RACE SEGREGATION IN THREE BRAZILIAN METROPOLITAN AREAS

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Introduction

✓ **In Brazil, population segregation has some peculiarities (Telles 2004):**

– **On the one hand, residential segregation is moderate, and has lower evidence of racial boundaries than in the US (intermarriage, poor neighborhoods).**

– **On the other hand, race segregation still exists, because the disadvantage of nonwhites seems to be explained partly by their spatial isolation from middle class.**

✓ **This study intends to analyze the extent to which Brazilian population is segregated by race and socioeconomic status.**

Selected Metropolitan Areas

Data and Methods

✓ **2000 Brazilian Census microdata.**

✓ **Georeferenced data for the Brazilian territory by groups of census tracts.**

✓ **Data is analyzed using descriptive statistics and Geographic Information Systems (GIS) techniques.**

✓ **Education is used as an indicator of socioeconomic status (Telles 2004).**

Race Variable

✓ **Five categories of race and color identification: White, Brown (*Pardo*), Black, Yellow (for Asians), and Indigenous.**

✓ **Following the suggestion of previous studies (Wood and Carvalho 1994; Carvalho, Wood and Andrade 2003), the characterization of race is dichotomized.**

✓ **Browns and Blacks are grouped to be compared to Whites.**

✓ **Asians and Indigenous are not analyzed, because they do not represent a significant amount of the population.**

Selected Metropolitan Areas, 2000

	RECIFE	BELO HORIZONTE	PORTO ALEGRE
Total population with maps	2,991,948 (100%)	4,052,705 (95.2%)	3,348,234 (97.8%)
Percentage in central municipality	47.6	55.2	40.6
Number of municipalities with maps	8	13 (24 in total)	15 (21 in total)
Number of groups of census tracts	117	126	147

