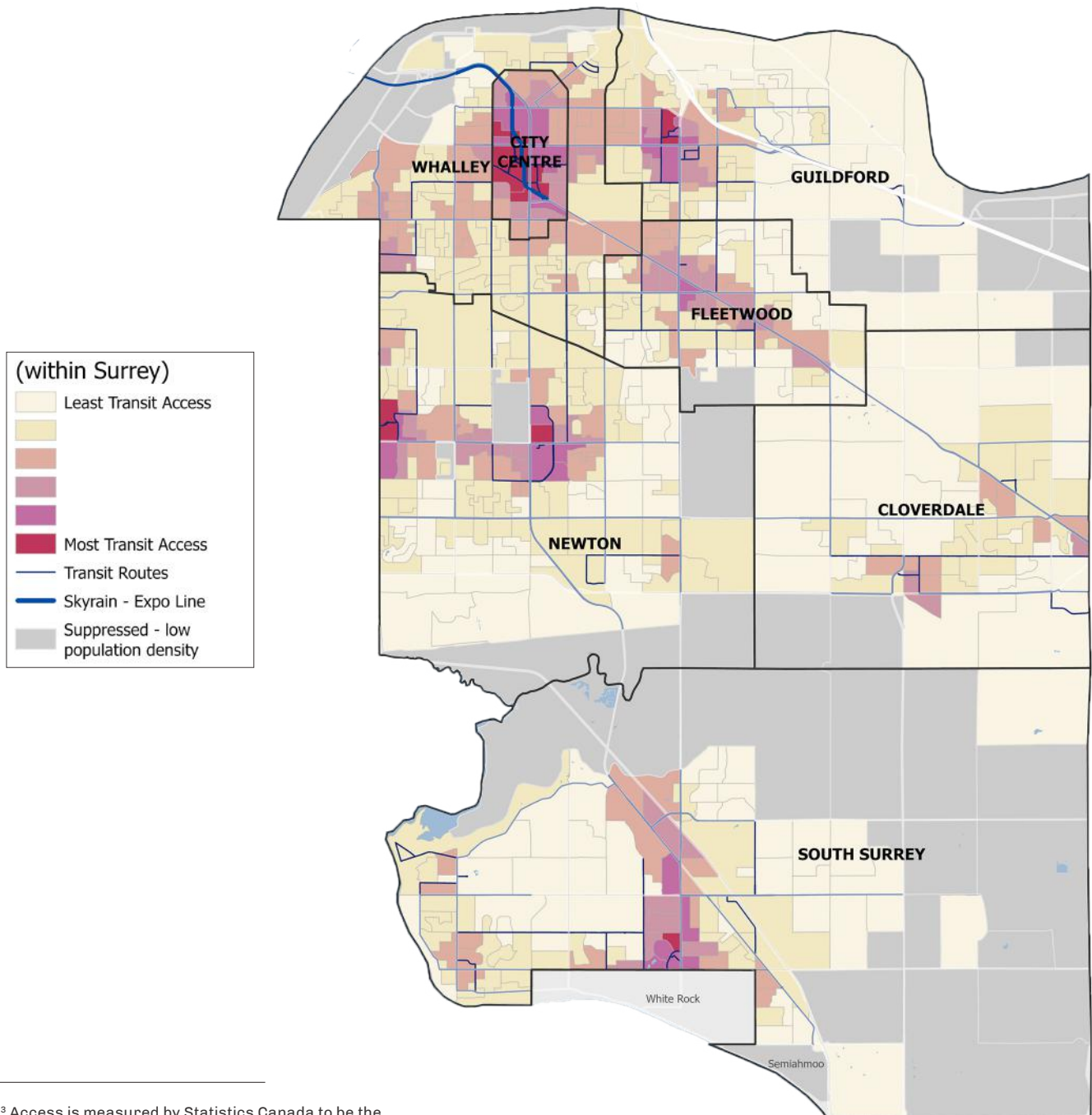
Interestingly, the households with the highest Transportation Spend Burden are in City Centre and Guildford Town Centre, neighbourhoods in close proximity to Skytrain stations and frequent public transportation. Almost 10% of Surrey’s population, or 50,000 residents, spend 18-22% of their household budget on transportation. Comparing this map to the distribution of LIM households generally makes a compelling case for finding ways to ease transportation costs for low-income households, who are spending a significant amount of their income on transportation, despite their access to public transit.



Data source: Environics Analytics, 2021

## Map 8. Relative Transit Access

Looking at the City's access to public transit<sup>3</sup> matters in urban planning, but also in terms of equity as we consider where there is a high prevalence of lower-income households who may benefit the most from increased access to public transportation. Comparing this map to the distribution of LIM households may help to identify key areas that are currently underserved by transit, and where increased access points would represent an equitable approach to transportation planning.



<sup>3</sup> Access is measured by Statistics Canada to be the closeness of a dissemination area to any source of public transit within 1 km of walking distance.

Data source: Statistics Canada 2016 Census of Population