

# Racial segregation in Belo Horizonte: what has changed in over a decade?

Segregação racial em Belo Horizonte: o que mudou em mais de uma década?

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## Abstract

Belo Horizonte, the first Brazilian capital planned with the use of a Master Plan, has unique territorial characteristics and plays a role in the (re)production of inequalities. Urban segregation, influenced by historical factors and housing practices, remains a reality. This article analyzes the spatial dynamics of racial segregation between 2010 and 2022 based on population censuses. Three indices were developed: the Segregation Index, the Absolute Concentration Index, and the Absolute Clustering Index. The results indicate that racial segregation persists, with the Black population still residing far from the city center and more concentrated in urban fringes. This study highlights the importance of population censuses in analyzing inequalities and making public policies targeted at racial issues.

**Keywords:** inequality; racial segregation; housing; urban planning.

## Resumo

*Belo Horizonte, a primeira capital brasileira planejada com um Plano Diretor, apresenta particularidades na formação de seu território e na (re)produção das desigualdades. A segregação urbana, influenciada por fatores históricos e práticas habitacionais, permanece como uma realidade. Este artigo analisa as dinâmicas espaciais da segregação racial entre 2010 e 2022, com base nos censos demográficos. Foram desenvolvidos três índices: Índice de Segregação (ISS), Índice de Concentração Absoluta (ACO) e Índice de Agrupamento Absoluto (ACL). Os resultados indicam que a segregação racial persiste, com a população negra ainda afastada do centro e mais concentrada nas franjas urbanas. O estudo reforça a importância dos censos demográficos na análise das desigualdades e na formulação de políticas públicas voltadas para a questão racial.*

**Palavras-chave:** desigualdade; segregação racial; habitação; planejamento urbano.



## Introduction

Inequality is a multidimensional phenomenon, as it is caused by various factors, including income, education, race, religion, occupation, and others. Consequently, research in this field encompasses distinct themes and employs various approaches to understand existing discrepancies within a society and their impact on the population

Inequalities of opportunity regarding access to education, leisure, adequate housing, employment, and other aspects that enable social mobility are closely linked to stratification, mobility, and social segregation of individuals, since these are relative ways of measuring them. Therefore, segregation is not merely a matter related to territory and the distribution of individuals in space; it is also about how available opportunities influence people's way of life, mobility across the city, access to public services, and place of residence.

Segregation can be understood as the distance between social groups, considering the location of their residences in urban space. In other words, it refers to the territorial clustering or separation of certain social or ethnic groups (Massey & Denton, 1988). This phenomenon is also related to the social differentiation present in society. It should be interpreted through differences in access to opportunities such as housing, education, leisure, urban infrastructure, and others (Harvey, 1980). Segregation may occur involuntarily (Villaça, 1998) when individuals are compelled by external forces to live in certain areas. It can also occur voluntarily, when people are able to choose their place of residence and opt for gated communities or homogeneous neighborhoods (Caldeira, 2000).

According to Sabatini (2006), Latin America's segregation differs from that in Europe and the United States. Here, economic

segregation is stronger due to deep inequalities, while racial segregation is weaker than in the U.S. This is evident in studies of major Brazilian cities like São Paulo (Marques & França, 2020), Salvador (Carvalho & Barreto, 2007), Recife (Germano & Silveira Neto, 2015), Rio de Janeiro (Gonçalves & Strauch, 2021; Ribeiro & Ribeiro, 2021), and Belo Horizonte (Cerqueira, 2015; Silveira & Tomas, 2019; Haddad, 2020).

Regarding racial segregation in Brazil, Telles (1992) confirms the existence of this phenomenon in the country's largest urban areas, noting that residents' skin color varies according to neighborhood quality. Salvador is the only capital where Black and Brown residents show lower segregation levels in the highest income strata. In his analysis, Telles (1992) notes that, though racial segregation is less pronounced in Brazil compared to the United States, it still reduces individuals' opportunities for social mobility.

França (2022) demonstrates how Whites and Blacks are segregated in terms of their place of residence and the resulting impact on the construction of their personal networks. Consequently, the author argues that urban space contributes to the establishment of barriers to the integration of Black people into the Brazilian middle classes.

Moreover, racial segregation tends to impact people's health in Brazil. Barber et al. (2018) demonstrated that it can be a determining factor in the development of cardiovascular diseases. Guimarães et al. (2025) examined the evolution of Body Mass Index (BMI) among employees of the State University of Rio de Janeiro (UERJ) to investigate the association between racial segregation and income.

According to Oliveira (2023), large metropolises are unable to effectively address the issue of racial segregation, even with advances brought about by the City Statute and the enactment of the Racial Equality Statute.

Strategies are still needed for the design of public policies that combine social class, ethnicity, race, and gender.

Considering how housing issues impact inequalities is one way of incorporating territory into analyses of mobility and stratification, combining sociological and geographical perspectives (Harvey, 1980). This study therefore aims to analyze urban segregation related to colour and race in Belo Horizonte in 2000 and 2022, examining the changes that have taken place over the last twelve years.

