

SHORT-TERM RENTAL PLATFORMS IN PERIPHERAL CAPITALISM

*AIRBNB, LABOR, AND LAND RENT
IN THE URBAN ECONOMY OF RIO DE JANEIRO*

Aline Cristina Fortunato Cruvinel

Aline Cristina Fortunato Cruvinel

**Short-Term Rental Platforms in Peripheral Capitalism:
Airbnb, Labor, and Land Rent in the Urban Economy of Rio de Janeiro**

Doctoral dissertation submitted to the Graduate Program in Urbanism, School of Architecture and Urbanism, Federal University of Rio de Janeiro, in partial fulfillment of the requirements for the degree of Doctor of Urbanism.

Supervisor: Prof. Dr. Rodrigo Cury Paraizo

Rio de Janeiro
2025

Disclaimers

- This thesis is a translation of a work originally written in Portuguese and is the result of a research process officially initiated in March 2022, while also incorporating theoretical approaches previously developed by the author.
- The full Portuguese version of the thesis was sent to all members of the examination committee on November 4, 2025, and was approved by the committee on December 8, 2025. This translation faithfully follows the Portuguese version, without additions to the original text.
- This version was independently prepared by the author without institutional or financial support and may be subject to further revision and improvement.
- Unless otherwise noted, references to cited works are based on their Portuguese versions, including both publicly available editions and translations prepared by the author for the purposes of this thesis.
- The representation of numbers in tables and charts was maintained according to the original version, following the Brazilian standard: thousands separated by periods and decimals by commas. Dates were preferably, although not exclusively, presented in the dd-mm-yyyy format.
- This thesis was originally formatted in accordance with the standards of the Brazilian Association of Technical Standards (ABNT).

Comments, corrections, and suggestions are welcome.

How to cite (APA):

Cruvinel, A. C. F. (2025). *Short-term rental platforms in peripheral capitalism: Airbnb, labor, and land rent in the urban economy of Rio de Janeiro* (Doctoral dissertation, Federal University of Rio de Janeiro).

English translation (Version 1), completed on July 1, 2026.

Contact:

www.alinecruvinel.com
aline.cfcruvinel@gmail.com

Aline Cristina Fortunato Cruvinel

**Short-Term Rental Platforms in Peripheral Capitalism:
Airbnb, Labor, and Land Rent in the Urban Economy of Rio de Janeiro**

Doctoral dissertation submitted to the Graduate Program in Urbanism, School of Architecture and Urbanism, Federal University of Rio de Janeiro, in partial fulfillment of the requirements for the degree of Doctor of Urbanism.

Approved on: *December 8, 2025*

Prof. Dr. Rodrigo Cury Paraizo (Supervisor)
FAU / PROURB – Federal University of Rio de Janeiro (UFRJ)

Profa. Dra. Denise Barcellos Pinheiro Machado (Internal Examiner)
FAU / PROURB – Federal University of Rio de Janeiro (UFRJ)

Profa. Dra. Rosângela Lunardelli Cavallazzi (Internal Examiner)
FAU / PROURB – Federal University of Rio de Janeiro (UFRJ)

Prof. Dr. Daniel de Mello Sanfelici (External Examiner)
POSGEO – Fluminense Federal University (UFF)

Prof. Dr. Agustín Cocola-Gant (External Examiner)
Universitat Rovira i Virgili (URV)

To all those who refuse to conform.

Acknowledgments

At the end of 2021, when I applied to the doctoral program in the Graduate Program in Urbanism at the Universidade Federal do Rio de Janeiro (PROURB/UFRJ), I proposed a research project that would engage with three themes: *digital platforms*, *labor*, and *urban space*. This proposal was grounded in work I had been developing with dedication since 2018 at the same institution. I now reach the end of 2025 with the results of my doctoral research in hand. This would not have been possible, however, without the support of individuals and institutions who accompanied me over the past four years, to whom I express my sincere gratitude.

I would first like to thank PROURB/UFRJ for its institutional support and for providing the financial resources that made this work possible. I am grateful to the entire technical, student, and academic staff of PROURB for the time and effort, in different ways, dedicated to me and to this research. I also thank the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES) for the financial support that enabled me to carry out my work as a researcher.

I am deeply grateful to Prof. Rodrigo Cury Paraizo for his guidance, availability, and support over the past four years. I also thank the Laboratório de Análise Urbana e Representação Digital for supporting activities related to this research. My thanks to Prof. José Luís Mourato Crespo, who kindly welcomed me at the Faculdade de Arquitetura da Universidade de Lisboa (FA.U LISBOA) in 2024 and supported my research in Portugal. I also thank Prof. Rosângela Lunardelli Cavallazzi and Prof. Cláudio Rezende Ribeiro for the time and comments dedicated to my doctoral qualification.

I would like to thank the Study Group on Marxist Dependency Theory at the Escola de Formação Política da Classe Trabalhadora – Vânia Bambirra (GE-TMD/EFOP), with whom I shared many evenings in 2022, deepening my understanding of Marxist Dependency Theory and learning alongside people committed to theoretical debate. I also thank the Observatório Global de Aluguéis Temporários (OGAT), LabCidade/FAU-USP, and the Rosa Luxemburg Foundation for their trust in my work and for the partnership developed during the second half of 2024.

I thank Inside Airbnb for providing the data used in this research and for its work over the past decade. In particular, I am grateful to Murray Cox for the knowledge he shared, and for his respect, kindness, and time dedicated to me and to my research, helping me find “the light of the sun” and believe in this work.

I thank Mateus for his companionship, love, care, patience, and support, making this process lighter. For joining me in some of my professional adventures with fear, courage, and enthusiasm. I also thank Camila, who, even from thousands of kilometers away, was present in my life every day over these past four years, supporting me with her friendship and her knowledge as a geographer. Thank you both for celebrating all my achievements and supporting me through every difficulty.

I thank Luisa for her friendship and professional partnership throughout this process. I thank Felipe for his friendship and for his professional and technical advice. I also thank my dear friends from PSDE 2024, who made my experience in Portugal more welcoming, familiar, and Brazilian. I am grateful to Gabriela and Maria Gabriela, professionals whose work provided me with emotional support to bring my own work into the world, helping me believe in my ideas and value my strengths, interests, and abilities, while also supporting me in moments of sadness.

I thank the Orixás for the paths opened and closed, for my precious existence, and for the miracle that is my life. For being with me and within me.

Finally, I thank myself, for facing the immense challenge that it has been, coming from where I come from, to conduct research in Brazil. There are lessons that do not come from books. Throughout this process, I have learned more about myself, about the values that guide me, my abilities, about trust, respect, generosity, loyalty, justice, courage, about what I love, and about what I will not give up. Deep respect for my own history.

Thank you.

"Why am I compelled to write? Because the writing saves me from this complacency I fear. Because I have no choice. Because I must keep the spirit of my revolt and myself alive. Because the world I create in the writing compensates for what the real world does not give me. By writing I put order in the world, give it a handle so I can grasp it. I write because life does not appease my appetites and hunger. I write to record what others erase when I speak, to rewrite the stories others have miswritten about me, about you. To become more intimate with myself and you. To discover myself, preserve myself, build myself, achieve autonomy. To dispel the myths that I am a mad prophet or a poor suffering soul. To convince myself that I am worthy and that what I have to say is not a pile of shit. To show that I *can* and that I *will* write, never mind their admonitions to the contrary. I will write about the unspoken, having no regard for the censor's outraged gasp. Finally, I write because I'm afraid of writing, but I'm more afraid of not writing."

In:

Speaking in Tongues: A Letter to Third World Women Writers.

Gloria Anzaldúa, 1980, emphasis in the original.

Abstract

Cruvinel, A. C. F. (2025). *Short-term rental platforms in peripheral capitalism: Airbnb, labor, and land rent in the urban economy of Rio de Janeiro* (Doctoral dissertation, Federal University of Rio de Janeiro).

After the 2008 global economic crisis, digital platforms became popular as alternative sources of income and employment for different segments of the working class, while simultaneously reinventing strategies for capital accumulation to ensure the continuity of the capitalist system. With the rise of digital short-term rental platforms such as Airbnb, Vrbo, and Booking.com, a range of urban problems began to intensify in cities around the world, manifesting in processes of gentrification, touristification, evictions, and rising housing costs. In this context, and using the city of Rio de Janeiro as a case study, this dissertation analyzes how Airbnb penetrates the urban economy in peripheral countries and accumulates capital through housing, benefiting from labor and land rent, and materializing in a particular way the expansion of U.S. imperialism through digital monopolies. To this end, it draws on: the theories of value, surplus value, and rent formulated by Karl Marx and revisited by David Harvey; the contributions of Milton Santos and the theorists of the Marxist Theory of Dependency (TMD) concerning the economic dependence between peripheral and core countries; and data from Inside Airbnb for Rio de Janeiro. Methodologically, the study adopts historical-dialectical materialism, articulated with data analysis based on Python and Geographic Information Systems (GIS). The main findings demonstrate how Airbnb and other capital holders benefit from labor through the organization of production and consumption, as well as from the expansion of land rent through changes in tenant profiles, the exploitation of periods of high tourist demand, and investments in mega-events and urban renewal. This process, in turn, constitutes a form of accumulation by dispossession, deepens the dependency between peripheral and core countries, and directly contributes to the globalized structural impoverishment of the working class.

Keywords: urbanism; rent; labor; urban economy; digital platforms; Airbnb; capitalism; periphery.

Resumo

CRUVINEL, Aline Cristina Fortunato. **Plataformas de aluguel temporário no capitalismo periférico: Airbnb, trabalho e renda fundiária na economia urbana do Rio de Janeiro.** 2025. 238 f. Tese (Doutorado em Urbanismo) – Faculdade de Arquitetura e Urbanismo, Universidade Federal do Rio de Janeiro, Rio de Janeiro, 2025.

Após a crise econômica global de 2008, as plataformas digitais se popularizaram como fontes alternativas de renda e trabalho para diferentes frações da classe trabalhadora, ao mesmo tempo em que reinventaram estratégias para a acumulação do capital, de modo a garantir a continuidade do sistema capitalista. Com as atividades de plataformas digitais de aluguel temporário, como Airbnb, Vrbo e Booking.com, uma série de problemas urbanos passou a se intensificar em cidades do mundo todo, se expressando em processos de gentrificação, turistificação, remoções e aumento dos custos de moradia. Diante desse cenário, e utilizando como estudo de caso a cidade do Rio de Janeiro, esta tese analisa como o Airbnb penetra a economia urbana em países periféricos e acumula capital através da habitação, se beneficiando do trabalho e da renda fundiária e materializando de modo particular a expansão do imperialismo estadunidense via monopólios digitais. Para isso, utilizam-se: as teorias do valor, do mais-valor e da renda formuladas por Karl Marx e retomadas por David Harvey; as contribuições de Milton Santos e dos formuladores da Teoria Marxista da Dependência (TMD) acerca da dependência econômica entre países periféricos e centrais; e dados do Inside Airbnb para o Rio de Janeiro. Como metodologia, adota-se o materialismo histórico-dialético, articulado à análise de dados baseada em Python e Sistemas de Informação Geográfica (SIG). Como principais resultados, esta tese demonstra como o Airbnb e outros requerentes do capital se beneficiam do trabalho por meio da organização da produção e do consumo, assim como da ampliação da renda fundiária por meio da mudança do tipo de locatário, da utilização de períodos de alta demanda turística e de investimentos em megaeventos e renovações urbanas. Esse processo, por sua vez, caracteriza uma acumulação por despossessão, aprofunda a dependência entre países periféricos e centrais e contribui diretamente para a pobreza estrutural globalizada da classe trabalhadora.

Palavras-chave: urbanismo; aluguel; trabalho; economia urbana; plataformas digitais; Airbnb; capitalismo; periferia.