Percentage of Population by Race, 2000
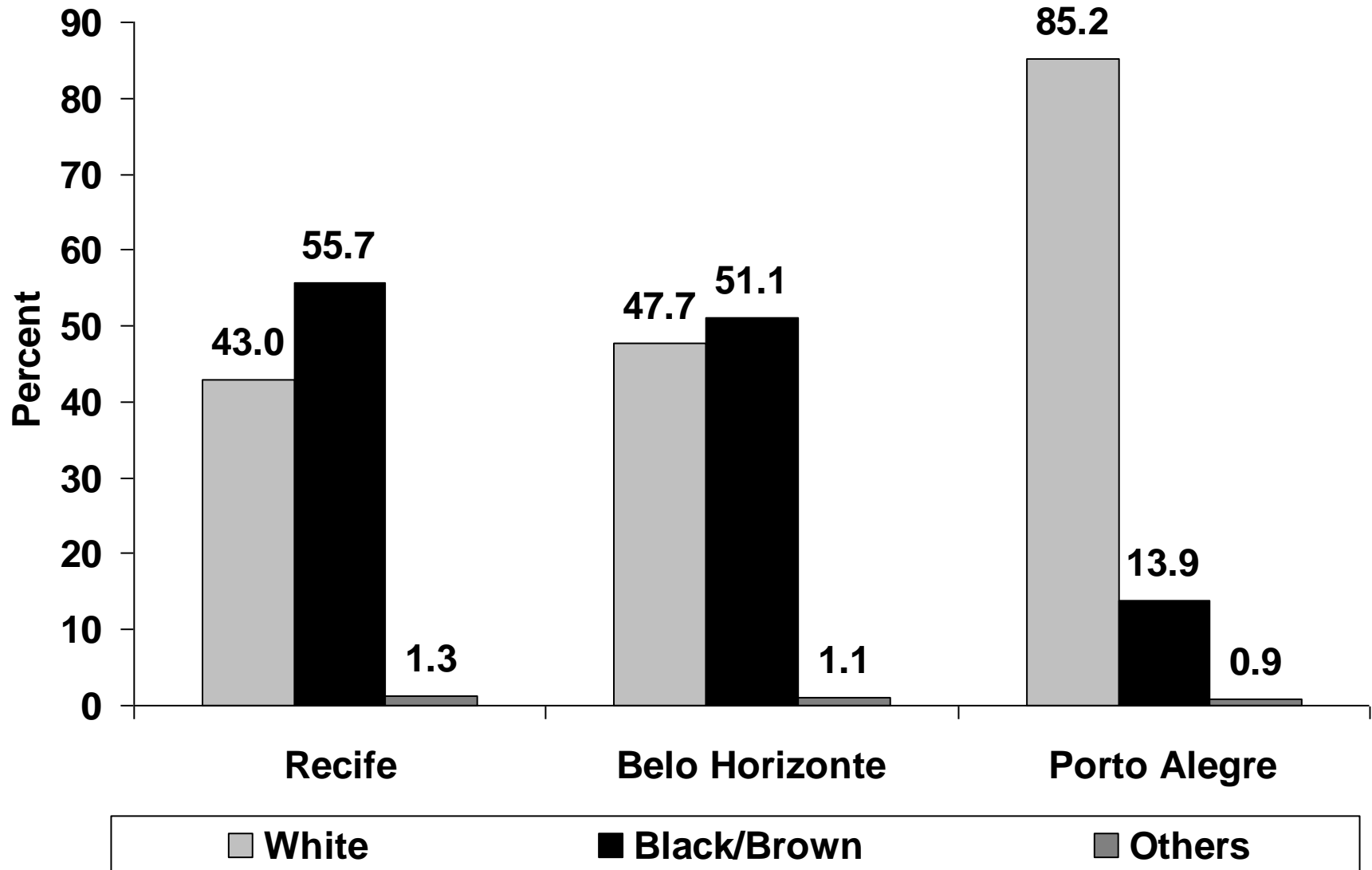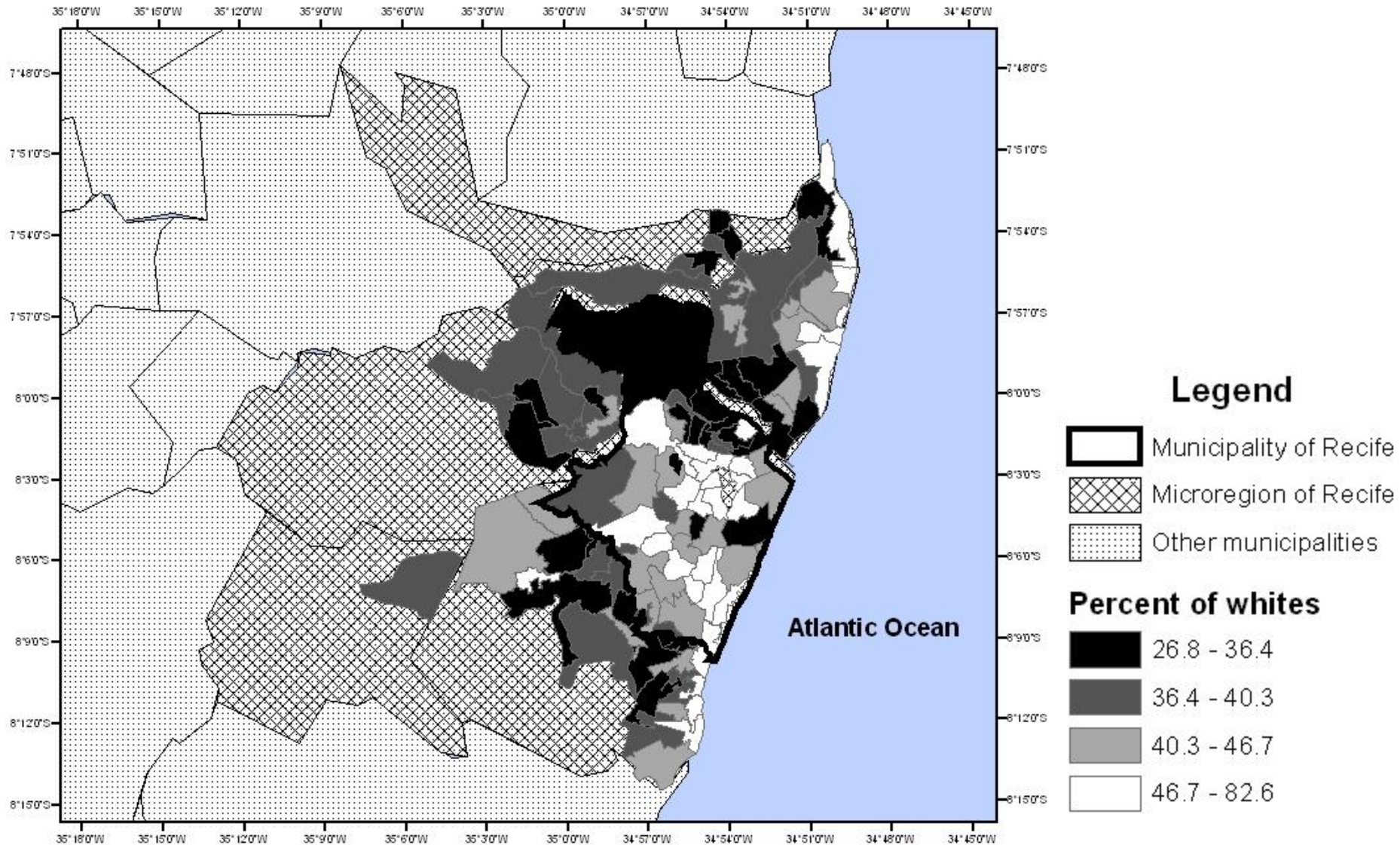
Percentage of Population by Education, 2000
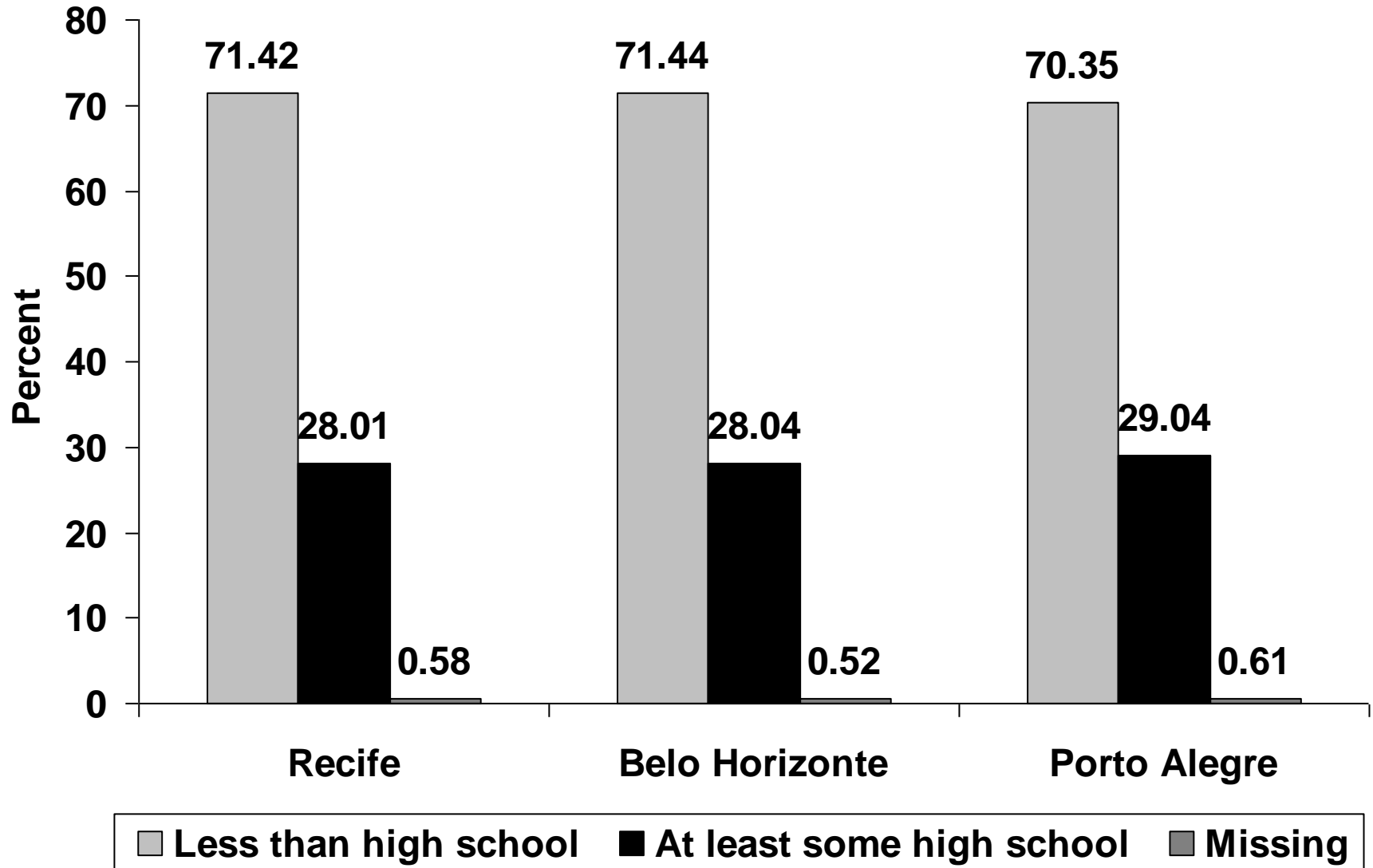
Index of Dissimilarity, 2000