## Justification

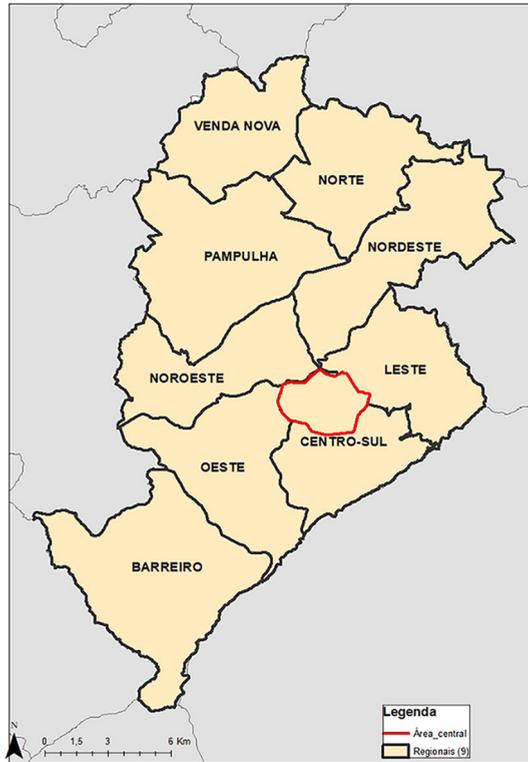
Belo Horizonte was planned to host the new administrative center of the state of Minas Gerais, which had previously been located in Ouro Preto. Aarão Reis's intention was to design a modern city inspired by European and North American models. The urban center was outlined by a circular avenue – known as Avenida do Contorno – which today corresponds to the city's central area. The plan envisioned wide streets and neighborhoods organized according to specific functions, such as districts designated for hospitals or areas intended for public service workers. Figure 1 illustrates the spatial organization of Belo Horizonte, highlighting the central area and its territorial division into administrative regions.

In general, individuals who migrated to Belo Horizonte as workers for the construction of the new administrative center settled in unplanned areas outside the central zone. Therefore, from its inception, Belo Horizonte city was already segregating its inhabitants, as noted by Bustamante and Freitas (2023) in their analysis of the creation of the Concórdia neighborhood, located outside the central area, and of how the city's urban planning policies have played a significant role in shaping racialized socio-spatial dynamics.

Miranda-Ribeiro and Garcia (2005) demonstrate that segregation, from a multidimensional perspective, is lower in the Centro-Sul region – the planned area of the city – and higher in the Eastern region. The Centro-Sul also concentrates more employment opportunities, which forces poorer residents living in other parts of the city to endure long daily commutes to work (Haddad, 2020). Moreover, Belo Horizonte's mobility pattern has been road-based since its early development, relying on private vehicles and buses. This has restricted access for lower-income populations to certain urban areas, as a result of the way bus line concessions are granted (Velooso, 2017). Such arrangements reinforce unequal accessibility to the city through public transportation, particularly buses (Lobo et al., 2020).

In the 1980s, Belo Horizonte city registered a Dissimilarity Index of 41 between Whites and Blacks. This indicator measures

Figure 1 – Territorial division of Belo Horizonte



Source: Municipality of Belo Horizonte (2025).

segregation through the dimension of evenness (Massey & Denton, 1988). In other words, 41% of the population would have had to move for the distribution to become uniform. Telles (1992) studied several cities, and this number was second only to Salvador. The author says that racial segregation in Belo Horizonte also intensifies with rising income, as “segregation between Whites and Blacks in the highest-income group is 11 points higher than in the next highest-income group” (Telles, 1992, p. 172).

This fact may reflect greater control by the white middle class in selecting their place of residence, based on colour criteria, through a formal property market, unlike those who obtain their housing through precarious informal markets. The low levels of racial segregation among the poor (except in the lowest income group) may reflect the precarious housing situation for the poorest sectors of the Brazilian population, where they have little control or interest in the colour of their neighbours. (Ibid., p. 173)

Recent research on racial inequalities in Belo Horizonte shows that Black and Brown individuals mostly live in favelas and belong to lower social classes, with the additional dimension of racial fluidity. This means that an individual's colour or race is influenced by their socioeconomic and contextual characteristics (Silveira & Tomas, 2019). Thus, Black and Brown people with better financial conditions, living in wealthier neighborhoods, tend to be perceived as “whiter.”

It is noteworthy that only a few studies address racial segregation and inequality in Belo Horizonte. This trend was also identified by Veloso and Teixeira (2024), who analyzed theses and dissertations on urban issues produced in the city over the past three decades. Among the 670 works examined, only 16 (2.39%) had ethnic-racial relations as their main theme. In light of this evidence, there is a clear need for further research to deepen the understanding of Belo Horizonte's spatial dynamics, particularly to assess how racial segregation shapes inequalities, social stratification, and opportunities for upward mobility.