List of Figures

Figure 1 – Origins of the Platformization of the Economy	48
Figure 2 – Territorial Penetration of Digital Platforms in Cities on the Periphery of Capitalism	51
Figure 3 – Short-Term Rentals in the Upper and Lower Circuits of the Urban Economy ...	55
Figure 4 – Mechanisms of Capital Accumulation on the Airbnb Platform	60
Figure 5 – Actors in the Process of Capital Circulation Controlled by Airbnb	63
Figure 6 – Basic Cycle of Capital Circulation on Airbnb	68
Figure 7 – Distribution of Lodging Payments	69
Figure 8 – Complete Cycle of Capital Circulation Through the Connection Between Airbnb, Host, Listing, and Guest	71
Figure 9 – Hypothetical Scenarios of Property Occupancy Over Time	73
Figure 10 – Factors Influencing the Expansion of Land Rent According to the Type of Renter	77
Figure 11 – Expansion of Land Rent According to Rental Type and Demand	79
Figure 12 – Conceptual Examples of Demand, Time, and Price Combinations	79
Figure 13 – Conceptual Scheme of Periods of Extraordinary Revenue in Rio de Janeiro ...	80
Figure 14 – Airbnb and the Production of Globalized Structural Poverty	85
Figure 15 – Types of geometries in a <i>GeoDataFrame</i>	98
Figure 16 – Neighborhoods of Rio de Janeiro	101
Figure 17 – Hexagonal Grid	102
Figure 18 – Circulation of capital on Airbnb: study of the M stage	106
Figure 19 – Rio de Janeiro: Distribution of listing types	109
Figure 20 – Rio de Janeiro: Number of listings by neighborhood	111
Figure 21 – Rio de Janeiro: listing density by neighborhood	111
Figure 22 – Rio de Janeiro: Types of listings by neighborhood	113
Figure 23 – Rio de Janeiro: Airbnb listings in favelas	117
Figure 24 – Rio de Janeiro: Distribution of housing typologies by neighborhood	119
Figure 25 – Rio de Janeiro: Distribution of listings within neighborhoods	123
Figure 26 – Circulation of capital on Airbnb: study of the C stage	129
Figure 27 – Rio de Janeiro: number of hosts by data collection (2015–2025)	131

Figure 28 – Rio de Janeiro: number of co-hosts by data collection (2023–2025)	134
Figure 29 – Rio de Janeiro: Accommodation stock of the 20 hosts with the largest number of listings	137
Figure 30 – Rio de Janeiro: Main connections between hosts and co-hosts	141
Figure 31 – Rio de Janeiro: Accommodation stock of the 20 co-hosts with the largest number of listings	143
Figure 32 – Rio de Janeiro: Examples of arrangements between hosts, co-hosts, and listings	145
Figure 33 – Circulation of capital on Airbnb: study of the M' stage	148
Figure 34 – Rio de Janeiro: median prices of entire homes by neighborhood	151
Figure 35 – Rio de Janeiro: median prices of private rooms by neighborhood	151
Figure 36 – Rio de Janeiro: Estimated nights booked in the last 12 months	156
Figure 37 – Rio de Janeiro: Estimated revenue in the last 12 months	158
Figure 38 – Expanded accumulation: strategy 1	163
Figure 39 – Rio de Janeiro: Housing stock used by entire home listings on Airbnb	165
Figure 40 – Rio de Janeiro: Percentage of entire home Airbnb listings relative to vacant housing units	165
Figure 41 – Rio de Janeiro: Housing stock occupied by entire home Airbnb listings within neighborhoods	170
Figure 42 – Rio de Janeiro: evolution of the daily price per square meter of short-term rental and residential rental (2015–2025)	174
Figure 43 – Expanded accumulation: strategy 2	178
Figure 44 – Rio de Janeiro: median price of entire home listings per data scrape (2015–2025)	180
Figure 45 – Rio de Janeiro: median price of private room listings per data scrape (2015–2025)	181
Figure 46 – Rio de Janeiro: evolution of the median price of entire home and private room listings (2015–2025)	182
Figure 47 – Rio de Janeiro: variation in the median prices of entire homes by neighborhood (January–November vs. December 2024)	186
Figure 48 – Rio de Janeiro: variation in the median prices of private rooms by neighborhood (January–November vs. December 2024)	186
Figure 49 – Expanded accumulation: strategy 3	191
Figure 50 – Rio de Janeiro: number of listings (2015–2025)	194

Figure 51 – Rio de Janeiro: evolution of the number of listings (2015–2025)	195
Figure 52 – Rio de Janeiro: number of listings in the eleven selected data scrapes ...	197
Figure 53 – Rio de Janeiro: evolution of the spatial distribution of listings (2015–2025)	200
Figure 54 – Rio de Janeiro: annual variations in the number of listings by neighborhood (2015–2025)	205
Figure 55 – Rio de Janeiro: annual variations in listing density by neighborhood (2015–2025)	206
Figure 56 – Rio de Janeiro: variation in listings between 2015 and 2016	209
Figure 57 – Rio de Janeiro: variation in listings between 2021 and 2025	211

List of Tables

Table 1 – Inside Airbnb: Attributes of the <i>listings.csv.gz</i> file grouped into thematic blocks	90
Table 2 – Main stages adopted in data analysis with Python	99
Table 3 – Rio de Janeiro: Distribution of listings by neighborhood	112
Table 4 – Rio de Janeiro: Distribution of housing typologies by neighborhood	120
Table 5 – Rio de Janeiro: Hosts with the largest number of listings	135
Table 6 – Rio de Janeiro: Co-hosts with the largest number of listings	140
Table 7 – Rio de Janeiro: Prices, occupancy, and estimated annual revenue by neighborhood	152
Table 8 – Rio de Janeiro: Housing stock occupied by Airbnb and the relationship between entire home listings and vacant housing units	166
Table 9 – Rio de Janeiro: variations in the daily price per square meter of short-term rental and residential rental (2015–2025)	175
Table 10 – Rio de Janeiro: variation in the median prices of entire home listings	183
Table 11 – Rio de Janeiro: variation in the median prices of private room listings	184
Table 12 – Rio de Janeiro: Variation in median prices of entire home listings by neighborhood (January–November vs. December 2024)	187
Table 13 – Rio de Janeiro: Variation in median prices of private rooms by neighborhood (January–November vs. December 2024)	188
Table 14 – Rio de Janeiro: annual variation in the number of listings (2015–2025)	196
Table 15 – Rio de Janeiro: variation in the supply of listings (2015–2025)	201
Table 16 – Rio de Janeiro: variation in listing density (2015–2025)	204

Table of Contents

Introduction	16
<i>PART I : Theory and Method</i>	
1. Digital Monopolies of Short-Term Rentals in the Periphery of Capitalism	31
1.1. Toward a Theory of Short-Term Rentals in Peripheral Capitalism	32
1.2. Short-Term Rentals in the Circuits of the Urban Economy	46
1.3. Mechanisms of Accumulation and the Movement of Capital on the Airbnb Platform	60
2. An urban-digital layer based on Inside Airbnb data	86
2.1. An Urban-Digital Layer in the Periphery of Capitalism	87
2.2. Data Analysis with Python and Geographic Information Systems (GIS)	95

PART II: The Circulation of Airbnb's Capital in the City of Rio de Janeiro

3. Conditions for the Circulation of Capital	105
3.1. Anticipating capital: Airbnb listings in Rio de Janeiro	106
3.2. Organizing production: networks of hosts, co-hosts, and listings	129
3.3. Realizing consumption: listing occupancy and revenue estimates	148
4. Strategies for expanded accumulation	162
4.1. Satisfying a new consumer: from residential rental to short-term rental	163
4.2. Exploiting existing demand: extraordinary prices during New Year's Eve	178
4.3. Expanding supply and demand: mega-events and urban renewal projects	191
Final Considerations	214
References	226

Introduction

In recent years, the impacts of activities controlled by short-term rental digital platforms—such as Airbnb, Booking.com, Vrbo, Tujia, and Xiaozhu—have been observed in cities around the world. Established through digital infrastructures that enable connections between hosts and guests, these platforms have been associated with a new wave of *gentrification on a global scale* (Aalbers, 2018). Referred to in different ways, drawing on existing conceptualizations and varying across contexts—such as *tourism gentrification* and *transnational gentrification*—this form of platform-mediated gentrification is characterized by processes of *dispossession* of working-class resources, including housing and neighborhood spaces. It is also marked by rising living costs, particularly housing costs, which increasingly capture larger shares of workers' wages. This process has also been accompanied by a *progressive transformation of neighborhoods and cities* to meet external interests, often at the expense of local needs. As a result, over the past decade, regulatory policies for short-term rentals have been developed in several cities, reflecting ongoing disputes between the state, digital platforms, and different local actors, including the real estate sector, hosts, and neighborhood groups. Platform-mediated short-term rentals have become popular as an alternative source of income through hosting and are embedded within a broader context of housing financialization. They are also part of what has been described as the platform society (Van Dijck, Poell, & de Waal, 2018).

The impacts of these platforms have been observed in New York City, where increases in residential rent prices have been identified as a result of Airbnb's activities (Wachsmuth & Weisler, 2018). Similar processes have been observed in other cities in the United States as well as in Canada (Spangler, 2019; Van Holm, 2020; Wachsmuth, De Blois, & St-Hilaire, 2021; Koster, Van Ommeren, & Volkhausen, 2021; Safari, Zhang, & Komarek, 2025), manifesting in processes of gentrification, displacement, and population relocation. These impacts have also been shaped by ethno-racial inequalities that extend beyond North America (Cox, 2017; Piracha et al., 2019; Medvedeva, 2023), affecting different segments of the working class unevenly, and are connected to the growing prevalence of micro-entrepreneurship (Strabrowski, 2017). In the U.S. context, regulatory policies have also been developed, largely based on the implementation of accommodation registration systems and taxation mechanisms, as seen in San Francisco, Los Angeles, New York, Chicago, San Diego, New Orleans, and Miami Beach—sometimes combined with zoning regulations. With the expansion of these platforms and the intensi-

fication of their impacts, local governments have progressively incorporated new administrative and fiscal functions, often through specialized units dedicated to regulating short-term rentals.

The impacts of short-term rental platforms have also been identified in Spain, particularly in Barcelona and Madrid, though not limited to these cities, with processes of touristification also observed in Spanish islands and medium-sized cities (Yrigoy, 2019; Adamiak et al., 2019; Ardura Urquiaga, Lorente-Riverola, & Ruiz Sanchez, 2020; Garcia-López et al., 2020; Cocola-Gant & López-Gay, 2020; Lag-onigro, Martori, & Apparicio, 2020; Hübscher et al., 2020). Similar dynamics have been observed in Portugal, where the state has played an important role as a facilitator of short-term rental activities through policies aimed at promoting tourism and second-home ownership, with the objective of attracting international investment into the local economy (Lestegás, Seixas, & Lois-González, 2019; Antunes & Ferreira, 2021; Cocola-Gant & Gago, 2021; Franco & Santos, 2021; Jover & Cocola-Gant, 2022; Estevens et al., 2023). In both Spain and Portugal, following the adoption of restrictive measures on short-term rental activities, regulatory debates have increasingly shifted toward the possibility of stricter controls and even total bans, as discussed and demanded by social movements, such as the Referendum for Housing movement in Portuguese cities. The impacts and regulatory challenges associated with short-term rentals have also been identified in other European countries (Cox & Haar, 2020), including Greece, Ireland, the United Kingdom, Germany, Iceland, Austria, Croatia, and Italy (Aguilera, Artioli, & Colomb, 2019; Smigiel et al., 2020; Söderström & Mermet, 2020; Katsinas, 2021; Clancy, 2022; Amore, De Bernardi, & Arvanitis, 2022; Mermet, 2022; Hübscher & Borst, 2023; Colomb & Moreira de Souza, 2024; Kourkouridis et al., 2024; Stojčić, Vizek, & Glaurdić, 2024), among other cases.

A similar scenario can be observed in Australia (Gurran & Phibbs, 2017), New Zealand (Campbell et al., 2019), and South Africa (Visser, Erasmus, & Miller, 2017; Hofäcker & Gebauer, 2021), where the growing presence of Airbnb in local economies has driven new tourism dynamics in cities such as Sydney, Auckland, and Cape Town, generating impacts similar to those identified in other parts of the world and also shaping regulatory debates. The territorial penetration of Airbnb has also been observed—and in some cases associated with impacts on housing markets—in Taiwan, Hong Kong, Sri Lanka, South Korea, and India (Tseng & Chan, 2019; Ki & Lee, 2019; Chang, 2020; Sridhar, 2021; Munasinghe et al., 2022; Liang, Yeung, &

Au, 2022). The same applies to Japan, where in 2017 the government implemented, at the national level, the Minpaku Law regulating short-term rental activities. In China, despite disputes over the short-term rental market among different companies, such as Tujia and Xiaozhu, and the withdrawal of Airbnb from the country in 2022, the impacts of this platform have also been identified (Tian et al., 2022).

In Latin America and the Caribbean, the impacts of short-term rentals have been observed in Mexico, particularly through processes of transnational gentrification driven by visitors and property owners from the United States, affecting not only the capital but also other Mexican cities (López-Gay et al., 2019; Navarrete-Escobedo, 2020). This process has intensified in recent years, driven by preparations for the 2026 FIFA World Cup, to be hosted by the United States, Canada, and Mexico. Other studies describe the territorial penetration of Airbnb in Argentina, Peru, Colombia, Chile, and Cuba, associated with the intensification of tourism, gentrification, population displacement, and rising living costs (Del Castillo & Klaufus, 2019; López-Gay et al., 2019; Rodríguez et al., 2020; Benítez-Aurioles, 2021; Lerena-Rongvaux, 2022; Lerena-Rongvaux & Rodriguez, 2022; Wijburg, 2023; Arevalo et al., 2024). Some Latin American cities have implemented regulatory measures for short-term rentals, such as Buenos Aires and Mexico City. As observed in other parts of the world, these cities face challenges related to access to platform data, which complicates both regulatory implementation and enforcement. Short-term rental platforms have also been regulated at the national level in Costa Rica, though in a relatively limited and general manner, aiming to promote cooperation between the state and platform companies.