	RECIFE	BELO HORIZONTE	PORTO ALEGRE
Segregation by race	0.17	0.24	0.27
Segregation by education	0.27	0.31	0.32

Recife
Percent of Whites Within Each Group of Census Tracts

Recife
Race and Education

Percent of whites

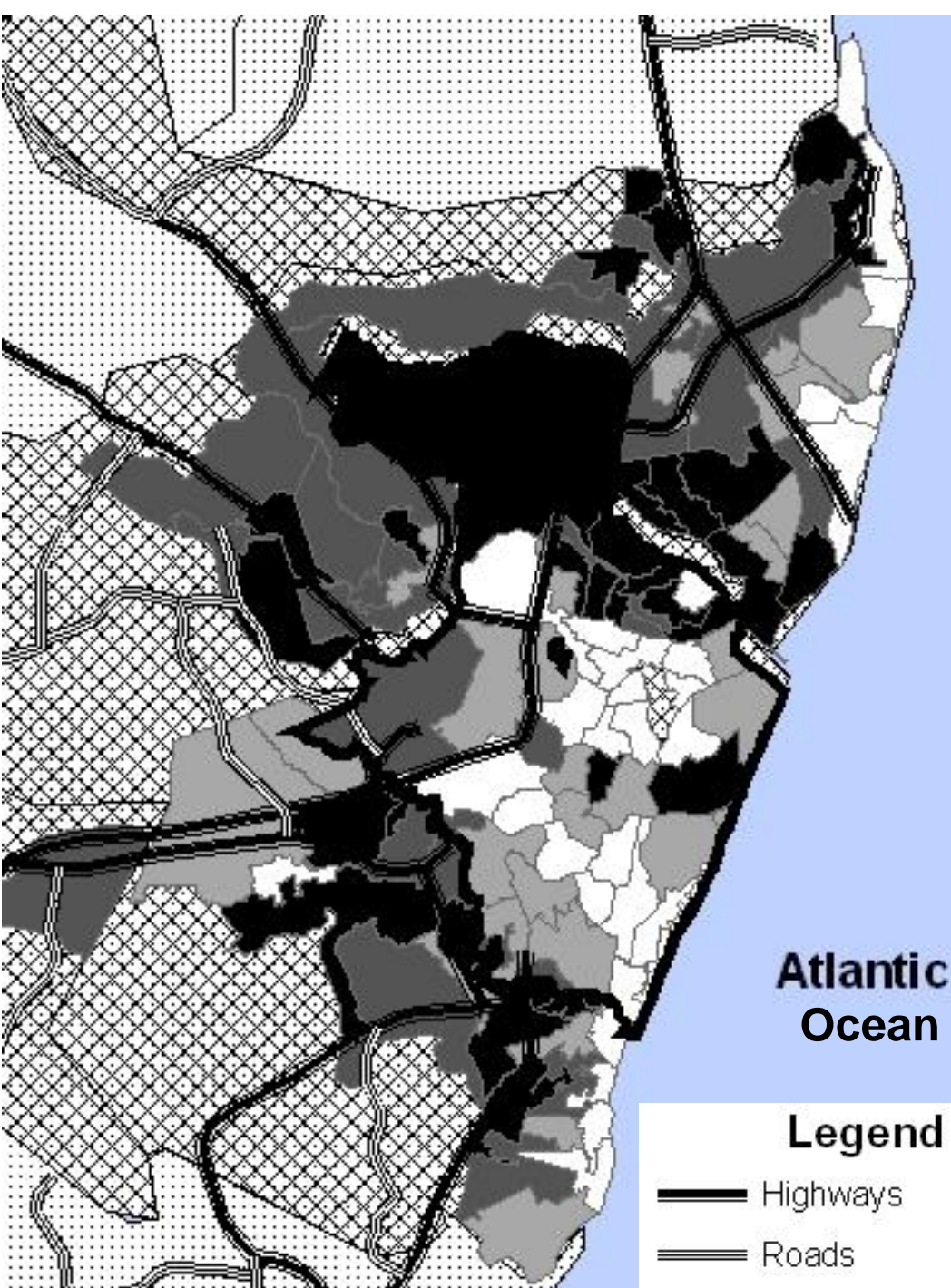|	
■	26.8 - 36.4
▨	36.4 - 40.3
▧	40.3 - 46.7
☐	46.7 - 82.6
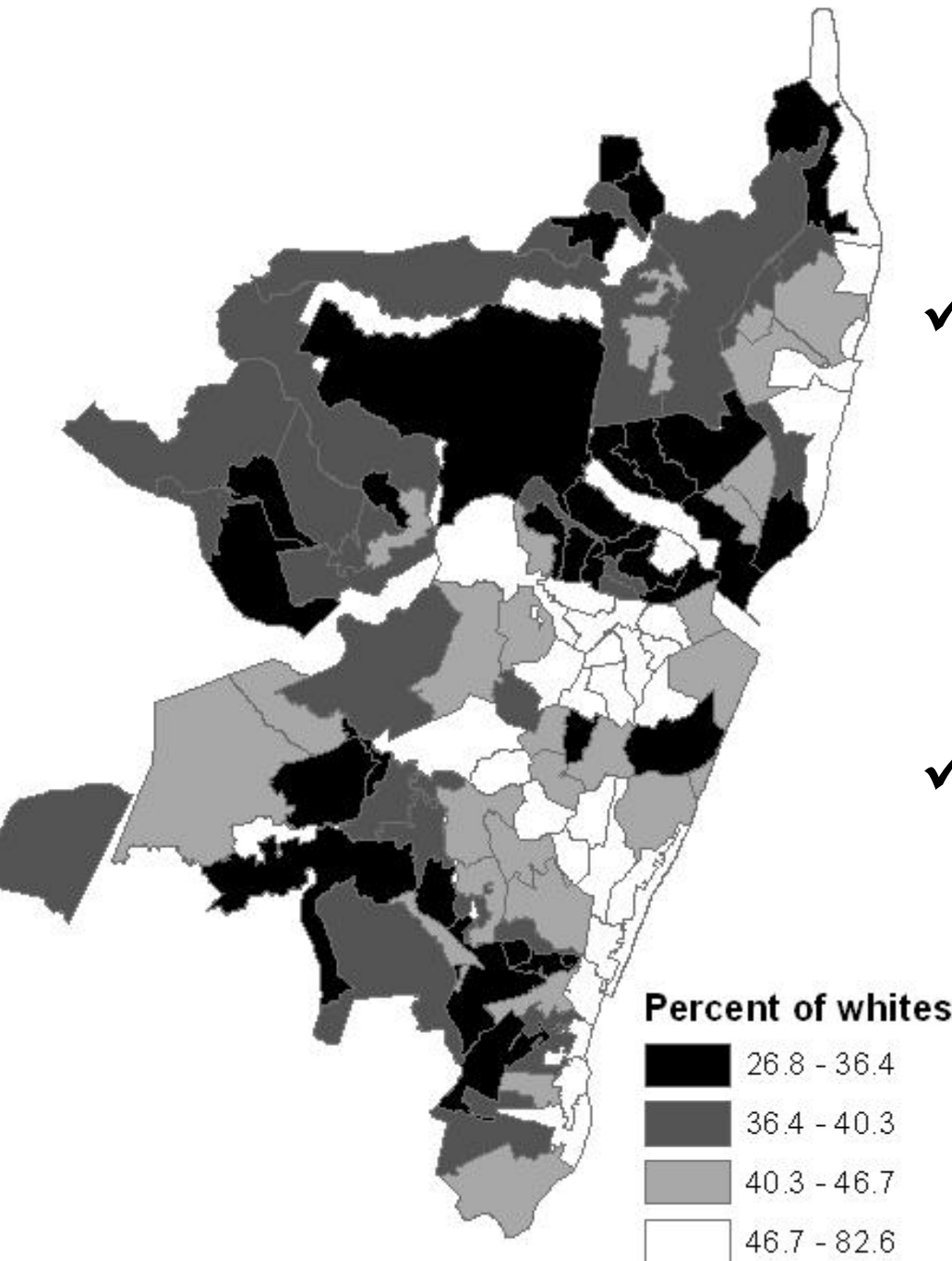
✓ **80% of groups of census tracts with highest proportions of Whites have most of the population with at least some high school.**