## Materials and methods

This study draws on census tract data from 2010 and 2022 Population Censuses (IBGE, 2011; 2024) to look at changes in patterns of racial segregation in Belo Horizonte. The variables employed were: residents self-declared as White; residents self-declared as Black; and residents self-declared as Brown (*pardo*). It is important to note that, due to the relatively small absolute number of self-declared Black residents in Belo Horizonte,<sup>1</sup> particularly in 2010, this study combines the Black and Brown populations under the category “Black population.”

It should also be emphasized that data for all Brazilian municipalities, with levels of disaggregation below the municipal level and even below neighborhood divisions, are only available through the Population Censuses. Consequently, for quantitative studies on racial segregation, information is only released every decade, underscoring the importance of the Census and of including the variable “colour or race” in the universal questionnaire – something that has only occurred since 2010 (Anjos, 2013). It is also worth noting the challenges faced in carrying out the 2022 Population Census, which led to delays in both its implementation and the publication of results. For this reason, income data are not used in this study, as income figures at the census-tract level have not yet been released.

To measure segregation, four indices were employed, capturing the following dimensions: (1) Evenness or Dispersion; (2) Concentration; and (3) Clustering. The Segregation Index (IS), proposed by Duncan and Duncan (1955), measures the dispersion of a single group. It indicates the proportion of the group's population that would need to relocate to other areas for the overall distribution to become homogeneous. The index ranges from 0 to 1, with 0 indicating no segregation. Higher values indicate lower dispersion, i.e., greater segregation.

The IS has the limitation of not incorporating spatial components in its calculation. To address this, Wong (1993) proposed the spatial segregation index IS(S), which considers the adjacency matrix, as well as the area and perimeter of census tracts. This method helps minimize the “checkerboard problem” (White, 1983). Its measurement approach is similar to the IS, with values ranging from 0 to 1.

The dimension of concentration refers to the physical space occupied by a group. The larger the area of settlement, the less concentrated, and therefore less segregated, the group will be. The Absolute Concentration Index (ACO) compares the maximum and minimum areas that could be inhabited by a group with the total area actually occupied. Values range from 0 (minimum concentration) to 1 (maximum concentration) (Massey & Denton, 1988).

Finally, the dimension of clustering captures the degree of similarity among neighboring areas. The more homogeneous the distribution of a group across adjacent areas, the greater its clustering, and thus the higher the level of segregation. The Absolute Clustering Index (ACL) measures the average number of members of a group in surrounding areas relative to the total population of those areas, incorporating the adjacency matrix in its calculation. Like the other indices, ACL ranges from 0 to 1. Values closer to 0 indicate lower segregation, whereas values closer to 1 indicate greater spatial contiguity of the group. The index thus reflects the average proportion of a group's members in adjacent areas relative to the overall population in those same areas (Massey & Denton, 1988).

## Discussion of results

Changes in the population composition by colour and race in Belo Horizonte city can be observed in Char 1. The proportion of residents self-identifying as White decreased by 3.1% between 2010 and 2022. Nevertheless, this group still represents the largest share of the population, declining from 46.7% in 2010 to

43.6% in 2022. Residents identifying as Asian (yellow) or Indigenous also showed decreases over the same period.

The Black and Brown groups were the only categories that registered a proportional increase in self-identification. The proportion of Black individuals rose from 10.4% in 2010 to 13.5% in 2022, an increase of 3.1 percentage points. Those identifying as Brown accounted for 41.8% of the population in 2010, rising to 42.6% in 2022, an increase of 0.8 percentage points. When combined, the Black and Brown categories represented 52.2% of the population in 2010, increasing to 56.1% in 2022.

This growth over the twelve-year period was driven by the combination of an increase in self-declared Black individuals and a reduction in those identifying as White. Although the available Census data do not allow us to infer the precise causes of this shift, several hypotheses can be considered. These include migration of Black individuals to Belo Horizonte or greater racial awareness, which may have influenced responses to the question "What is your colour and/or race?" between 2010 and 2022.

The hypothesis of racial reclassification as a factor in the growth of the Black population in Brazil, as well as the historical development of including the colour/race question in the population census, has been discussed by scholars (Anjos, 2013). This phenomenon has also been tested in some databases, such as Senkevics (2022), who analyzed candidates registered for the National High School Exam (Exame Nacional do Ensino Médio, ENEM) between 2010 and 2016. The study demonstrates that racial reclassification accounts for approximately two-thirds of the increase in the number of individuals self-identifying as Black during this period.

Chart 1 – Proportion of the population by colour/race in Belo Horizonte in 2010 and 2022

Year	White	Black	Asian (Yellow)	Brown	Indigenous
2010	46,7%	10,4%	1,1%	41,8%	0,2%
2022	43,6%	13,5%	0,2%	42,6%	0,1%

Source: IBGE (2011 and 2024).

To understand the spatial distribution of White and Black populations in Belo Horizonte, thematic maps were created based on the proportion of White and Black residents by neighborhood in 2010 and 2022. The scale was defined manually, dividing the data distribution into four equal intervals ranging from 0 to 1.

Figures 2 and 3 show that the White population, in both periods, is concentrated in the Centro-Sul region. The neighborhood with the highest proportion of White residents in both years is Mangabeiras, located in the same region. Its development began in the 1960s during the expansion of Belo Horizonte city, when plots from the former “Fazenda das Mangabeiras,” near the Serra do Curral, were sold. Luxury mansions were built in this area (Urbel, 2008).