Finally, in Brazil, studies have characterized the presence of Airbnb in different cities, identifying its impacts as well as the need for regulation, while also outlining research agendas across different disciplinary fields (Tavolari, 2017; Lobo, 2018, 2020; Tambelli, 2020; Souza, 2021; Souza & Leonelli, 2021, 2024; Ferreira, 2021; Andrade, Araujo, & Cristino, 2022, 2024; Gushiken, 2023; Kalinoski, 2024; Cruvinel & Mendonça, 2024; Cruvinel, 2024b). These studies include cities such as Curitiba, São Paulo, Rio de Janeiro, and Belo Horizonte, as well as medium- and small-sized cities distributed along the entire coastline, including analyses focused on the coast of Pernambuco. It is important to note that, in the Brazilian context and in other countries on the periphery of capitalism, research faces a scarcity of data on short-term rental activities, which makes it difficult to assess the scale of participation and control exercised by Airbnb and other platforms in local economies.

As an example, a 2015 news report on the Olympic Games indicated a total of 45,000 Airbnb listings across the country (Andrade, 2015), while more recent studies show that the cities of São Paulo and Rio de Janeiro alone account for approximately 70,000 listings (Cruvinel & Mendonça, 2024). Recent data from the Inside Airbnb project indicate the existence of approximately half a million Airbnb listings across Brazil, with Rio de Janeiro being the city with the highest number of listings, accounting for around 8.5% of the total supply. In general terms, improved access to platform data is understood as a key factor in advancing the understanding of short-term rentals in the periphery of capitalism, as well as enabling a multiscalar analysis of this phenomenon (Cruvinel, 2024a).

Given the global scale that platform-mediated short-term rental activities have reached today, and recognizing both the similarities and differences among the countries affected by this process, this research proposes an analysis of short-term rentals from the perspective of the periphery of capitalism. The dynamics outlined above are understood as expressions of the functioning of the global capitalist system in the twenty-first century, and an analysis of short-term rental platforms grounded in a systematic approach to productive relations at a global scale is expected to contribute to the ongoing debate on this topic. Furthermore, this study is based on the premise that the production of space under capitalism is, in essence, unequal, just as capital flows are structured through the international division of labor, which defines the hierarchical organization of stages and functions within capitalist production at a global scale. In this sense, countries and cities located at the core and the periphery of capitalism are understood to perform distinct functions within the operation of this system, which justifies the proposed approach and underscores its relevance.

In this sense, the *general objective* of this research is to understand how these platforms accumulate capital in peripheral cities through housing, focusing on Airbnb and the city of Rio de Janeiro. The *specific objectives* are: to investigate the process of Airbnb's territorial penetration through the circuits of the urban economy; to understand how the platform's capital accumulation is realized through labor and land rent; and, finally, to analyze how this process of accumulation has taken place in the city of Rio de Janeiro.

Based on these objectives, this thesis develops an analysis grounded in historical-dialectical materialism of the process of capital accumulation by the Airbnb platform across different scales and through the various actors involved in the

circulation of capital. To this end, the foundations of economic dependence between the *center* and the *periphery* of capitalism are examined, with emphasis on the period following the Second World War, which constitutes what Milton Santos (2013) defines as the *technical-scientific-informational period*, characterized by the convergence of advances in technology, science, and information as instruments for the global unification of capital. Within this context, the platformization of the economy in the twenty-first century is interpreted as part of a process that began in the twentieth century, thus constituting a form of historical continuity. It is argued that platformization both results from and contributes to the intensification of longstanding social and urban problems—most notably poverty—historically observed in countries on the periphery of capitalism and among the most vulnerable segments of the working class, as a reflection of relations of dependence. Platformization also *results in*, and *contributes to*, the expansion of these problems to countries that had previously been less affected by the process of imperialist expansion and the global unification of capital, as well as to relatively privileged segments of the working class, such as portions of the middle classes.

It is argued that the Airbnb platform constitutes a global digital monopoly and that its accumulation is based on the structural dispossession of working-class resources in the form of *housing*. This accumulation, in turn, is anchored in the control that Airbnb exerts over the distribution of money-capital (expressed in the payment made by the guest for accommodation) and is enabled by the company's monopoly over a digital infrastructure, through which it also controls the production and consumption of tourist accommodations across different cities worldwide. Through the digital infrastructure monopolized by Airbnb, it is argued that landowners expand the transfer of land rent, while workers obtain remuneration for labor performed on demand. This process is made possible by the use of housing as a means of producing a commodity—the *temporary use of tourist accommodation*, or simply, *lodging*—intended to satisfy a new type of consumer, whose desires are shaped by advertising strategies that appropriate notions of *collaboration* and *sharing* within a neoliberal logic. By satisfying this new consumer—the *visitor*, who may be a domestic tourist, an international tourist, or a digital nomad—Airbnb-mediated activities expand the influence of external economies over urban economies in cities on the periphery of capitalism, thereby intensifying the condition of dependence of peripheral countries. This process, in turn, has taken shape spatially primarily through preexisting flows of the global tourism industry.

This process unfolds through the relationships between the different components that, in practice, enable the functioning of the platform: the company itself, hosts, co-hosts, guests, outsourced workers, and other actors indirectly connected to the activities carried out through Airbnb's digital infrastructure. It is argued that these different elements reproduce class relations and the interconnected processes that describe the circulation of capital, aimed at accumulation by its various claimants. These actors, in turn, are organized through different arrangements, which are examined in this thesis based on the two circuits of the urban economy described by Santos (1978; 2004). It is understood that the accumulation of capital by Airbnb and by other claimants—such as landowners and the housing production sector—results in the impoverishment of the working class, as it relies on the intensification of surplus-value appropriation through the expansion of land rent. It also contributes to other forms of dispossession of working-class resources, including the appropriation of pensions, retirement funds, savings, and, once again, housing, through processes such as financialization, gentrification, touristification, and displacement, among other cases. At a global scale, Airbnb's accumulation, similarly to what occurs with other digital monopolies, contributes to structural globalized poverty, as it channels resources originating from both peripheral and core countries toward the United States, reinforcing U.S. hegemony and the centralization of capital in that country. All the concepts mobilized to construct this argument are presented and explained in detail throughout the thesis.

By adopting historical-dialectical materialism as its methodology, this thesis proposes an understanding of concrete reality based on the dialectical relationship between *the parts* and *the whole*. Within the context of the global capitalist system of production and a society divided into classes, this means analyzing its different *components* while paying attention to the relationships established among them, which enable its functioning as a *system*. A *dialectical relationship* is, in essence, characterized by a *contradictory* and *interdependent* interaction between the parts of the system. Among these elements, particular attention is given to countries themselves, understood as territorial, political, and economic divisions that enable the distribution of different functions and processes on a global scale. In an analysis of the production of urban space within the context of capitalist production, this also implies paying attention to the different actors and interactions that shape urban phenomena, understanding that cities are both a product and an expression of this dialectic.

The same applies to the analysis of the different classes that make up capitalist society. Thus, in essence, urban analyses grounded in historical-dialectical materialism are dedicated to understanding these relationships. Dialectics, in turn, makes more explicit the contradictions inherent to the capitalist mode of production. The main bibliographical references used in this thesis are also grounded in this same methodology.

In this sense, this thesis draws on the theoretical framework developed by Brazilian scholars from the 1960s onward in the debate on *underdevelopment* and *economic dependence* to analyze the process of technological modernization observed in the Brazilian and Latin American economies, considering studies that adopt historical-dialectical materialism as their analytical methodology. Based on this debate, economic dependence is understood as an unequal relationship established between politically independent nations and as a necessary condition for the functioning of the capitalist system at a global scale. In this sense, the idea that peripheral countries are economically backward and must overcome this condition through further economic development is rejected. Instead, dependence is understood as a structural component of the capitalist system, conceived as a totality in which different countries perform distinct and complementary functions. This understanding serves as the basis for analyzing the relationships established between core and peripheral countries in the context of the popularization of digital platforms as alternative sources of income and work for the working class.

More specifically, this thesis draws on the contributions of the theorists of Marxist Dependency Theory (MDT), particularly the following works: *Subdesenvolvimento e revolução* ([1969] 2013), by Ruy Mauro Marini; *O capitalismo dependente latino-americano* ([1973] 2013), by Vânia Bambirra; and *Socialismo ou fascismo: O novo caráter da dependência e o dilema latino-americano* ([1978] 2020), by Theotonio dos Santos. It is understood that the debate developed within MDT contributes to the understanding of economic dependence between the center and the periphery of capitalism, as well as to the dynamics of imperialist expansion, based on the concrete reality of peripheral countries in the second half of the twentieth century. These relations, in turn, help explain the contemporary unfolding of digital short-term rental monopolies in urban space in the twenty-first century. Based on these contributions, this thesis addresses processes related to the dialectics of dependence, such as the impoverishment of the masses as a reflection of the *super-exploitation of the working class* (Marini, 2013); the *dependent structure* as a structure

that, in essence, enables global monopolistic integration in Latin America (Bambirra, 2013); and the *formation of alliances* between international capital and national bourgeoisies to expand accumulation (dos Santos, 2020).

This thesis also draws on the work of Milton Santos, particularly the following books: *Pobreza Urbana* (1978), *A Urbanização Desigual* (1980), *Espaço e Método* (1985), *O Espaço Dividido* ([1979] 2004), *Por uma outra globalização* ([2000] 2008), *Técnica, Espaço, Tempo* ([1994] 2013), and *Ensaio sobre a Urbanização Latino-Americana* ([1982] 2017). Different categories developed by Santos throughout his work are mobilized in this research. In particular, the theoretical framework surrounding the concept of the urban economy and its division into two circuits—the upper circuit and the lower circuit—is used to understand the relationship between monopoly activities and the production of urban poverty (Santos, 1978; 2004). These categories, in turn, help to explain the process of Airbnb’s territorial penetration as a unidirectional movement, operating from the global to the local. For this purpose, the term *system* is adopted to refer to a set of interdependent elements that interact through different functions and processes. In this sense, the categories of *form*, *function*, *process*, and *structure* (Santos, 1985) are also mobilized, as developed by Santos in his dialectical analysis of the production of space under capitalism. Finally, Santos’s contributions also extend to the understanding of the characteristics of underdevelopment in Brazil and Latin America, as well as to the advance of globalization as one of the defining features of the technical-scientific-informational period, based on the unification of time and space as mechanisms for the global unification of capital (Santos, 2008; 2013; 2017).

This thesis also draws on the work of Karl Marx, particularly the theories of value, surplus value, and rent presented in *Capital* ([1867–1894] 2013), which are mobilized here to understand the process of capital circulation through Airbnb. Marx’s general formula of capital circulation, described as *money–commodity–money* (M–C–M’), is adopted as the basis for analyzing the process of capital accumulation by Airbnb and other claimants. The analytical category of the commodity, one of the central categories in Marx’s work, is used to understand the interaction between the different actors involved in the circulation of capital through Airbnb’s digital infrastructure, particularly hosts and guests. From this category, the concepts of value—defined as *the amount of socially necessary labor required for the production of a commodity*—and *surplus value*—understood as the capitalist’s profit derived from the exploitation of labor power—are also explained.

Based on this, the stages of *advance*, *valorization*, and *realization* that compose the basic cycle of capital circulation are presented. In addition, drawing on David Harvey's interpretation of Marx, the concept of *land rent* is explained as *an appropriation of surplus value based on the monopoly of land*, thus highlighting the relationship between rent and the exploitation of labor. In the same sense, *capital* is defined as *value in motion* (Harvey, 2018). Finally, the four processes that make up the complete cycle of capital circulation are presented: *valorization*, *realization*, *distribution*, and *capture*.

To this end, this thesis draws on David Harvey's analyses, developed primarily in the books *The New Imperialism* ([2003] 2005), *The Limits to Capital* ([1982] 2013), *Rebel Cities* ([2012] 2014), and *The Madness of Economic Reason: Marx and Capital in the Twenty-First Century* ([2017] 2018). Based on Harvey's work, the analysis of land rent is further developed, drawing on his explanation of the four types of rent identified by Marx, summarized here as follows: *absolute rent*, derived from the monopoly of land and supplemented by the other three types; *monopoly rent*, an increment resulting from the spatial singularities of monopolized land; *differential rent I*, an increment resulting from locational characteristics; and *differential rent II*, an increment resulting from internal improvements to that land. These concepts are mobilized to explain how short-term rentals expand the possibilities for capital accumulation through the expansion of land rent, particularly by shifting the type of tenant from the local resident to the visitor, thereby allowing for a broader appropriation of spatial singularities, periods of extraordinary revenue, and economic inequalities between countries. Also drawing on Harvey's work, the concept of *accumulation by dispossession* is used—originally introduced by Marx and further developed by Harvey—to explain processes of imperialist expansion increasingly based on the structural and globalized dispossession of working-class resources as a mechanism of accumulation under monopolistic control.

This thesis is also developed based on the concept of an *expanded working class*, understood as the group composed of all individuals who depend on the sale of their labor power to survive (Antunes, 2018; Mattos, 2019). This understanding is central to the present research, as it is grounded in the interpretation of the working class as a heterogeneous group, marked by internal differences and contradictions. At present, there appears to be a growing difficulty in defining who is and who is not a worker, resulting from mechanisms that obscure class consciousness, among which the very notion of entrepreneurship stands out.

After all, *if I am an entrepreneur and the owner of my own business, then I am not a worker—I am the boss*. In this sense, the rise of entrepreneurship in the twenty-first century as a form of precarious and informal labor, as well as a consequence of the erosion of labor rights, reinforces the fragmentation of the working class and hinders its political organization in the face of new, increasingly globalized forms of exploitation.