✓ **All areas with highest proportions of Blacks and Browns have most of the population with less than high school.**
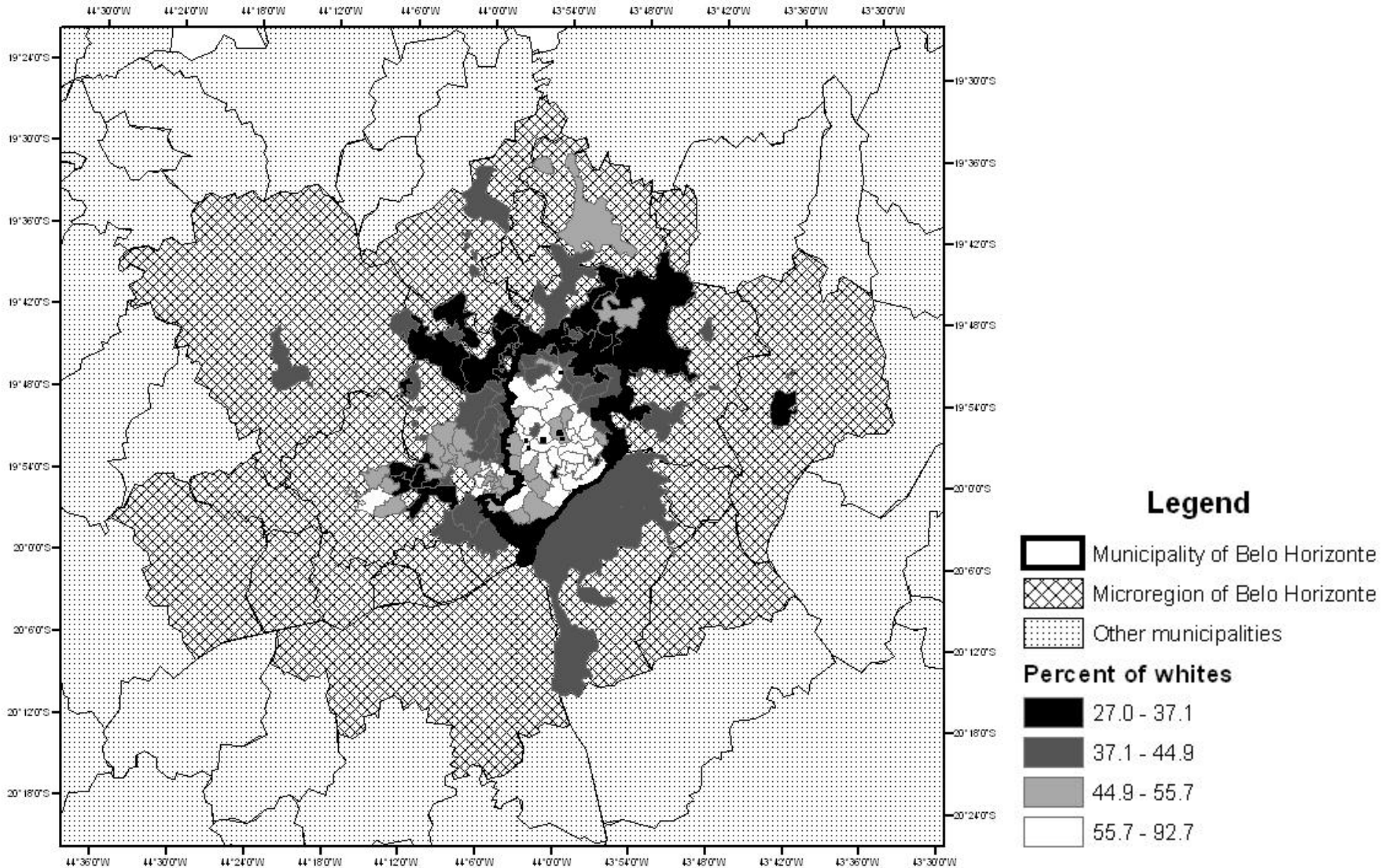
Recife