As neighborhoods become more distant from the city center, the White population decreases, indicating that the segregation pattern imposed by Belo Horizonte’s initial urban planning, proposed by Aarão Reis, remains in effect.

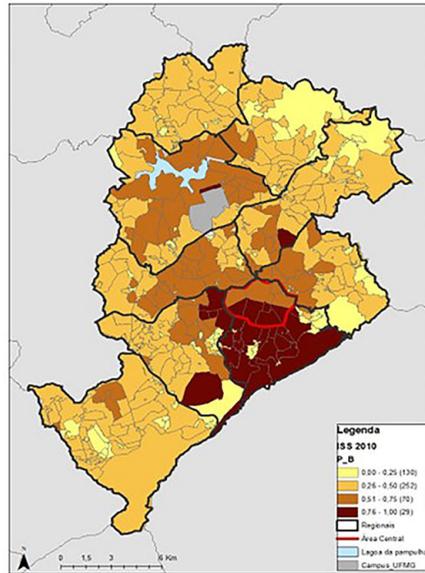
It is also notable that around Lagoa da Pampulha and near the UFMG campus, there is a concentration of neighborhoods where the White population represents between 51% and 75% of total residents. This area

was designed in the 1940s by then-mayor Juscelino Kubitschek and hosts the Pampulha architectural, landscape, and leisure complex, which has become a major tourist attraction. Furthermore, the area was planned for single-family residences for the elite, but surrounding neighborhoods were occupied by middle-income groups (Paixão & Abramo, 2009). These regional urbanization characteristics help explain the racial stratifications often associated with socioeconomic inequalities.

In the Pampulha region, the highest concentration of White residents occurs in the São Luiz neighborhood, where 74.5% and 71.4% of residents self-identified as White in 2010 and 2022, respectively. This neighborhood is located very close to UFMG, attracting a large number of faculty members, which may contribute to the high concentration of White residents.

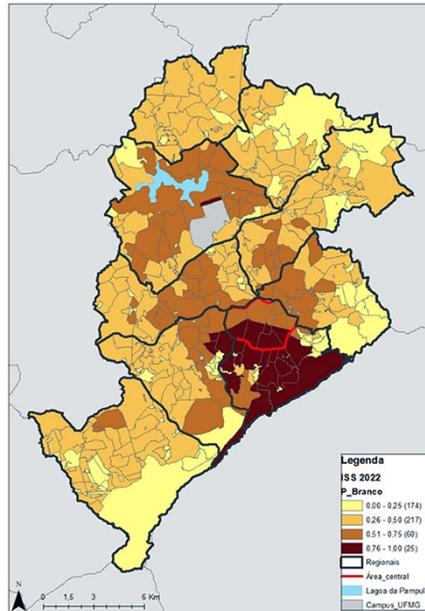
However, the area surrounding Lagoa da Pampulha is not homogeneous in terms of White population predominance. Neighborhoods such as Braúnas, Xangri-lá, and Trevo have less than 50% White residents and a high proportion of Black residents, as shown in Figures 4 and 5. This indicates that the promotion of Pampulha’s occupation was focused near Niemeyer’s architectural complex, leaving some neighborhoods aside.

Figure 2 – Proportion of White residents in Belo Horizonte neighborhoods in 2010



Source: IBGE (2011).

Figure 3 – Proportion of White residents in Belo Horizonte neighborhoods in 2022



Source: IBGE (2024).

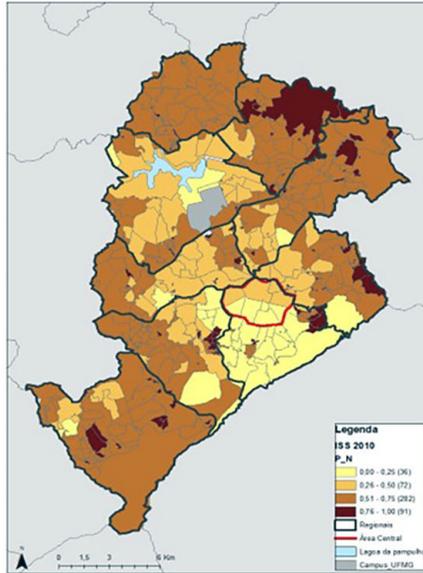
Between 2010 and 2022, the White population decreased in the Prado, Buritis, and Cidade Nova neighborhoods, from 78.5%, 76.5%, and 78% in 2010 to 73.7%, 74.5%, and 72.3% in 2022, respectively. Additionally, in the Barreiro region, the Serra do Curral and Pilar neighborhoods, as well as Olhos d'Água, already part of the Oeste region, also showed declines in the proportion of White residents, although less pronounced than in the previously mentioned neighborhoods.