Adopting the heterogeneity of the working class as a premise is essential for understanding how Airbnb organizes production and consumption and how it appropriates land rent in peripheral countries, particularly through properties owned by segments of the middle classes, a group that includes a portion of the working class. As noted by Santos, the middle classes “are composed of wage earners of all types who are situated above the level of subsistence, as well as owners and entrepreneurs whose earnings are insufficient for them to move into the upper classes” (2004, p. 51). This analysis also considers the growing number of global *intermittent workers*—those subjected to forms of labor marked by discontinuity—as a reflection of the precarization of work in the twenty-first century (Antunes, 2018), as well as the process of impoverishment of the middle classes (Santos, 2008) and the expansion of poverty in an uneven manner, intensified in countries on the periphery of capitalism (Davis, 2006; Santos, 2008).

With regard to the spatial scope, this research proposes a multiscalar analysis, primarily articulating the global and local scales, with the city of Rio de Janeiro as the local case study. This city is understood to exhibit characteristics that are intrinsic to the capitalist mode of production in peripheral countries, bearing traces rooted in both the colonial period and in the expansion of imperialism from the 1950s onward, which are expressions of the unequal production of space. It is important to note that Rio de Janeiro served as the capital of the Portuguese colony and, subsequently, as the capital of both the Empire and the Republic, thus playing a strategic role in the relationship between Brazil and international capital. In addition, the advanced integration of this city into the global tourism market is considered, as it allows for an understanding of the degree of integration achieved by Airbnb through its territorial penetration at the local scale. Although it is necessary to consider the specificities that characterize different peripheral cities, the study of Rio de Janeiro is understood to contribute to the broader understanding of the relationships between the center and the periphery established through platform-mediated short-term rental activities.

In articulation with the theoretical framework presented above, this thesis also proposes the development of an analytical approach to the data produced within Airbnb's digital infrastructure, interpreting them as an urban-digital layer—that is, as a layer that combines physical space and information within a multi-scalar network structure (Cruvinel & Teixeira, 2024). In this sense, Airbnb data are understood as a tool for analyzing processes of territorially embedded production and consumption across different cities worldwide, as controlled by the platform. From the perspective of the periphery of capitalism, this research analyzes data collected by the Inside Airbnb project since 2015, focusing on the city of Rio de Janeiro and made available for the purposes of this study. To construct this analytical methodology, Python programming language and Geographic Information Systems (GIS) are employed, based on queries to the Inside Airbnb SQL database, as well as on additional datasets structured in different formats and drawn from other sources, such as IBGE, DATA.Rio, and real estate market indices. The codes developed for this research were structured through the analysis of GeoData-Frames (geospatial tabular data) and aimed at producing three types of analytical outputs: maps, charts, and tables.

Finally, based on an approach that articulates theory and data analysis, this research is structured into two parts. The first part, entitled *Theory and Method*, consists of two chapters. The first chapter is dedicated to a detailed explanation of how Airbnb and other actors accumulate capital through short-term rental activities, with a focus on the periphery of capitalism. It presents: the debate on economic dependence and the center–periphery relationship; an analysis of Airbnb's territorial penetration based on the two circuits of the urban economy and its relationship with working-class poverty; and the movement of Airbnb's capital through the interactions between the different actors involved in this activity, based on labor and land rent, in order to demonstrate its connection to the production of structural globalized poverty. The second chapter articulates the theoretical framework presented in Chapter 1 with the analysis of Airbnb data, based on the concept of the urban-digital layer. It also briefly presents the technical guidelines and methodological foundations, based on the use of Python and GIS, that guided the analysis of the data provided by Inside Airbnb and combined with additional datasets.

The second part, entitled *The Circulation of Airbnb Capital in the City of Rio de Janeiro*, also consists of two chapters. The first chapter analyzes how the conditions of capital circulation, through three interconnected processes—advance, valori-

zation, and realization—have taken shape in the city of Rio de Janeiro. It describes how fixed capital in the form of housing has been advanced by local property owners, how the organization of production has been carried out through actors such as hosts and co-hosts, and how capital has been realized through the commercialization of the commodity lodging in the city. The second chapter presents different strategies adopted by various claimants of capital to access expanded accumulation through Airbnb listings in Rio de Janeiro. It analyzes: the conversion of housing stock into tourist accommodations as a strategy to access resources from a new type of consumer; the use of periods of high tourist demand, such as New Year's Eve, to increase revenues over specific time intervals; and the expansion of supply and demand through mega-events and urban redevelopment processes, which enable the expansion of land rent in both the short and long term. In this way, the second part investigates, based on Inside Airbnb data and at the local scale, the theoretical argument developed throughout the first part of the thesis, as presented below.

PART I

Theory and Method

*Everybody knows that it's
so hard to dig and get to the root.*

"Maria Bethânia" - Caetano Veloso

1. Digital Monopolies of Short-Term Rentals in the Periphery of Capitalism

1.1.1. Toward a Theory of Short-Term Rentals in Peripheral Capitalism

Over the past two decades, short-term rentals have consolidated as a form of rental marked by new configurations and meanings, driven by the process of platformization of the economy in the twenty-first century and by the shortening of traditional rental cycles. This phenomenon gained global scale particularly after the 2008 economic crisis, when the sharing of residential spaces began to be incorporated as an alternative source of subsistence income for middle classes across different countries. This dynamic was enabled by the expansion of digital platforms specialized in mediating short-term rentals, which connect hosts and guests according to the model of the so-called *sharing economy*, and has been interpreted as a disruptive innovation in the tourist accommodation sector. Since then, short-term rentals have also been associated with the advance of a new wave of gentrification on a global scale, being considered one of the urban manifestations of financialized capitalism (Aalbers, 2018)—understood as the current stage of the capitalist system and marked by the growing role of the financial sector in the process of capital accumulation.

Currently, there is a wide range of terms used to refer to this rental modality, characterized by short cycles and generally associated with tourism use, which in this thesis is referred to as short-term rentals. In Brazil, expressions such as *aluguel de curto prazo*—a direct translation from English—as well as *aluguel de curta duração*, *aluguel de temporada*, and *aluguel temporário* are commonly used, similar to the variety of expressions found in Spanish, such as *alquiler turístico*, *alquiler vacacional*, *alquiler temporal*, or *alquiler temporario*, among others. As summarized by Aguilera, Artioli, and Colomb (2019), several practices can be subsumed under the term short-term rental (STR): “Several practices can be subsumed under the term STR: (i) commercial STR of a full unit not normally used as a primary residence; (ii) temporary STR of a full unit while the main resident is away; and (iii) rental of a portion of a primary residence with the host present (‘home-sharing’).” (Aguilera, Artioli, & Colomb, 2019).

Although different terms may be used to refer to this phenomenon, this thesis adopts the term *short-term rentals* for two main reasons. First, because it is a concise and effective expression to distinguish it from *residential rentals*—which have also been referred to as *long-term rentals*, *traditional rentals*, or *conventional rent-*

als. Second, because it avoids an exclusive association with peak tourist seasons. This research is based on the premise that short-term rentals constitute a rental modality that, despite its intermittency, takes place throughout the entire year and varies according to the different types and flows of activities stimulated in each city. These may include peak tourism, cultural and sporting events, or even everyday activities such as remote work. This is an important characteristic for understanding the role of short-term rentals in the process of capital accumulation through housing and its temporary use as *commodities*—composed, according to Marx’s theory of value, of *use value* (its utility) and *value* (the amount of socially necessary labor required for its production), whose expression is realized in *exchange value* (prices and other forms of equivalence). This perspective is grounded in historical-dialectical materialism and guides analyses that reveal how urban space is inserted into the process of capital accumulation, as seen in the works of Milton Santos and David Harvey, which are extensively referenced in the development of this research.

At certain points in this thesis, the expression *platform-controlled short-term rentals* is also used. This term is employed to emphasize the specific characteristics that short-term rentals have acquired over recent decades, which have made them an urban and social issue in different cities. The use of this expression is based on the understanding that digital platforms, in the context of peripheral countries, currently represent a fraction of international capital and establish their accumulation through urban space by composing the upper circuit of the urban economy—an argument that will be further developed in this chapter. It is also supported by studies that discuss the formation of digitally mediated rental markets (Robertson, Oliver, & Nost, 2022) and their relationship with the production of illegality and informality in contemporary cities (Colomb & Moreira de Souza, 2024). Based on the scientific literature on the subject, this research adopts the premise that short-term rentals become an urban issue through the renewal of mechanisms that enable new forms of accumulation and, therefore, the continuity of the capitalist system of production in the twenty-first century, accompanying technological changes but not limited to them, thus also incorporating historical continuities.

Digital platforms emerge in this context as instruments that offer new solutions for the functioning of the capitalist system of production. By capturing essential demands of human existence—such as the need for connection and hospitality—they reinvent forms of surplus value extraction, taking advantage of the possibilities offered by digital technologies. It is therefore not surprising

that one of the sectors reshaped by digital platforms is that of hospitality. In this process, longstanding practices such as seasonal rentals, and already established commodities such as housing, are reconfigured through economic activities digitally controlled by platforms such as Airbnb, Vrbo, Tujia, and Xiaozhu, among others. In this way, urban space comes to reflect, through a global network of tourist accommodations—and, consequently, of hosts and guests—the disputes between hegemonic powers such as the United States and China, thus encompassing regional dynamics that counter the expansion of U.S. imperialism. Similar reconfigurations can be observed in the production and distribution of other commodities, for example in the trade of electronics and clothing, food delivery, and transportation services, through platforms such as Amazon, Uber, iFood, and Shein, encompassing both global and regional monopolies. This is the case of iFood, a Brazilian platform that exercises its monopoly within the Latin American context, expressing a form of *sub-imperialism* (dos Santos, 2020), which, in general terms, occurs when a monopoly based in a peripheral country exerts regional control over other peripheral countries. These reconfigurations, in turn, are territorialized across different scales: they transform national and international flows of commodities and financial capital, while also reshaping economic and spatial dynamics at the local level, within cities.

In light of this context, this thesis aims to analyze how digital platforms for short-term rentals penetrate the urban economy of cities on the periphery of capitalism and accumulate capital through labor and land rent, taking as references the activities controlled by Airbnb and the city of Rio de Janeiro. In this sense, it proposes a theoretical articulation with an emphasis on short-term rentals in the periphery of capitalism. To this end, it is necessary to understand how the relationship between the center and the periphery of capitalism is configured and how this relationship contributes to the expansion of capital accumulation through digital short-term rental monopolies. This section therefore presents an analysis of the concept of *economic dependence* based on studies of Brazilian and Latin American underdevelopment, articulating it with an understanding of the functioning of the global capitalist system and the process of expansion of accumulation driven by monopolies, in order to reveal the imperialist character of this expansion, insofar as it contributes to the maintenance of U.S. hegemony. This imperialist character is particularly convenient in that it allows for the stabilization of the global capitalist system by creating and expanding demand for investment and

consumption goods (Harvey, 2005, p. 117), such as housing and tourist accommodation. It is also emphasized that this process is marked by the impoverishment of the working class and is established through a progressive unification of capital that characterizes globalization. Finally, it is highlighted that this process is combined with the historical, social, and spatial specificities of each country or city, as in the case of Rio de Janeiro.

From this perspective, this research develops, based on the theoretical debate on the production of urban space and grounded in historical-dialectical materialism, a critical analysis of short-term rentals in the context of peripheral capitalism, largely motivated by the need to address this topic in a systematic manner, beyond the “urban discontents and anxieties” that have become more visible through contemporary urban transformations (Harvey, 2014, p. 21). This approach reflects not only the demand for studies on the impacts of short-term rental platforms in Brazil across different disciplinary fields, as already identified and addressed by researchers in the field (Tavolari, 2017; Lobo, 2018, 2020; Tambelli, 2020; Souza, 2021; Souza & Leonelli, 2021, 2024; Ferreira, 2021; Andrade, Araujo, & Cristino, 2022, 2024; Gushiken, 2023; Kalinoski, 2024; Cruvinel & Mendonça, 2024), but also the need to structurally consider how the global economy influences the production of urban space. In this sense, the economic dynamics observed at global and regional scales are not of secondary importance; rather, they are constitutive of the urban space observed at the scale of the city. Thus, the dialectic between the global capitalist system, understood as a totality, and the urban economy, understood as part of that totality, will be substantially explored throughout this thesis.

To this end, this thesis builds on the premise, already well established in the scientific literature, that the study of the urban phenomenon in the context of underdevelopment—resulting from the relationship between the center and the periphery of capitalism—must take into account the effects of domination exercised by more developed countries or regions (Santos, 2013; 2017). In particular, it adopts the notion of *economic dependence* mobilized by Brazilian theorists from the 1960s onward in analyses of the process of technological modernization in underdeveloped countries. Based on this premise, the thesis draws on the literature on dependency and imperialism theories to analyze the role of short-term rentals as a contemporary mechanism of imperialist expansion. It is understood that only through an understanding of dependency relations is it possible to explain the penetration of short-term rental digital platforms in peripheral countries. In this sense,

the use of the term *peripheral capitalism*¹ throughout this thesis is grounded in theoretical frameworks established in the Social Sciences and Geography that contribute to the understanding of the dynamics of economic dependence in countries on the periphery of capitalism. In the Brazilian context, and from the perspective of historical-dialectical materialism, these dynamics have been addressed by theorists such as Milton Santos and Florestan Fernandes, as well as Ruy Mauro Marini, Vânia Bambirra, and Theotonio dos Santos, the three formulators of Marxist Dependency Theory (TMD)². Within this framework, the dialectics of dependence between the *periphery* and the *center* of capitalism—that is, between *peripheral* and *core countries*—is analyzed, with these terms being used as equivalents to *underdeveloped* and *developed countries*, a distinction commonly adopted in the 1970s.