Race and Location

- ✓ **Groups of census tracts with highest proportions of Whites are located in the core of the city, or close to the coast.**

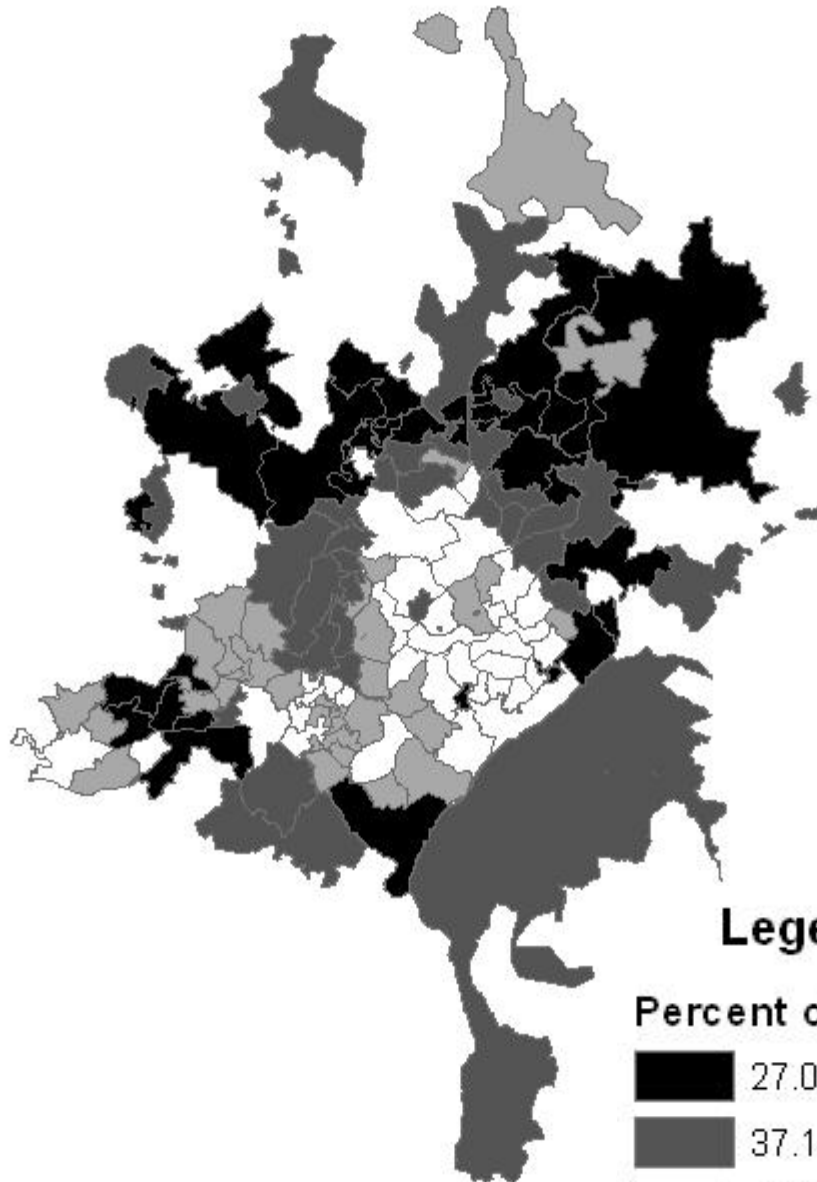- ✓ **Areas with highest proportions of Blacks and Browns are concentrated in the periphery of the city.**

Atlantic
Ocean

Legend

— Highways

═ Roads

☐ Municipality of Recife

▨ Microregion of Recife

⬚ Other municipalities

Belo Horizonte
Percent of Whites Within Each Group of Census Tracts

Legend

- ▢ Municipality of Belo Horizonte
- ▨ Microregion of Belo Horizonte
- ▦ Other municipalities

Percent of whites

- ■ 27.0 - 37.1
- ■ 37.1 - 44.9
- ▨ 44.9 - 55.7
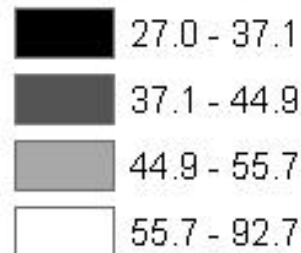- ▢ 55.7 - 92.7

Belo Horizonte

Race and Education

✓ **71% of groups of census tracts with highest proportions of Blacks and Browns have 16% or less of the population with at least some high school.**
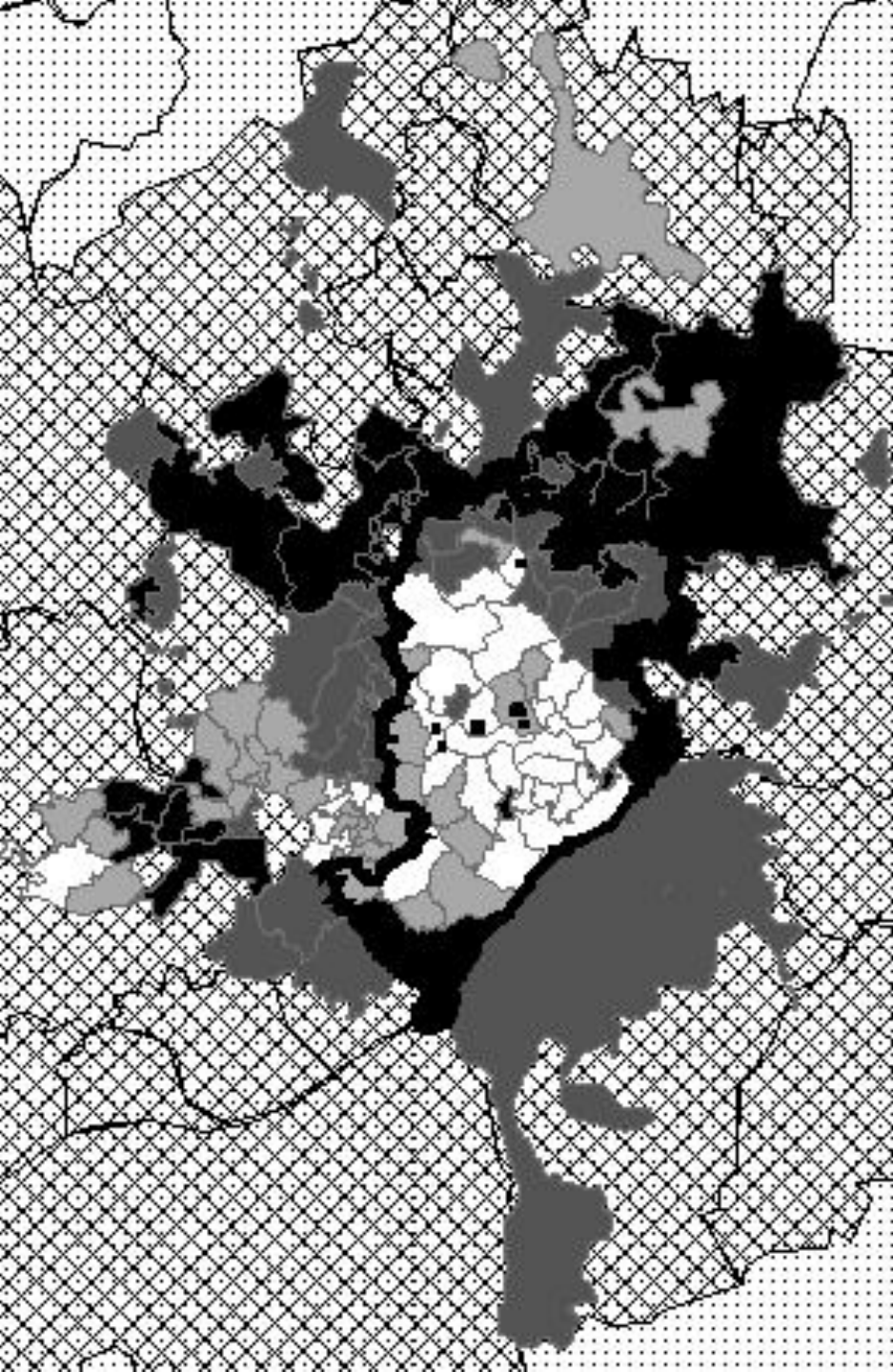
Legend