Differences in population composition by colour or race over the twelve-year period reflect changes in the spatial organization of Belo Horizonte, as shown in Figures 4 and 5. In general, Black residents have come to occupy a greater number of neighborhoods, indicating a more spatially distributed presence in 2022. Their proportion increased particularly in the Barreiro, Norte, and Venda Nova regions, which correspond to the city's peripheries and border other municipalities in the Belo Horizonte Metropolitan Region. According to Paixão and Abramo (2009), the neighborhoods farthest from the city center, with the exception of

Pampulha, house the city's poorest populations. This finding indicates that economic inequalities are linked to the residential location of Black residents and result in longer commutes to the Centro-Sul region, as noted by Haddad (2020). In this context, an involuntary segregation process occurs (Villaça, 1998), in which Black residents, possibly due to economic constraints, have limited choice in selecting their neighborhoods. As a result, these individuals often live in areas where they can afford to rent, buy, or build housing.

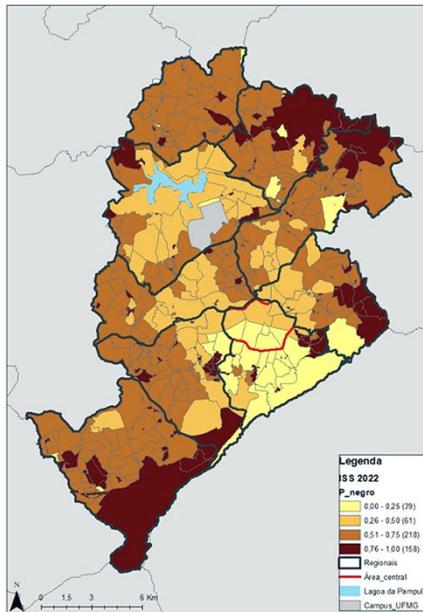
Amid changes in the spatial organization of Belo Horizonte, the neighborhoods with the highest concentration of Black residents shifted between 2010 and 2022. In 2010, in the Cônego Pinheiro neighborhood (2nd Section), all residents surveyed self-identified as Black; in São Francisco das Chagas, this percentage was 84.2%; and in Vila Satélite, 87.5% of residents identified as Black. By 2022, Vila Independência IV recorded a 90% Black population, followed by Guanabara with 89% and Universitário with 88.9%. It is noteworthy that these neighborhoods are not adjacent to one another.

Figure 4 – Proportion of Black residents in Belo Horizonte neighborhoods in 2010



Source: IBGE (2011).

Figure 5 – Proportion of Black residents in Belo Horizonte neighborhoods in 2022



Source: IBGE (2024).

In 2022, the proportion of Black residents increased in the Capitão Eduardo neighborhood in the Nordeste region, as well as in adjacent neighborhoods. In the Norte region, Granja Werneck maintained a high proportion of Black residents, as did Venda Nova in the Venda Nova region. The Trevo and Confisco neighborhoods in the Pampulha region, along with Jardim Taquaril and its surrounding areas in the Leste region, also saw an increase in the proportion of Black residents in 2022.

Notably, the Serra do Curral and Pilar neighborhoods in the Barreiro region showed an increase in the proportion of Black residents and a decrease in the proportion of White residents in 2022, indicating a shift in the population profile.

Exploratory analysis demonstrates that the socio-spatial segregation pattern by colour and race is linked to Belo Horizonte's urban planning, from its inception to the present day. Bustamante and Freitas (2023) argue that urban policies naturalize the presence of Black residents in the city, rendering the Afro-descendant population invisible and displacing

them from neighborhoods subject to increasing real estate speculation, as exemplified by the Concórdia neighborhood. However, in recent years, between 2010 and 2022, the proportion of Black residents in this area remained stable at around 59%.

Given the evidence of racial segregation, Segregation Indices for Belo Horizonte were calculated for 2010 and 2022, inspired by Telles (1992) for Brazil's major metropolitan areas, with the aim of analyzing the phenomenon in greater depth.

According to Chart 2, segregation related to the dimension of evenness, or population dispersion, changed little over the past twelve years. It can be considered low in both periods. In this case, the percentage of Black and White residents who would need to relocate for the population distribution to become uniform ranged from 31% to 33%. This index has shown a continuous decline since the 1980s, the first calculation made by Telles (1992), compared to 2022. The reduction was approximately 10 percentage points.

Chart 2 – Segregation Indices for 2010 and 2022

Color/race	IS		IS(s)		ACO		ACL	
	2010	2022	2010	2022	2010	2022	2010	2022
White	0,32	0,33	0,31	0,32	0,45	0,48	0,46	0,43
Black and brown	0,32	0,33	0,31	0,32	0,55	0,52	0,40	0,44

Source: IBGE (2011 and 2024).

The Absolute Concentration Index (ACO) of Black and White residents in Belo Horizonte neighborhoods is high. The ACO reached a minimum value of 0.45 for the Black population in 2010 and a maximum of 0.55 for the White population in 2022. This index ranges from 0 to 1, with values closer to 1 indicating greater segregation, as they reflect a high concentration of individuals with certain characteristics residing in the same neighborhoods.