This decision is grounded in the scientific production of the geographer Milton Santos and the theorists of TMD—scholars who, each in their own way, developed reflections on the relationship of economic dependence established between developed and underdeveloped countries, indicating the specific role that each of these groups plays within the global capitalist system. Based on this approach, a peripheral country is necessarily a dependent country. This decision also stems from a reading grounded in dialectics, which Bambirra refers to as a “multidimensional and integrative scientific analysis” (2013, p. 34), and reflects the same principle adopted by Harvey, who applies the dialectical method throughout his work and refers to it as historical-geographical materialism (Harvey, 2013, p. 27).

The antagonisms between **city** and **countryside**, between **center** and **periphery**, between **development** and the **development of underdevelopment** are not imposed accidentally or exogenously. They are the coherent product of various inter-

¹ It should be noted that, although this thesis uses the term *peripheral*, it does not adopt the world-systems framework developed by Immanuel Wallerstein in the 1970s, which is widely used today. According to this author, nation-states, within the context of the modern world-system and based on center-periphery relations, are divided into three groups: *core*, *semi-periphery*, and *periphery*. However, this thesis takes into account critiques of the notion of economic dependence underlying this framework, which may lead to confusion and to a weakening of the understanding of dependency relations from a Marxist perspective (Amaral, 2017). For this reason, the analysis is based primarily on the relationship between *core* and *peripheral countries*, while also recognizing the need to reflect on the different degrees of dependency currently shaped by imperialist expansion through digital platforms, as well as on the inequalities that exist both among core countries and among peripheral countries.

² Marxist Dependency Theory (TMD — Teoria Marxista da Dependência) began to be developed in Latin America in the 1960s as a school of thought dedicated to understanding the conditions, causes, and consequences of underdevelopment, grounded in the classical theories of imperialism. Its main theorists—Ruy Mauro Marini, Vânia Bambirra, and Theotonio dos Santos—brought together theoretical contributions on the reality of Brazilian and Latin American underdevelopment, also drawing on their experiences of political militancy. With the advance of imperialism and the establishment of military dictatorships in different Latin American countries, a significant portion of these authors’ intellectual production was developed during periods of exile. The recovery of TMD’s contributions to Brazilian scholarship remains, to this day, a challenge, particularly with regard to its incorporation into debates on urban space.

related forces operating within the overall unity of the process of capital circulation. (Harvey, 2013, p. 606, emphasis added)

In this sense, this thesis employs three adjectives to refer to countries located on the periphery of capitalism: *peripheral*, which refers essentially to their position within the global system; *dependent*, referring to the condition of economic dependence that characterizes them; and *underdeveloped*, used as a synonym for peripheral only in cases where the notion of underdevelopment is addressed by these theorists, preserving the terminology originally adopted in their texts, even though this term is often misinterpreted due to the evolutionary reading promoted by developmentalist theories. In general, preference is given to the term *peripheral countries*, in order to avoid confusion and to emphasize the dialectical relationship between *center* and *periphery*. Within this framework, economic dependence is understood “[...] as a relationship of subordination between formally independent nations, within which the relations of production of subordinate nations are modified or recreated to ensure the expanded reproduction of dependence” (Marini, 2013, p. 4). Thus, dependence constitutes a “*conditioning situation*,” that is, “a situation in which the economy of a certain group of countries is conditioned by the development and expansion of another economy to which it is subjected” (dos Santos, 1970).

The relationship of dependence, in turn, manifests itself in a *dependent structure* (Bambirra, 2013, p. 39). Here, we may draw on Santos’s (1985) understanding of structure as a set of internal relations that sustain a given form of social and economic organization. In her study of the typology of dependent societies in Latin America, Bambirra focuses on the analysis of dependent structures in the period following the Second World War, when “a new phase in the process of integration of these societies into the global *monopolistic* capitalist system” began (Bambirra, 2013, p. 39, original emphasis). In other words, the author seeks to identify the relations that make possible both the condition of dependence and the expansion of imperialism in Latin American countries, in order to describe the conditions, consequences, and causes of underdevelopment. The debate on the dialectics of underdevelopment was not limited to the Latin American context, having also been developed in other regions and continents—such as in the African case, discussed by Walter Rodney in *How Europe Underdeveloped Africa* ([1972] 2002).

Within this framework, considering the conception adopted by Santos and the theorists of TMD, underdevelopment is understood as a result of the relationship of economic dependence, rather than as a stage in the process of capitalist develop-

ment. This understanding is reinforced when considering that capitalism operates as a system based on the general process of capital circulation, in which countries constitute interconnected forces that ensure its functioning, as synthesized by Harvey. Capital circulation, in turn, as it is oriented toward accumulation, increasingly requires expansion beyond the borders of the countries that make up the center of power of the system, thus extending toward peripheral countries. It is from this understanding that the debate on the imperialist and inherently expansionary character of capital accumulation is developed (Luxemburg, [1913] 1970; Lenin, [1916] 2011). Aware of this process, Santos and the authors of TMD reject the idea that development would be a goal to be achieved by economically backward countries. Instead, they understand underdevelopment as a structural characteristic of certain countries, which enables the functioning of the capitalist system, is anchored in the prevailing world order, and reflects the expansion of capital accumulation.

In this research, the understanding of the process of imperialist expansion based on the condition of dependence is mobilized to analyze short-term rentals within the context of the reinvention of accumulation mechanisms in the twenty-first century and of imperialist expansion through activities controlled by digital monopolies, with a focus on the Airbnb platform. Founded in San Francisco in 2008 and initially named *AirBed & Breakfast*, Airbnb has consolidated itself as one of the main digital platforms for short-term rentals, becoming popular as an alternative source of subsistence income following the 2008 housing market collapse in the United States (Gallagher, 2018, pp. 9–10; van Doorn, 2020, p. 1819). Under the slogan *Travel like a Human*, the company transformed into a market model the idea of hospitality exchange promoted by networks such as Couchsurfing, based on the sharing of “sofas,” alongside platforms that already existed at the time, such as HomeAway. Although it is currently the most emblematic and widely studied case, Airbnb is part of a broader set of tourist accommodation platforms whose specific regional dynamics collectively constitute, at a global scale, an oligopoly of short-term rental companies. Starting from the understanding that Airbnb exercises a monopoly sustained by its territorial penetration, this thesis argues that the platform, operating from the center of capitalism, controls the distribution of capital while simultaneously organizing production and consumption in different cities around the world through its digital infrastructure, thereby expanding its capacity for global accumulation. It is therefore considered that it is through its digital infrastructure that its territorial penetration becomes possible.

Understanding this process requires recognizing *monopoly* as a structural mechanism of capital centralization and expansion, one that eliminates weaker firms and explains why competition “always tends toward monopoly (or oligopoly)” (Harvey, 2014, pp. 176–177) through control. As Santos emphasizes, “[w]hat characterizes a monopoly situation is not the number of firms controlling a large share of the market, but control itself” (2004, p. 139). In general terms, monopoly enables the expansion of capital through the incorporation of markets previously occupied by smaller, local firms, whether through replacement or through alliances. In this process, the relationship of dependence between peripheral and core countries is intensified, as peripheral countries act as “multipliers of capital that returns valorized to the countries of the center” (Santos, 2004, p. 119). As a consequence, “[o]nce established, monopoly possesses an exorbitant power that tends to increase through accumulation” (Santos, 2004, p. 142). The advance of imperialism through monopolies, in turn, has increasingly been marked by the structural dispossession of working-class resources, configuring the logic of expansion that characterizes *new imperialism* (Harvey, 2005). This process is intensified in cities on the periphery of capitalism because they are formed and consolidated to serve distant interests (Santos, 1980, p. 97), constituting open territories for the capitalist logic of power (Harvey, 2005, p. 117). Capitalists benefit extensively from this characteristic and, in cultivating monopoly:

[...] they obtain a broad degree of control over production and commercialization and, in doing so, stabilize their operations in a way that allows for rational calculation and long-term planning, the reduction of risks and uncertainties, and, more generally, ensures them a relatively calmer existence without major disruptions. (Harvey, 2014, p. 177)

At a global scale and with varying degrees of territorial penetration, Airbnb holds a monopoly over a digital infrastructure that grants it privileged access to different actors involved in the circulation of capital, such as landowners, producers, and consumers. In the context of the impoverishment of the working class, the growth of social informality, and the precarization of labor in the twenty-first century, the platform emerges as a source of income and work for these actors, ensuring a continuous adherence to short-term rental activities. In this sense, the possibilities for Airbnb’s monopolistic expansion must be analyzed within a broader historical context. In *Por uma outra globalização* (2008), Santos had already warned of the expansion of structural poverty to the middle classes and to wealthy

countries. In *Planet of Slums* (2006), Davis had already highlighted the expansion of social informality, rooted in historical processes and more intense in the periphery of capitalism. More recently, in *O privilégio da servidão: o novo proletariado de serviços na era digital* (2018), Antunes emphasized how digital labor has deepened the exploitation of labor power.

We can go further back in history and recall that one of the main consequences of economic dependence identified by the theorists of TMD as early as the 1970s is the *super-exploitation of labor*, resulting in the impoverishment of the working class, or what Marini refers to as the *pauperization of the masses* (2013, p. 38). The super-exploitation of labor consists in the intensification of the exploitation of labor power in peripheral countries in order to compensate for the capture of surplus value by international capital. This capture of surplus value, in turn, is only possible due to the alliances established between local bourgeoisies and international capital (Marini, 2013; dos Santos, 2020). As analyzed by the authors of TMD, this process became key to the expansion of U.S. imperialism in Brazilian and Latin American territories in the second half of the twentieth century, intensifying the participation of the center of capitalism in peripheral economic dynamics.

The same pattern can be observed in the context of the platformization of the economy in the twenty-first century: national financial and real estate markets, property owners who make up local bourgeoisies, and segments of the working class with access to property benefit from the alliances established with short-term rental digital platforms. On the one hand, these groups benefit from facilitated access to potential consumers of their goods and services, which enables capital accumulation or resolves problems at an individual or limited scale—such as the impoverishment of segments of the middle classes—even if this results in the intensification of poverty at a broader scale. On the other hand, platforms acquire greater territorial capillarity for the expansion of their model of surplus value appropriation based on the transfer and expansion of land rent across different cities worldwide, while simultaneously shifting the risks and uncertainties of capital circulation onto local actors. Within the process of pauperization of the masses described by Marini are factors such as rising costs of living, including housing costs. The way in which this process unfolds will be detailed throughout this thesis.

At this point, it is important to keep in mind that the platformization of the economy does not represent a structural transformation of the global capitalist system, but rather a reinvention that enables its continuity, presenting itself as

an extension of what Santos defines as the *technical-scientific-informational period* (Santos, 2013). Here, we draw on the periodization of history based on different moments of modernization. According to Santos, each modernization is defined as a period of generalization of an innovation, in which centers of power exert pressure for the modernization of subordinate subsystems (Santos, 2004, p. 31). In analyzing historical periods through the lens of modernization, Santos argues that each period “represents, at the center of the system, a coherent set of forms of action upon peripheral countries,” thereby explaining, among other factors, degrees of development and dependence (Santos, 1978, p. 23). The *technical-scientific-informational period* is constituted through the modernization that followed the Second World War and unfolds through the combination of information, science, and technology as structural mechanisms for the production and organization of capital accumulation, also shaping the organization and production of space. Platformization is thus understood as part of this period, constituting a continuation of a process that has been underway for decades. As indicated by Santos in *Por uma outra globalização* ([2000] 2008):

The result of scientific and technological progress, whose pursuit accelerated with the Second World War, the planetary operation of large global firms revolutionizes the world of finance, allowing the respective market to operate in multiple locations throughout the entire day. Real time also makes it possible to use the same moment from multiple places, and all places from a single one. (Santos, 2008, p. 28)

Thus, although the activities of digital platforms are commonly interpreted as disruptive—by reinventing mechanisms of surplus value extraction through creative responses to the crises of capitalism—it is argued that this process, in fact, also unfolds through information, science, and technology. Understanding this continuity is essential to the argument developed throughout this thesis, as it shows that platformization intensifies a process that began in the previous century, which had until then been more evident in peripheral countries and particularly harmful to the most vulnerable segments of the working class (Marini, 2013; Bamberra, 2013; dos Santos, 2020). However, with platformization, this process increasingly extends to the middle classes and to countries that had previously been less affected by imperialist expansion and the global unification of capital. This helps explain why the most vulnerable segments of the working class are affected by short-term rentals even in core countries, as well as why regions marked by economic inequalities, such as Southern Europe, have experienced more pronounced impacts at the

continental scale³. In general terms, the expansion of digital platforms headquartered in the United States contributes to the centralization of capital and to the expansion of that country's control over others, whether peripheral or core. At the same time, it should be emphasized that the impacts of these platforms' activities tend to be even more intense in the periphery of capitalism, as digital monopolies overcome local barriers to their expansion and deepen their territorial penetration. Among these barriers is the very need to increasingly transform peripheral spaces into desirable commodities for international visitors.