Percent of whites

■	27.0 - 37.1
▓	37.1 - 44.9
▒	44.9 - 55.7
□	55.7 - 92.7

Belo Horizonte
Race and Location

✓ **Groups of census tracts with highest proportions of Whites are in the central municipality.**

✓ **Areas with highest proportions of Blacks and Browns are in the Northern border.**

Legend

☐ Municipality of Belo Horizonte

⊠ Microregion of Belo Horizonte

▦ Other municipalities

Belo Horizonte
Race and Elevation

✓ **Groups of census tracts with highest proportions of Whites are located in areas with low elevation.**

✓ **Blacks and Browns usually live on hills and mountains around the central municipality, where the public infrastructure is worse.**
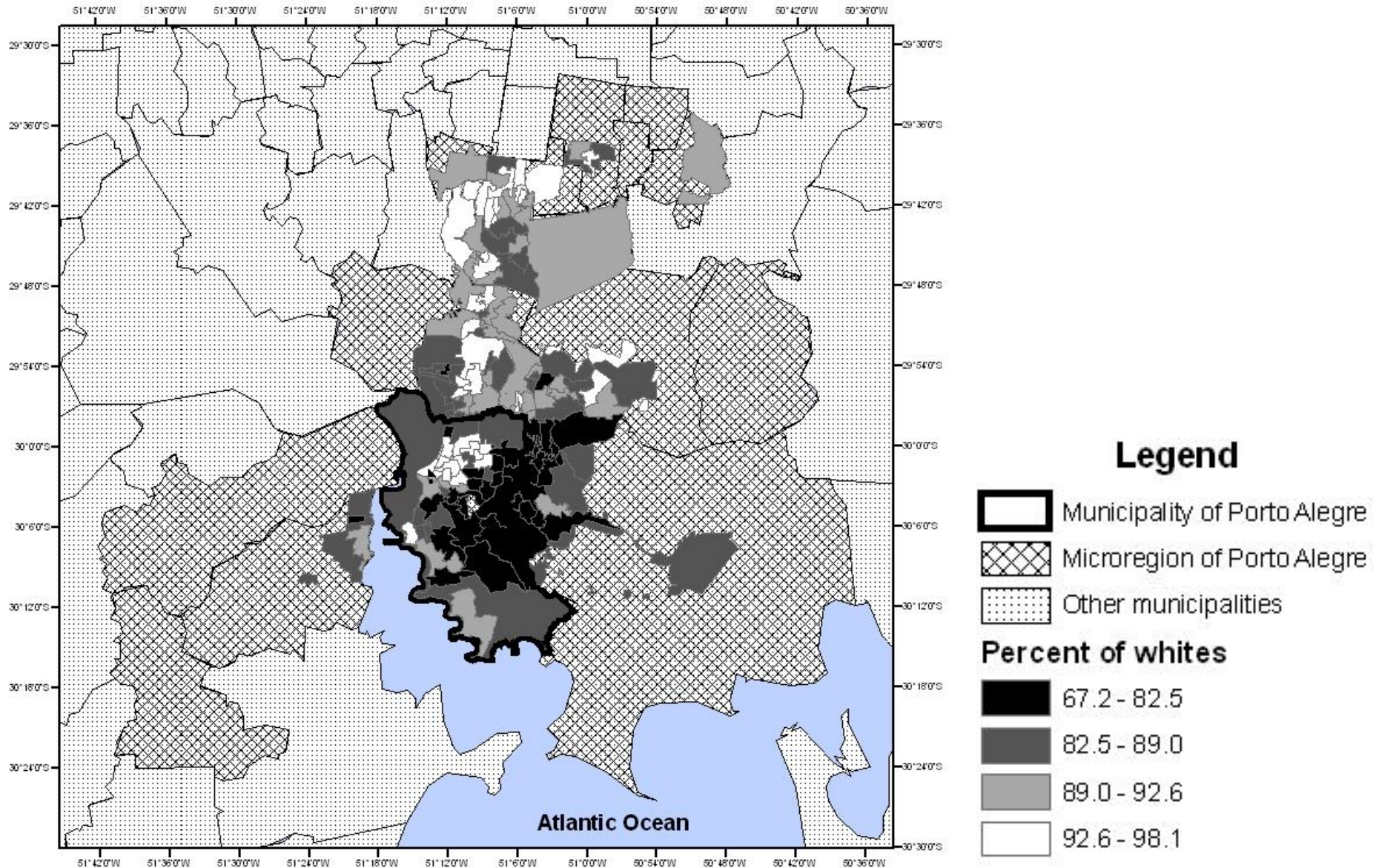
Legend