It can be observed that White residents in Belo Horizonte live in a less concentrated manner than Black residents, as the ACO increased from 0.45 in 2010 to 0.48 in 2022. Conversely, Black residents tend to reside in neighborhoods with a higher presence of people sharing similar characteristics. However, there is a tendency toward greater dispersion over time, as the indicator for Black residents decreased from 0.55 in 2010 to 0.52 in 2022. It is important to note that this index is influenced by population size, meaning that the reduction in the number of White residents and the increase in the Black population in Belo Horizonte between 2010 and 2022 affected the spatial redistribution of residents.

Moreover, the clustering dimension was also relevant for measuring segregation in Belo Horizonte, assessed using the Absolute Clustering Index (ACL). This index indicates whether individuals with a specific characteristic are grouped territorially, i.e., whether a neighborhood with a prevalence of a given characteristic has neighboring areas with the same characteristic. Lower ACL values indicate fewer clusters. Segregation along this dimension can be considered moderate for both Black and White residents, with values ranging from 0.40 to 0.46.

There was a reduction in clusters of White residents, as the indicator decreased from 0.46 in 2010 to 0.43 in 2022, suggesting fewer

neighborhoods with a high concentration of White residents whose neighboring areas share the same characteristic. Exploratory analysis revealed that, in both periods, there is only one major cluster of neighborhoods with a high proportion of White residents, located in the Centro-Sul region of Belo Horizonte, suggesting that the historically planned urban design of the city remains influential.

Clustering among Black residents increased, as indicated by the ACL, which rose from 0.40 in 2010 to 0.44 in 2022. This growth may be related to population increases among Black residents, who tend to live in neighborhoods with higher concentrations of Black residents, due to financial factors as well as the desire to reside near their social networks. Figures 4 and 5 show an increase in the number of neighborhoods where 76% to 100% of residents self-identify as Black, rising from 91 neighborhoods in 2010 to 158 in 2022. In 2022, three major clusters of neighborhoods with high concentrations of Black residents are identifiable, located in the Norte and Noroeste regions, the Leste region (bordering the municipalities of Sabará and Nova Lima), and the Barreiro region. These areas represent city expansion zones where real estate developments over the decade were primarily part of the Minha Casa Minha Vida program, income brackets 2 and 3.

Exploratory analysis and segregation indices highlight the presence of socio-spatial segregation by colour and race in Belo Horizonte, particularly pronounced in the concentration and clustering dimensions. Although there has been a slight reduction in this phenomenon over time, the implementation of housing, mobility, and urban inclusion policies remains necessary to reduce the social inequalities associated with the residential locations of Black residents.

## Final considerations

Given the scarcity of studies on racial issues in urban research in Belo Horizonte (Veloso & Teixeira, 2024), the use of Population Census data allowed for an analysis of the population dynamics in terms of colour and race at both municipal and neighborhood levels. Based on the results obtained, it can be stated that the increase in the Black population in Belo Horizonte in 2022 impacted the city's spatial organization and the dynamics of racial segregation. Black residents are now more evenly distributed across the city, but still live less frequently in the central and Centro-Sul regions. There is a higher presence of neighborhoods with a high proportion of Black residents in areas where neighboring neighborhoods exhibit similar characteristics, particularly in regions at the city's periphery, corresponding to the most recent areas of urban expansion. Consequently, Black residents continue to have less access to opportunities, as they must travel longer distances to access certain public facilities, services, and better employment opportunities, as observed by Haddad (2022).

Regarding the results related to colour/race, it is important to note that it is not possible to determine whether population changes associated with colour and race are due to racial reclassification, migration, or other factors. This remains a gap requiring further studies on the public statistics question of colour and race, as well as its results over time.

This study also observed that White residents are more concentrated in the Centro-Sul region and, to a lesser extent, in the Pampulha region, with the exception of

neighborhoods such as Braúnas, Xangri-lá, and Trevo. However, the number of clusters of neighborhoods with a high proportion of White residents decreased, as shown by the ACL, although these individuals remain increasingly concentrated in neighborhoods with better service coverage and urban infrastructure. In this way, White residents are not negatively affected by the segregation pattern, whereas Black residents are significantly impacted due to their limited ability to reside in central areas of Belo Horizonte.

Overall, racial segregation remains relatively mild, as previously noted by Telles (1992) in his analysis of Belo Horizonte and other Brazilian capitals in the 1980s. The data suggest a strong relationship between racial and economic segregation in Brazil and Latin America, as indicated by Sabatini (2006) and also observed by França (2022) in Fortaleza, Salvador, and São Paulo. However, limitations imposed by the schedule for releasing the 2022 Demographic Census results did not allow for a study relating income and race, which will be addressed in the next phases of the research.

Additionally, it is expected that a case study will be conducted in the three neighborhoods with the highest proportion of Black residents around Lagoa da Pampulha to understand why they differ from other areas.

Finally, public policies for urban planning and city management in Belo Horizonte need to incorporate additional dimensions, such as racial issues, in their formulation. Ideally, programs and actions should adopt an intersectional perspective, linking race, gender, and class. Through this approach, it will be possible to reduce territorial inequalities and ensure that all citizens enjoy the right to the city equally.