In this context, it is necessary to consider that the process of capital unification is "exclusionary and guarantees exclusivities," insofar as not all individuals and firms are "fluid" and able to benefit from the unification of time and space (Santos, 2008, p. 30). Here, the *unification of time* is understood as the integration of simultaneous actions, and the *unification of space* as the integration of different territories. In line with Santos, one may ask: *after all, who can circulate freely across the world?* Thinking from this perspective not only emphasizes that the expansion of Airbnb's monopoly occurs from the center toward the periphery, but also helps us reflect on the flows of capital and people established through short-term rentals, particularly since these have often been associated with processes of transnational gentrification and the unequal circulation of capital between countries (Sigler & Wachsmuth, 2020; Ardura Urquiaga, Lorente-Riverola, & Ruiz Sanchez, 2020; Navarrete-Escobedo, 2020). In essence, these flows are structured on the basis of economic inequalities, whether global or regional, as illustrated by government incentives for the acquisition of second homes by foreigners through programs such as the *Golden Visa* in Portugal (Jover & Cocola-Gant, 2023). The very promotion of digital nomadism—as observed in Rio de Janeiro through the *Rio Digital Nomads program*⁴, and also in Mexico (Shortell, 2023; Carvalho, 2023)—appears as a strategy to intensify these flows. With digital nomads, for whom Airbnb is the primary accommodation platform (Hannonen, 2021), short-term rentals come to include periods of remote work, expanding beyond

³ For example, one may consider the unequal flow of international visitors in countries such as Spain and Portugal, which function as accessible and relatively affordable entry points to the European continent—a destination widely sought after by tourists from around the world. According to the list published by Nomads.com in January 2024, among the 100 cities most preferred by digital nomads, 48 were located in Europe, with Portugal and Spain being the countries with the highest number of cities included: nine and six, respectively. Relatively affordable living costs, among other factors, make these two countries particularly attractive European destinations.

⁴ More information about the program can be found at: <https://www.nomadesdigitais.rio/>

periods of peak tourist demand, typically associated with leisure and vacation. In this way, the possibilities for capital realization diversify and expand, while also enabling an acceleration of its process of circulation.

Finally, bearing in mind the unequal relations that shape, in different ways, the process of Airbnb's monopolistic expansion, the second part of this thesis proposes a case study of a city located in the context of peripheral capitalism. This study is developed through an analysis of short-term rentals in Rio de Janeiro, considering the activities controlled by the Airbnb platform and using data from the Inside Airbnb project as its empirical basis. It is important to note that, throughout its history, the city of Rio de Janeiro has played a significant political and economic role in Brazil—having been the capital of the Portuguese colony and of the Brazilian Empire in the eighteenth and nineteenth centuries, and the country's capital until the inauguration of Brasília in 1960. Today, the city stands out as one of Brazil's main tourist destinations, particularly with regard to international tourist flows.

The urban history of Rio de Janeiro is also shaped by processes characteristic of Brazilian and Latin American city formation, presenting features and contradictions typical of a model of urbanization rooted in relations of colonization and economic dependence, which largely define underdevelopment in the Latin American context (Santos, 2017). Among these features, particular emphasis should be given to the weight of history in relation to inherited structures (Santos, 2017, p. 40), from which some of the main urban problems faced today originate and are continually reproduced, such as difficulties in access to land and housing. The history of Rio de Janeiro is also marked by attempts to import models of European cities—through, for example, the Pereira Passos Plan implemented in the early twentieth century and inspired by Haussmannian urbanism in Paris. It is also marked by the adoption of North American models, applied to different social groups: such as the development of Barra da Tijuca in the 1970s, aimed at upper-middle-class populations; and housing complexes financed by the U.S. economic initiative *Alliance for Progress*, associated with the process of favela removals from the city's South Zone and the suburbanization of working-class populations (Cruvinel, 2020; 2023). Thus, the study of short-term rentals in Rio de Janeiro is understood as illustrative of the dynamics of territorial penetration and capital accumulation by Airbnb in cities on the periphery of capitalism.

In this sense, it is emphasized that this study takes into account the urban, cultural, and social diversity that characterizes peripheral countries, highlighting

the need for studies dedicated to understanding short-term rentals based on the specificities of each place, while also considering the economic and historical conditions they share. This becomes particularly evident when considering Milton Santos's studies on Latin American urbanization. In his analysis of Latin America, Santos proposes an interscalar approach to phenomena, applying a materialist perspective to the understanding of the production of urban space. According to the author, "it becomes necessary to grasp the nature of global phenomena linked to the process of urbanization while at the same time interpreting their local, regional, and national factors" (Santos, 2017, p. 57). Santos's approach operates at the root of what underlies classifications such as Latin America, the Global South, peripheral countries, among other terms used to describe regions situated on the periphery of capitalism. After all, is what defines a Latin American city merely—and essentially—its geographical location? This is where much of the confusion in urban studies focused on Latin American cities lies: many analyses consider it sufficient to examine and compare them based on physical aspects, without taking into account the conditions that define them both as a unit and as part of a totality—the global capitalist system. Such an exercise often proves to be inconclusive and of limited analytical value, since, just as similarities can be identified among these cities, substantial differences can also be observed.

The same applies to peripheral countries. For this reason, Santos starts from the notion of underdevelopment—which explains the condition of certain countries within a global context—and then articulates it with the process of space production at other scales. This is because underdevelopment presents general characteristics across different contexts (Santos, 2017, p. 9), even in the presence of local specificities. From this, Santos argues that, in analyzing urban phenomena in underdeveloped countries, it is necessary to first consider economic mechanisms and then examine them from sociological and historical perspectives (Santos, 2017, p. 9). It is on the basis of this theoretical framework that the analysis of short-term rentals in the city of Rio de Janeiro is proposed, as an analytical exercise on the territorial penetration of Airbnb's monopoly in peripheral countries, demonstrating how capital accumulation by this platform is made possible through cities on the periphery of capitalism.

Finally, it is considered that short-term rental platforms are a particular expression of different types of digital monopolies that, over recent decades, have

added *urban-digital layers*⁵ to cities—that is, “layers that combine physical spaces and information within a multiscalar network structure” (Cruvinel & Teixeira, 2024)—forming a dense web of data. These layers become territorialized through the creation or adaptation of spatial typologies, such as *dark kitchens* in the context of food delivery platforms and tourist accommodations in the case of short-term rental platforms. These layers, in turn, bring together information that helps to understand the *forms, functions, processes, and structures* that enable the integration of space into the capitalist mode of production, according to the conceptual framework developed by Santos (1985). In this thesis, we explore the urban-digital layer formed by Airbnb data, using as a basis the data collected by the Inside Airbnb project. Before doing so, however, it is necessary to understand how the different actors that directly or indirectly compose the platform are articulated through the circuits of the urban economy, in order to enable Airbnb’s territorial penetration. Subsequently, it is also necessary to understand how and why this articulation takes place. To this end, we first draw on Milton Santos’s contributions regarding the circuits that constitute the urban economy of cities on the periphery of capitalism.

⁵ The concept of the *urban-digital layer* was developed by the author in collaboration with researcher Luisa da Cunha Teixeira (PROURB/UFRJ) and further elaborated through a case study of iFood dark kitchens in Rio de Janeiro. For further information, see: A. C. F., & TEIXEIRA, L. D. C. (2024). Urban-digital layers: From the global infrastructure of the Internet to dark kitchens. *VIRUS Journal*, 1(28), 90–100. <https://doi.org/10.11606/2175-974x.virus.v28.229575>

1.2. Short-Term Rentals in the Circuits of the Urban Economy

Although digital platforms for short-term rentals are sometimes analyzed as an isolated phenomenon, self-contained and detached from broader processes, there exists a historical and structural relationship between them and other digital platforms that should not be overlooked—one that relates to the very origins of the platformization of the economy: the impoverishment of the working class. In the context of the 2008 crisis—often associated with the emergence of platformization due to the housing market collapse in the United States—this impoverishment resulted from factors such as rising interest rates, increasing unemployment, and wage stagnation, leading to a reduction in the population's purchasing power. However, when viewed from a broader perspective, and more recently associated with the growth of social informality and the precarization of labor, this process is not new: it runs throughout the history of capitalist society. As already noted by Davis (2006) and Santos (2008), even before the 2008 crisis and the rise of platformization, poverty was already expanding among the middle classes and deepening in the periphery of capitalism; likewise, Marini (2013) pointed to the structural role of poverty as a consequence of the super-exploitation of labor in peripheral countries. Marx (2013), in turn, had already emphasized that capitalism, in essence, is sustained through the accumulation of capital by some and the impoverishment of others, constituting one of its fundamental contradictions.

Taking this context as a starting point, this section proposes to analyze short-term rental activities through the lens of the circuits of the urban economy developed by Santos (1978; 2004), emphasizing how these activities are articulated in an interscalar manner—and from the global to the local, through a process of monopolistic expansion—and how these circuits relate to poverty in cities on the periphery of capitalism. To carry out this analysis, it is necessary to more closely examine how the origins of platformization relate to the impoverishment of the working class, which in turn requires understanding how the 2008 crisis developed and its significance as one of the cyclical crises of capitalism. As Santos (2008) explains:

The history of capitalism can be divided into periods, segments of time marked by a certain coherence among its significant variables, which evolve differently but within a system. One period follows another, but we must not forget that periods are also preceded and followed by crises, that is, moments in which the established order among variables, through a given organization, is disrupted. It becomes impossible to harmonize them when one of these variables gains greater prominence and introduces a principle of disorder. (Santos, 2008, p. 33)

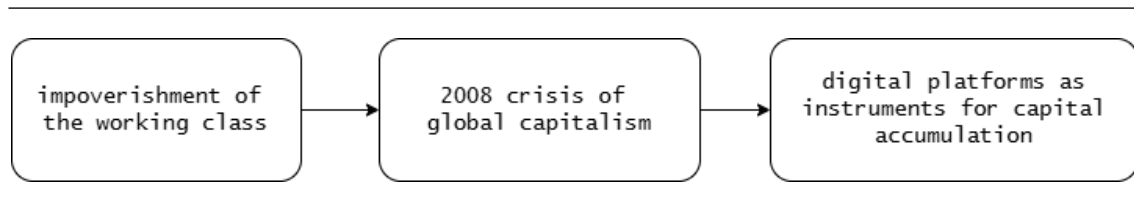
The capitalist system is marked by successive economic crises and, at the same time, by a state of permanent crisis, expressed in different ways—even when moments of macroeconomic stability can be observed (Santos, 2008, pp. 33–35). Within this framework, capitalist society currently finds itself in a period between economic crises—those most feared by capitalists for directly threatening the continuity of the system—while remaining permeated by other crises, such as urban and housing crises, to which capitalists devote little or no attention, as they affect them only marginally. The 2008 crisis constituted one of these successive crises of capitalism, emerging as a moment in which the capitalist order was destabilized to the point of posing a risk to the reproduction of capital.

The crisis of the global capitalist system in 2008 had its immediate origin in the mortgage crisis in the United States, which stemmed from the difficulties faced by the working class in meeting their mortgage payments. In general terms, the U.S. mortgage system is based on the provision of housing credit for the acquisition of property by the population, secured by mortgages and characteristic of the financialized era (Rolnik, 2015). In this system, the property is registered in the name of the debtor, but in the event of default, the creditor—that is, credit institutions which, as will be discussed, form part of the upper circuit—executes the mortgage, leading the property to auction. The mortgage system, in turn, constitutes a particular expression of the mechanisms of capital distribution through banking and financial institutions (Harvey, 2018, p. 47), structured through a chain of debts that originates with the worker and extends to the credit institutions themselves. This dynamic is sustained through the creation of fictitious capital which, in the form of debt, establishes “a claim on future production of value” (Harvey, 2018, p. 49). In other words, fictitious capital, expressed for example in securities and financing arrangements, enables the anticipation of claims over future labor.

In a context of intensified impoverishment of the working class, such as that of the 2008 crisis, the claim on future labor is not realized, as the production of subsistence resources necessary for debt repayment does not occur, thereby triggering the collapse of the credit system. In response, following the 2008 crisis, the platformization of the economy functioned as a strategy for rearranging the variables that configure the capitalist system. This occurred through creative and so-called disruptive solutions for generating subsistence income among the population, enabling accumulation through the appropriation of value and surplus value (Figure 1). In the case of Airbnb and short-term rental platforms more broadly, this process

occurred through the appropriation of land rent, but also through the intensification of the use of labor power—a process that will be further detailed in this chapter. Having established the relationship between the impoverishment of the working class and the origins of platformization, we can now advance the analysis of short-term rentals within the circuits of the urban economy, which will help to explain how short-term rental platforms penetrate peripheral countries.