Municipalities

Elevation at least 0.5 miles (800 meters)
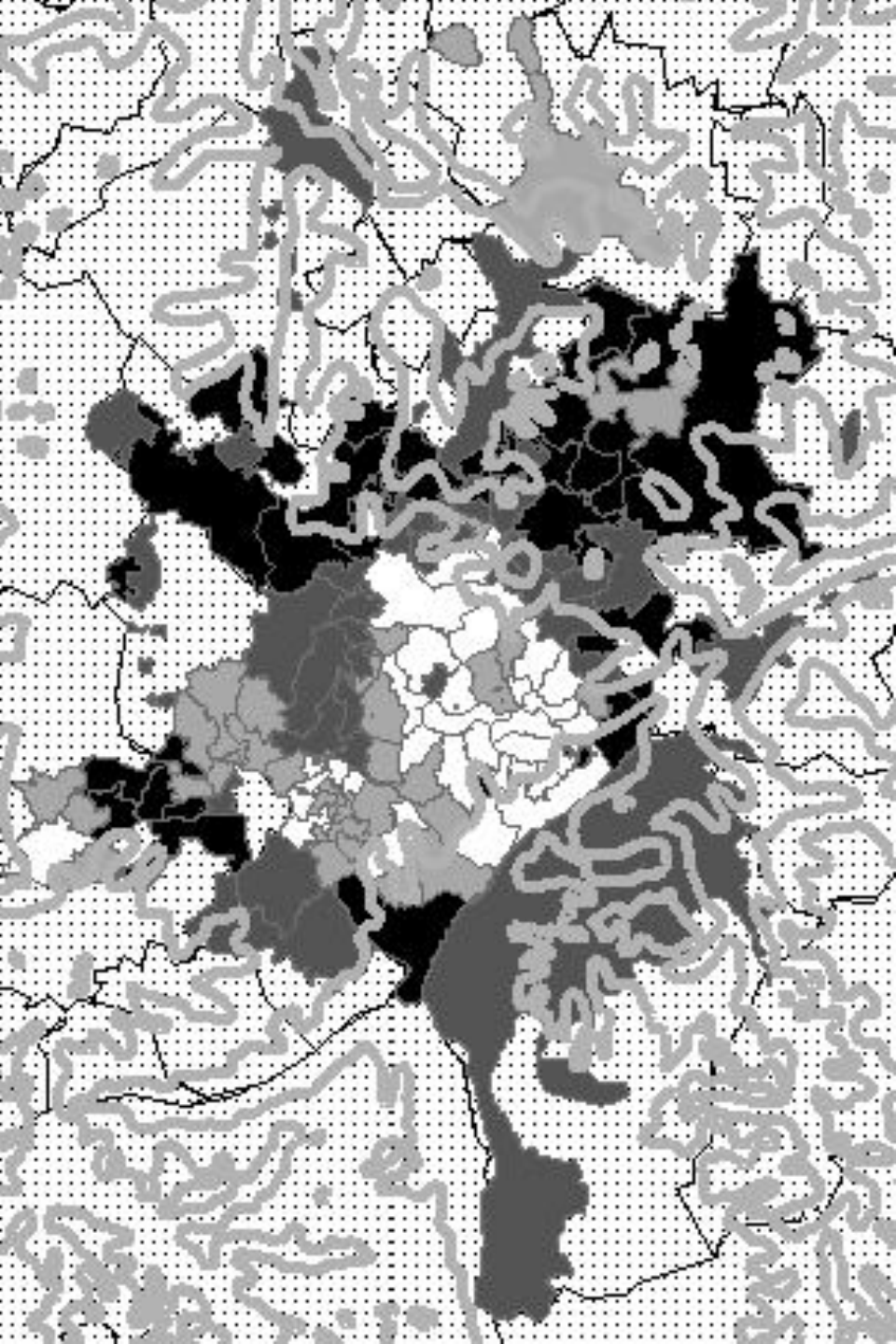
Porto Alegre
Percent of Whites Within Each Group of Census Tracts

Porto Alegre
Race and Education

✓ **68% of groups of census tracts with highest proportions of Whites have most of the population with at least some high school.**

✓ **Only 1.4% of areas with lowest proportions of Whites have most of the population with at least some high school.**

Percent of whites

■	67.2 - 82.5
▨	82.5 - 89.0
▦	89.0 - 92.6
□	92.6 - 98.1
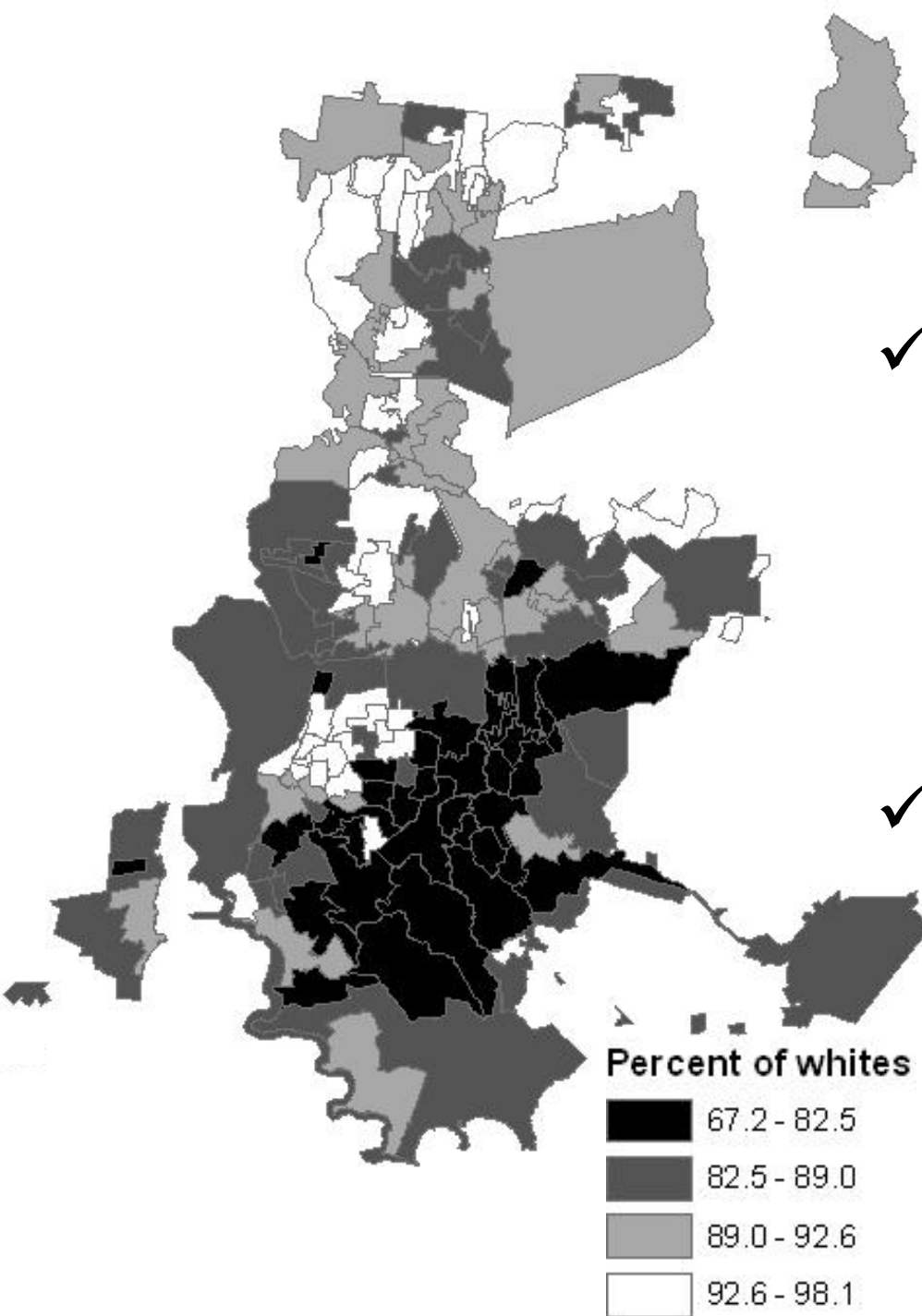
Porto Alegre
Race and Location