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## Note

(1) Only 17 of Belo Horizonte's 482 neighborhoods had a Black population share between 26% and 50% in 2010. By 2022, this number had risen to 64 neighborhoods (IBGE, 2011; 2024).

## References

- ANJOS, G. dos (2013). A questão "cor" ou "raça" nos censos nacionais. *Indicadores Econômicos FEE*, v. 41, n. 1, pp. 103-118. Disponível em: <https://revistas.planejamento.rs.gov.br/index.php/indicadores/article/view/2934>. Acesso em: 5 fev 2025.
- BARBER, S. et al. (2018). At the intersection of place, race, and health in Brazil: residential segregation and cardio-metabolic risk factors in the Brazilian Longitudinal Study of Adult Health (ELSA-Brasil). *Social Science & Medicine*, n. 199, pp. 67-76. DOI: 10.1016/j.socscimed.2017.05.047.
- BUSTAMANTE, C. B. A.; FREITAS, D. M. (2023). Processos de racialização urbana em Belo Horizonte. In: ENCONTRO NACIONAL DA ANPUR. *Anais*. Belém, Anpur. Disponível em: <https://anais.anpur.org.br>. Acesso em: 5 fev 2025.
- CALDEIRA, T. P. (2000). *Cidade de muros: crime, segregação e cidadania em São Paulo*. São Paulo, Editora 34/Edusp.
- CARVALHO, I.; BARRETO, V. (2007). Segregação residencial, condição social e raça em Salvador. *Cadernos Metrópole*. São Paulo, v. 18, n. 2. Disponível em: <https://revistas.pucsp.br/index.php/metropole/article/view/8737>. Acesso em: 5 fev 2025.
- CERQUEIRA, E. D. V. (2015). As novas lógicas de fortificação residencial nas periferias metropolitanas de Belo Horizonte: quais impactos sobre a segregação social? *Urbe. Revista Brasileira de Gestão Urbana*, n. 7, pp. 195-210. DOI: <https://doi.org/10.1590/2175-3369.007.002.SE04>.
- DUNCAN, O. D.; DUNCAN, B. (1955). A methodological analysis of segregation indexes. *American Sociological Review*, n. 20, pp. 210-217.

- FRANÇA, D. (2022a). Segregação residencial por raça e classe em Fortaleza, Salvador e São Paulo. *Caderno CRH*, n. 35, e022045. DOI: <https://doi.org/10.9771/ccrh.v35i0.42018>.
- \_\_\_\_\_. (2022b). Experiências urbanas segregadas: locais de moradia, trajetórias e redes pessoais de negros e brancos em São Paulo – SP. *Estudos de Sociologia*, v. 27(Esp.1), e022003. DOI: <https://doi.org/10.52780/res.v27iesp1.15820>.
- GERMANO, T.; SILVEIRA NETO, R. M. (2015). Segregação residencial na cidade do Recife: Um estudo da sua configuração. *Revista Brasileira de Estudos Regionais e Urbanos*, n. 9, pp. 71-92. Disponível em: <https://www.revistaaber.org.br/rberu/article/view/115/151>. Acesso em: 5 fev 2025.
- GONÇALVES, A. P. V.; STRAUCH, J. C. M. (2021). Segregação e atividade industrial no Estado do Rio de Janeiro: uma ênfase na microrregião do Vale do Paraíba Fluminense. *Desenvolvimento em Questão*, v. 19, n. 56, pp. 358-377. DOI: <https://doi.org/10.21527/2237-6453.2021.56.10703>.
- GUIMARÃES, J. C. M. N. et al. (2025). Is income and racial residential segregation associated with 13-year change in Body Mass Index? A longitudinal analysis in the Brazilian Pró-Saúde Cohort Study. *Journal of Urban Health*. DOI: [10.1007/s11524-024-00949-6](https://doi.org/10.1007/s11524-024-00949-6).
- HADDAD, M. A. (2020). Residential income segregation and commuting in a Latin American city. *Applied Geography*, n. 117, 102186. DOI: <https://doi.org/10.1016/j.apgeog.2020.102186>.
- HARVEY, D. (1980). *A justiça social e a cidade*. São Paulo, Hucitec.
- IBGE – Instituto Brasileiro de Geografia e Estatística (2011). *Sinopse do Censo Demográfico 2010*. Rio de Janeiro, IBGE.
- \_\_\_\_\_. (2024). *Agregados por setor censitário: Censo Demográfico 2022*. Rio de Janeiro, IBGE.
- LOBO, C.; CARDOSO, L.; LESSA, D. A.; MIRANDA, G. C. (2020). Acessibilidade ao sistema de transporte coletivo por ônibus: Indicadores para os municípios da periferia metropolitana e os campos de Belo Horizonte, Brasil. *Cuadernos de Geografía: Revista Colombiana de Geografía*, v. 29, n. 1, pp. 190-206. DOI: <https://doi.org/10.15446/rcdg.v29n1.76010>.
- MARQUES, E. C. L.; FRANÇA, D. (2020). “Segregation by class and race in São Paulo”. In: MUSTERD, S. (ed.), *Handbook of Urban Segregation*. Londres, Edward Elgar, pp. 36-54.
- MASSEY, D. S.; DENTON, N. A. (1988). The dimensions of residential segregation. *Social Forces*, n. 67, pp. 281-315.
- MIRANDA-RIBEIRO, A.; GARCIA, R. A. (2005). Segregação socioespacial em Belo Horizonte: uma aplicação de modelos difusos. *Revista Geografias*, v. 1, n. 1, pp. 86-97. DOI: <https://doi.org/10.35699/2237-549X..13188>.
- OLIVEIRA, R. J. (2023). Segregação racial no Brasil: Questões contemporâneas em políticas públicas. *Revista Urbano*, v. 8, n. 1, pp. 1-27. DOI: <https://doi.org/10.51359/2525-6092.2023.253421>.
- PAIXÃO, L. A.; ABRAMO, P. (2009). Os vetores de expansão da atividade imobiliária em Belo Horizonte: 1994-2003. *Nova Economia*, v. 18, n. 2. Disponível em: <https://revistas.face.ufmg.br/index.php/novaeconomia/article/view/503>. Acesso em: 5 fev 2025.
- PREFEITURA MUNICIPAL DE BELO HORIZONTE (2025). *BH Maps*. Disponível em: <https://bhmap.pbh.gov.br/v2/mapa/idebhgeo>. Acesso em: 5 fev 2025.
- RBEL (2008). *História dos bairros de Belo Horizonte: Regional Centro-Sul*. Disponível em: [http://www.pbh.gov.br/historia\\_bairros/CentroSulCompleto.pdf](http://www.pbh.gov.br/historia_bairros/CentroSulCompleto.pdf). Acesso em: 5 fev 2025.
- RIBEIRO, M. G.; RIBEIRO, L. C. Q. (2021). Segregação socioespacial e desigualdades de renda da classe popular na metrópole do Rio de Janeiro, Brasil. *Eure-Revista Latinoamericana de Estudios Urbano Regionales*, n. 47, pp. 27-48. DOI: <http://dx.doi.org/10.7764/eure.47.142.02>.