Figure 1 – Origins of the Platformization of the Economy



Source: Author's own work.

According to Milton Santos, the urban economy is defined by the economic activities that are structured and articulated within cities, and these activities serve as indicators of how cities are produced within the capitalist mode of production. Essentially, the urban economy is divided into two circuits—the *upper circuit* and the *lower circuit*—which are articulated through a relationship of unequal interdependence (Santos, 1978). Each of these circuits, in turn, constitutes an urban subsystem, with its own internal logics. Together, they form a single system (Santos, 1978, p. 49). The identification of the two circuits of the urban economy was a method adopted by Santos in his analyses of the production of urban space and poverty in underdeveloped countries from the 1960s onward, during the process of technological modernization of the Brazilian economy. This conceptualization is presented in works such as *O Espaço Dividido* ([1979] 2004) and *Pobreza Urbana* (1978). Santos's method enables the analysis of the production of space through interscalar economic interactions. Given that Airbnb, in its initial model of territorial penetration, has accessed resources from the working class through processes of impoverishment, Santos's method—focused on the analysis of poverty within the urban economy—proves particularly appropriate for understanding how this penetration occurs.

The platformization of economic activities, much like the modernization observed in Brazil from the 1950s onward, reflects the technological model and

the activities of large-scale industry, currently represented by *big tech companies*. If, during the modernization of the Brazilian economy in the twentieth century, the territorial penetration and diffusion of variables developed outside the country were observed for the first time (Santos, 1978, p. 45), today this process is seen to intensify through platformization, which operates as a mechanism for the progressive unification of capital. As developed by Santos, the effects of modernization are directly related to the functioning of each of the economic circuits, which, in the context of the 1950s and 1960s, were characteristic of developed countries (Santos, 2004, p. 74), but which, with the expansion of structural poverty at a global scale, also come to characterize core countries. The two circuits are constituted as follows:

The **upper circuit** originated directly from technological modernization, and its most representative elements today are **monopolies**. The essential part of its relations takes place outside the city and the region that host them, having the nation or the international sphere as their arena. The **lower circuit**, composed of small-scale activities and primarily serving **poorer populations**, is, by contrast, deeply rooted and maintains privileged relations with its region. (Santos, 2004, p. 22, emphasis added)

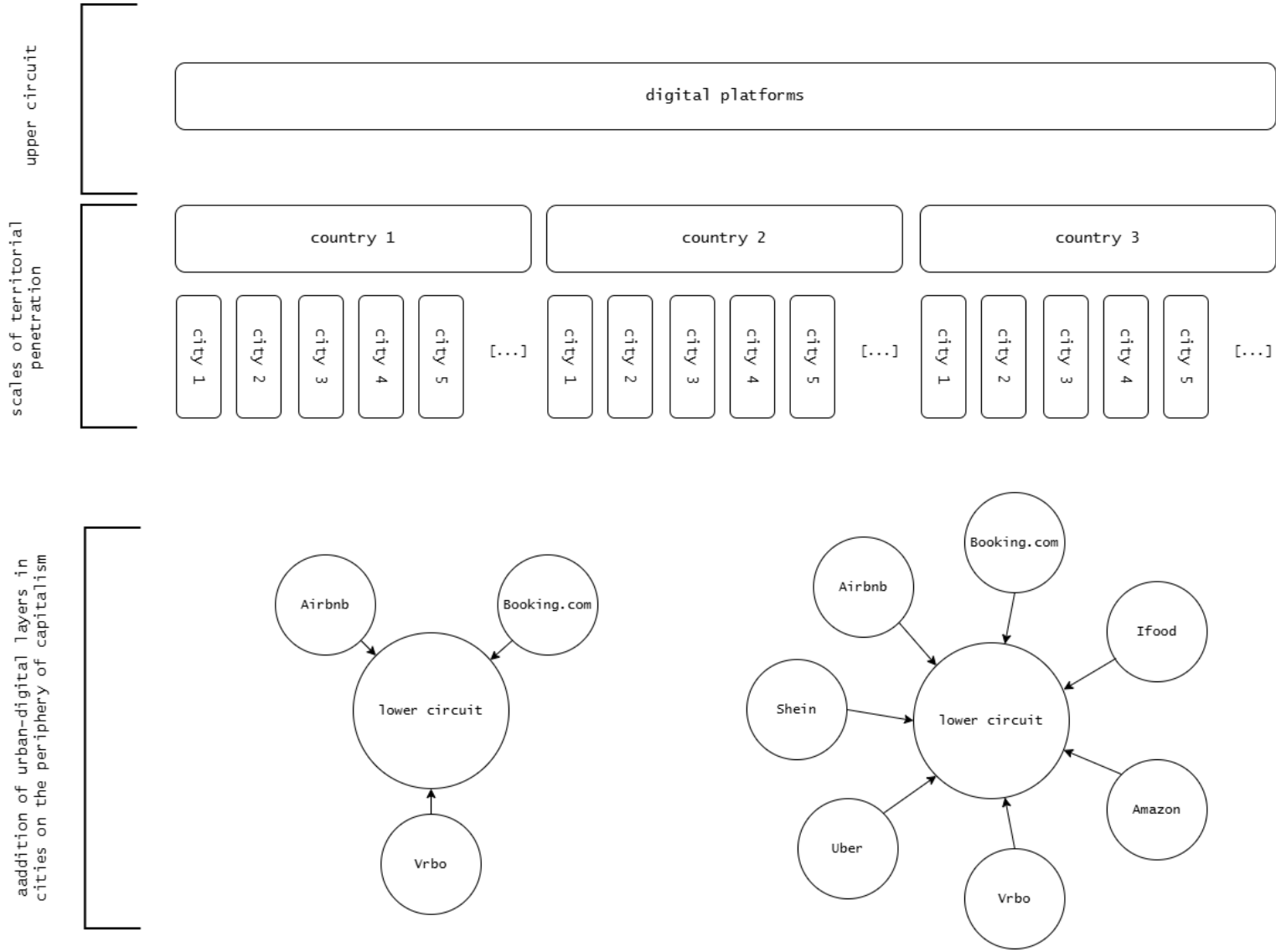
The functioning of the two economic circuits today is shaped by the modes of operation of global (and also regional) digital monopolies, expressed in platforms that compose the upper circuit—of which Airbnb is part. In the context of platform-controlled short-term rentals, the upper circuit is essentially determined by the control and operational mechanisms of these platforms, which project themselves territorially in a unidirectional manner: from the global to the local. One of these mechanisms is advertising, which is configured as a “methodical instrument for modifying tastes and altering the profile of demand” (Santos, 1978, p. 51). Advertising also constitutes a stage that precedes the production of the commodity (Santos, 2008, p. 40). After all, “[u]nless a commodity satisfies a social want or need, it cannot have exchange value or value” (Harvey, 2013, p. 57). Thus, if desire and need do not exist or do not correspond to the requirements of the capitalist system of production, they must be generated or transformed (Harvey, 2013, pp. 57–58). In the case of Airbnb, advertising has been shaped by notions of *collaboration* and *sharing*, which form part of a neoliberal imaginary that has, in turn, gained strength since the crisis faced by capitalism in the 1970s, with the decline of the Fordist-Keynesian model.

The modes of operation of Airbnb—based, among other factors, on the functioning of its digital infrastructure—enable the territorial penetration of the plat-

form's activities through its dialectical interaction with the lower circuit, as well as through its interaction with other actors belonging to the upper circuit, such as the state and companies that compose the tourism industry and the real estate market. Figure 2 presents a simplified scheme of how the territorial penetration of digital platforms occurs in peripheral cities, including short-term rental platforms such as Airbnb. As previously noted, this process is oriented from the global scale to the local and may encounter barriers or facilitators at intermediate scales, such as incentives or regulations at the national level, or even at the local scale—for example, through policies regulating or promoting digital nomadism and tourism. At the local scale, these platforms, as part of the upper circuit and in interaction with the lower circuit, penetrate cities through production and consumption activities, which constitute part of the processes necessary for the circulation of capital, as will be further developed in Section 1.3.

In the case of Airbnb, this occurs notably through the activities carried out by property owners who convert their homes into tourist accommodations, by outsourced workers who provide services to these owners, and also by consumers of the commodity *lodging*. It is important to emphasize that, in penetrating peripheral cities, Airbnb does not create a new circuit; rather, it inserts itself into an existing urban economy and interacts with its lower circuit in order to benefit from its local structure. This process becomes possible through the monopoly exercised by Airbnb based on its digital infrastructure, which constitutes a digital space where economic relations are established and become increasingly complex. This process, in turn, adds to the broader advance of different digital monopolies which, oriented toward diverse activities, add urban-digital layers to cities—layers that contain information about local processes of production and consumption. Each new monopoly that enters and expands within peripheral cities thus produces a new urban-digital layer capable of describing the activities of the two circuits of the urban economy. In this same sense, the dataset produced through the digital infrastructure controlled by each monopoly constitutes a privileged pathway for analyzing the process of capital accumulation carried out through cities located in both peripheral and core countries.

Figure 2 – Territorial Penetration of Digital Platforms in Cities on the Periphery of Capitalism



Source: Author's own work.

Before further developing the analysis of the actors that compose the two circuits through short-term rental activities, it is important to highlight the differences in the economies of cities located in the center and in the periphery of capitalism. As noted, according to Santos's conceptualization in the 1970s, the organization of the urban economy into two circuits was a structuring feature of cities in peripheral countries, whereas the same did not occur in core countries. Understanding this difference becomes easier when we consider that short-term rentals, as they are introduced and intensified in the periphery of capitalism under external control, come to interact with a complex and pre-existing lower circuit. Santos devotes considerable attention to constructing this distinction between circuits and between center and periphery. The author argues that "[t]he lower circuit in the urban economy constitutes a permanent mechanism of integration that offers a maximum number of employment opportunities with a minimum volume of capital" (Santos, 1978, p. 67).

In this sense, Santos emphasizes characteristics he considers fundamental to this circuit, such as *low capital intensity* and a *high use of labor power*, which takes place through *small-scale activities*. The lower circuit is thus composed of a flexible and adaptable labor force, encompassing a wide range of occupations for poor populations—after all, "*a job is a job*" (Santos, 2004, pp. 72–73). Moreover, "[e]mployment in the lower circuit is rarely permanent, and its remuneration frequently lies at or below subsistence level" (Santos, 2004, p. 45). At other moments, the author also associates the lower circuit with *poverty* and *social insecurity*, particularly due to the fragility of forms of social protection through institutions. According to the author, "security constitutes one of the essential differences between the situation of the unemployed in rich countries and in poor countries," and "this helps explain why one cannot speak of the existence of a lower circuit of the urban economy in developed countries" (Santos, 2004, p. 74). Thus, in structural terms, it can be said that there is a form of poverty with security at the center of capitalism and a form of poverty without security in the periphery of capitalism (Santos, 2004, p. 74). In this context, the lower circuit constitutes "the urban economy of poverty" (Santos, 1978, p. 70). From this, it follows that the author interprets poverty as a structuring feature of cities on the periphery of capitalism, in a manner similar to that proposed by Marini (2013). Later, in *Por uma outra globalização* (2008), Santos emphasizes that, with globalization, poverty—previously structural only in peripheral countries—comes to acquire a structural function also in core countries, even though asymmetries between them persist.

O Espaço Dividido, originally written in 1979, highlights that differences in consumption are substantial between developed and underdeveloped countries. In the latter, broader access to goods produced by society “is a privilege of the more advantaged classes” (Santos, 2004, p. 50), whereas in developed countries such access tends to be less unequal. In this process, “the likely essential function of the lower circuit is to diffuse the capitalist mode of production among the poor population through consumption, and to channel the savings and surplus value of household units into the upper circuit, through the financial, productive, and consumption apparatus” (Santos, 1978, p. 70). As this thesis will demonstrate, this is precisely the movement of capital through Airbnb’s activities: production and consumption originate in the lower circuit of cities, which thus becomes the source of the surplus value captured by the company—through labor and ground rent—and subsequently transferred to the core of global capitalism. In this sense, digital platforms play a significant role in the expansion of structural poverty in central countries, a process that has led some authors to adopt intermediate analytical categories, such as the *semi-periphery*, in order to better grasp and explain these dynamics.