✓ **Main highways make the connection among groups of census tracts that have more White population.**

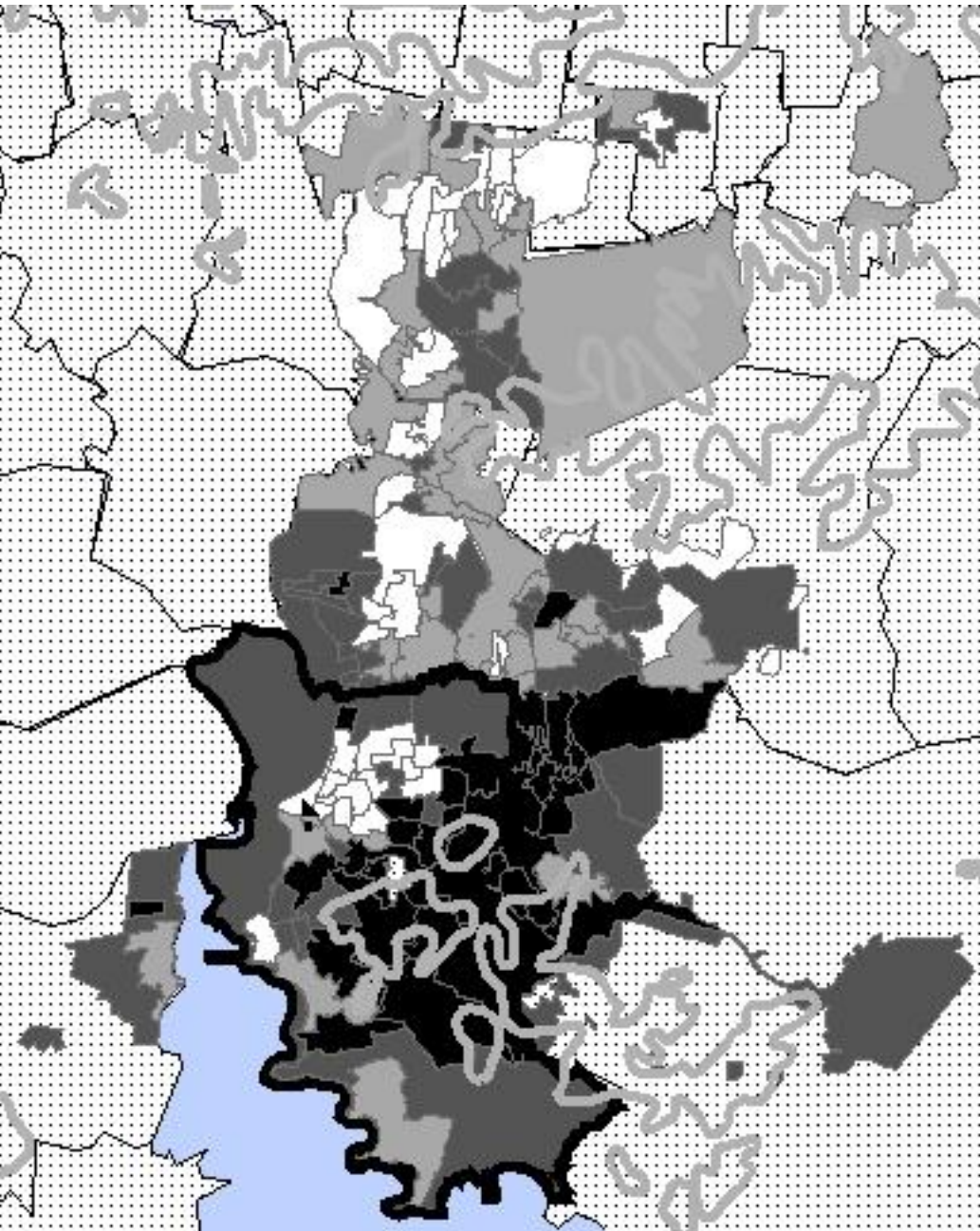✓ **This is the case of the highway that goes from the South to the North part of this area.**

Legend

Municipality of Porto Alegre

Microregion of Porto Alegre

Other municipalities

Highways

Roads

Porto Alegre
Race and Elevation

✓ **The most elevated areas in the South have higher proportions of Blacks and Browns.**

Legend

▦ Municipalities

— Elevation at least 0.0625 miles (100 meters)

Discussion

✓ **There is spatial segregation by race and socioeconomic status in the selected metropolitan areas.**

✓ **Main roads connect White neighborhoods in Porto Alegre, and separate White from Black/Brown groups of census tracts in Recife.**

✓ **More elevated areas, with worse infrastructural conditions, have higher proportions of Blacks and Browns.**

✓ **An improvement to this research would be the use of spatial regression models to better understand the relationship between race and socioeconomic status.**