- SABATINI, F. (2006). *La segregación social del espacio en las ciudades de América Latina*. Santiago de Chile, Banco Interamericano de Desarrollo. Disponível em: <https://publications.iadb.org/es/la-segregacion-social-del-espacio-en-las-ciudades-de-america-latina>. Acesso em: 5 fev 2025.
- SENKEVICS, A. S. (2022). De brancos para negros? Uma análise longitudinal da reclassificação racial no ENEM 2010–2016. *Dados*, v. 65, n. 3, e20190088. DOI: <https://doi.org/10.1590/dados.2022.65.3.268>.
- SILVEIRA, L. S.; TOMÁS, M. C. A. (2019). Fluidez racial na Região Metropolitana de Belo Horizonte: características individuais e contexto local na construção da raça. *Revista Brasileira de Estudos de População*, n. 36, e0081. DOI: <https://doi.org/10.20947/S0102-3098a0081>.
- TELLES, E. (1992). Residential segregation by skin color in Brazil. *American Sociological Review*, v. 57, n. 2, pp. 186–197.
- VELOSO, A. (2017). *O ônibus, a cidade e a luta*. Belo Horizonte, Impressões de Minas.
- VELOSO, C. S.; TEIXEIRA, A. T. (2024). Pesquisas urbanas em Belo Horizonte: um panorama da produção de teses e dissertações nas três últimas décadas (1991-2020). *Revista Brasileira de Sociologia*, n. 12, pp. 1-22. DOI: <https://doi.org/10.20336/rbs.981>.
- VILLAÇA, F. (1998). *Espaço intra-urbano no Brasil*. São Paulo, Studio Nobel.
- WHITE, M. J. (1983). The measurement of spatial segregation. *American Journal of Sociology*, v. 88, n. 4, pp. 1008–1018. Disponível em: <https://www.jstor.org/stable/2779449>. Acesso em: 5 fev 2025.
- WONG, D. W. S. (1993). Spatial indices of segregation. *Urban Studies*, v. 30, n. 3, pp. 559–572. Disponível em: <https://journals.sagepub.com/doi/10.1080/00420989320080551>. Acesso em: 5 fev 2025.

#### Authorship contribution

Ana Paula Vasconcelos Gonçalves: formal analysis; conceptualization; data curation; investigation; methodology; writing—original draft; writing—review & editing; software; supervision; validation; visualization.

Julia Celia Mercedes Strauch: project administration; funding acquisition; data curation; investigation; resources; writing—review & editing; software; supervision; validation; visualization.

#### Declaration of conflict of interest

The authors declare that there is no conflict of interest.

#### Data Availability Statement

The dataset supporting the results of this study is not publicly available.

Editors: Lucia Bógus and Luiz César de Queiroz Ribeiro

Organizers of this issue: Suzana Pasternak and Luís Felipe Aires Magalhães

Translation: this article was translated from Portuguese to English by the authors themselves.

Received: April 6, 2025  
Approved: August 7, 2025