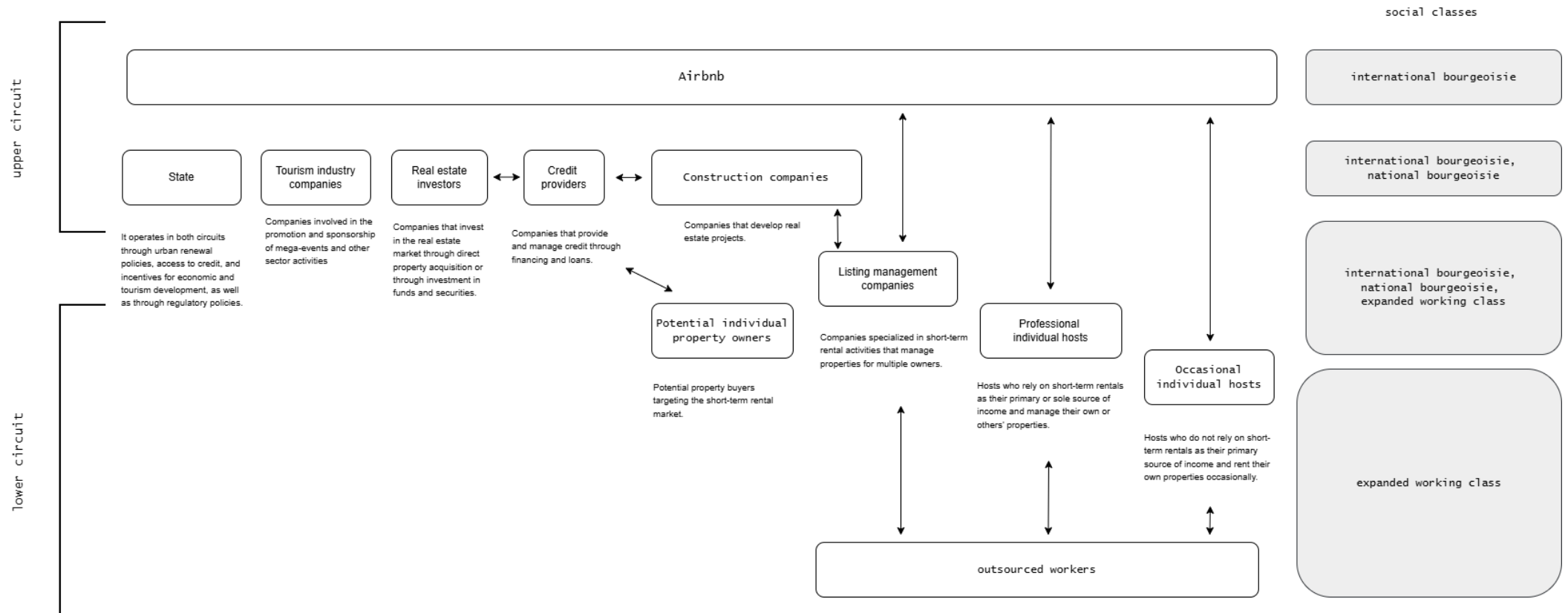
Additionally, the author emphasizes that the lower circuit should not be confused with the *favela*, since it “does not encompass all the poor in a city, nor can all those who live in it be defined according to the same criteria of poverty” (Santos, 2004, p. 75). Moreover, the lower circuit should not be understood as synonymous with *informality*, as it also includes formal activities, just as the upper circuit encompasses informal ones. Although Santos makes clear in his conceptualization developed in the 1970s that economic circuits emerge within the technical-scientific-informational period and are characteristic of peripheral countries, as mentioned earlier, in his later works he also highlights the global expansion of *structural poverty*, which must be taken into account in the context of global digital platforms. In this sense, unlike the scenario of the 1970s, the characteristics of the two economic circuits increasingly tend to manifest also in central countries as this expansion unfolds. Santos even refers to a process of “*Third Worldization*” (Santos, 2008, p. 151), that is, a form of peripheralization that increasingly affects segments of the population in wealthy countries, while at the same time intensifying the dependency of peripheral countries. As Santos describes, with globalization, poverty:

[...] is structural and no longer local, nor even national; it becomes globalized, present throughout the world. There is a planetary dissemination and a globalized production of poverty, even though it remains more present in countries that are already poor. (Santos, 2008, p. 69)

Globalized structural poverty is scientific and “politically produced by global actors with the conscious collaboration of national governments” (Santos, 2008, p. 72). In this sense, what can be observed is that poverty in core countries appears as a consequence of the centralization of capital and the global impoverishment of workers, and tends to be concentrated among more vulnerable groups, including immigrant populations who, largely originating from peripheral countries, move to core countries in search of better living conditions. Structurally, however, the impoverishment of core countries also signals the intensification of poverty in peripheral countries. Finally, to illustrate the differences that persist in center–periphery relations even in a context of globalized structural poverty, we may turn to the way in which platform-controlled short-term rentals, when incorporated into peripheral cities, rely on activities already existing in the lower circuit. As it expands, Airbnb, for example, benefits from activities already consolidated within popular tourism, such as the work of street vendors in beaches, stadiums, and events, which support the activities of the tourism industry and are understood as constitutive elements of the local economy. Other expressions of these differences relate to the possibilities of access to decent living conditions by the working class, including conditions of work and housing.

Having outlined these considerations regarding the differences between center and periphery and the expansion of structural poverty at a global scale—which justifies, with certain caveats, the current use of the theory of economic circuits also in analyses of digital platforms in core countries—we can now turn to the analysis of the actors that compose the two circuits through activities related to short-term rentals, as well as their main interactions (Figure 3), considering both dynamics identified in the scientific literature on the subject and those observed in the context of Rio de Janeiro, which are detailed in the second part of this thesis. Understanding that the two circuits of the urban economy express relationships established between social classes and the roles that each of these actors performs in the process of capital circulation—both at the global scale and within cities—the same figure also indicates, in a simplified manner, the classes to which these actors belong.

Figure 3 – Short-Term Rentals in the Upper and Lower Circuits of the Urban Economy



Source: Author's own work.

At the top of this circuit are short-term rental platforms and, more specifically in this analysis, Airbnb, which represent fractions of international capital. The upper circuit is also composed of fractions of national capital controlled by national bourgeoisies. This is because a defining characteristic of this circuit is its linkage to bank credit (Santos, 1978, p. 49), which includes not only Airbnb and other digital platforms, but also certain companies in the financial, real estate, and tourism sectors. Unlike residential rentals, short-term rental platforms interact intensively with companies in the tourism sector, replacing and expanding the economic activities of the traditional hotel industry, thereby integrating, through local economies, into the international tourism market. In addition to their differentiation through credit, actors in the upper circuit also differ from those in the lower circuit in terms of capital, the technologies they employ, and their level of organization (Santos, 1978, p. 49). This is because the upper circuit has greater resources, uses technologies that enable stronger integration into the global market, and its activities are less fragmented, less flexible, and more formal, governed by rules, contracts, and higher levels of regulation, thus becoming more predictable. This does not mean, however, that there is an opposition between rationality and irrationality across the two circuits. In *Pobreza Urbana* (1978), Santos makes a particular effort to explain that the activities of the lower circuit are not irrational, since “the economic activity of the poor also operates according to a logic and is therefore rational” (Santos, 1978, p. 67).

In this way, the upper circuit is also composed of national companies, such as construction companies, credit providers, real estate investors, and companies involved in the organization, promotion, and sponsorship of events, which benefit from the economic interactions enabled by Airbnb. In some cases, these activities are also carried out by international capital, which includes Airbnb itself, as it has sponsored mega-events in different parts of the world. Finally, the state also operates as an actor within the upper circuit, facilitating access to credit for the population, enabling events in the tourism sector and developments in the real estate sector, regulating short-term rental activities in order to control their impacts, and channeling resources from platforms into its institutional apparatus. The role of the state—whether through policies that promote short-term rental activities or through their regulation—has been highlighted in various studies on the subject (Ferreri & Sanyal, 2018; Nieuwland & van Melik, 2020; Cocola-Gant & Gago, 2021; Estevens et al., 2023; Zaveri, 2023; Colomb & Moreira de Souza, 2024).

In this thesis, it is understood that the state, in some cases, plays a decisive role in the territorial penetration of digital platforms, since “a considerable portion of capital circulation passes through the state apparatus” (Harvey, 2018, p. 29). This helps explain why the regulation of short-term rentals, in certain circumstances, relies on the creation of mechanisms for tax collection, as it may appear more advantageous for the state to maintain and encourage such activities rather than prohibit them, while ensuring that they remain under its control. In this sense, disputes between local governments and platforms reflect debates not only around mitigating the impacts of short-term rentals through regulation and enforcement, but also around decisions concerning how the surplus value produced or transferred through tourist accommodations and host labor will be distributed—decisions not always directly associated with concerns about the urban and social impacts of these activities. These dynamics are also shaped by the degree of popular participation and influence in the regulatory decisions and strategies adopted.

Still regarding the upper circuit, its actors perform specific activities and engage in diverse interactions both within this subsystem and with the lower circuit. In the financialized era, this occurs primarily through the circulation of assets, that is, resources that generate some form of return. Construction companies, for example, develop real estate projects and adopt as a marketing strategy the promotion of housing units for the short-term rental market, through the discourse of the *home-as-investment* (Kalinowski, 2024; Manduca, 2025; Stroher et al., 2025), offering them to potential individual property owners. This process contributes to the heating of the construction sector, accelerating capital circulation. Credit providers enable both the conversion of real estate assets into financial assets and the reverse movement, supplying the capital necessary for real estate development. Real estate investors, in turn, operate both directly in this market—through, for example, investments in the construction, renovation, and large-scale acquisition of properties and buildings to be directed toward short-term rentals—and indirectly, through investments in financial funds. Companies in the tourism sector, in turn, stimulate the short-term rental market through their activities and benefit from the accommodation infrastructure provided primarily by the lower circuit, through the local housing stock. The upper circuit is essentially composed of fractions of the international and national bourgeoisie.

Listing management companies and professional hosts, in turn, may constitute hybrid forms that belong to both the lower and the upper circuits (Santos, 2004, p. 41), transitioning to the latter as their levels of organization advance. This is because short-term rental activities have generally emerged in a fragmented manner: there is the occasional host, who rents out their property sporadically, and also the individual host who becomes professionalized, gradually managing and expanding a diverse portfolio of properties owned by different landlords. As the possibilities for capital circulation expand—driven first by the demonstrated high profitability of the market and subsequently by various incentives, such as mega-events and urban renewal processes—interest in short-term rental activities also increases, accompanied by greater volumes of capital, higher levels of organization, and more sophisticated technologies.

In this sense, the management of tourist accommodations has its historical origins in the lower circuit—due to the impoverishment of the middle classes—but tends to increasingly shift toward the upper circuit. This process does not represent the upward mobility of individual or small-scale hosts, but rather their replacement by more competitive firms that consolidate local, regional, and national oligopolies and expand their operations across different cities. This dynamic is illustrated by companies such as Housi and 360 Suítes, which operate accommodations in multiple Brazilian cities, as well as by the expansion of Blueground, a U.S.-based company that recently acquired Tabas, with listings in São Paulo. In this way, each city can be interpreted according to the levels of capital, organization, and technology exhibited by its main short-term rental managers.

Finally, listing management companies and professional hosts play an important role in connecting both with property owners—who provide the source of land rent, that is, the monopoly over land—and with outsourced workers. Property owners may include both workers with access to private property and members of the national and international bourgeoisie—for example, foreign investors owning property in Brazilian cities—who rely on the intensive labor of the lower circuit to increase the profitability of their assets. Outsourced workers, in turn, are in search of employment and constitute the most vulnerable layer within the process of capital circulation as structured through the two circuits of the urban economy. The lower circuit is fundamentally composed of the expanded working class, although it may also include small property owners belonging to the bourgeoisie who rely on activities within this circuit. As a result of

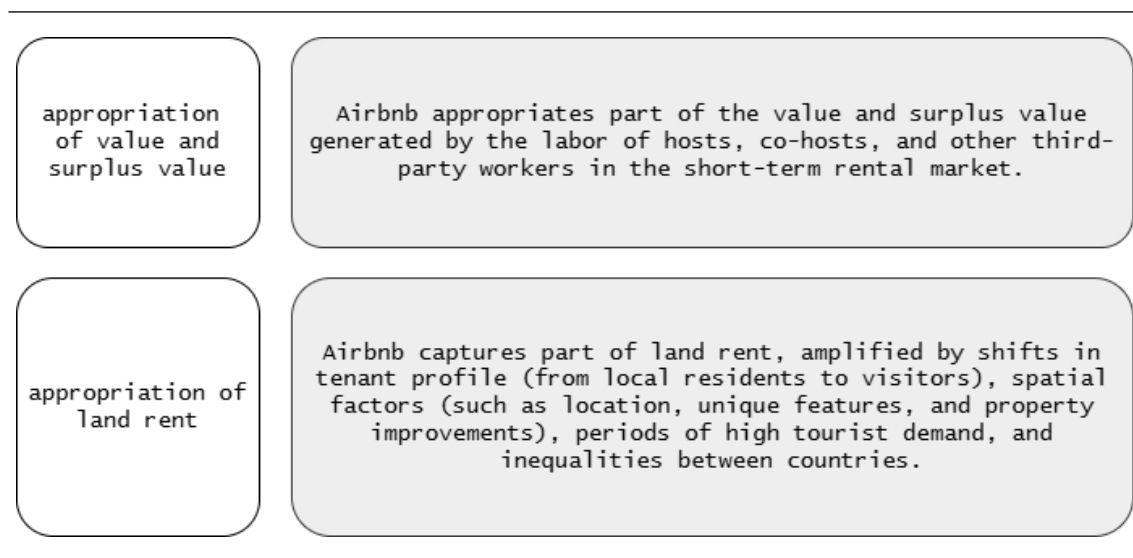
these interactions, and as short-term rental activities expand, local disputes over the monopoly of land intensify, particularly in areas identified as more profitable. Processes of housing dispossession also intensify, as will be discussed later.

In this section, the two economic circuits proposed by Milton Santos have been used to explain how the territorial penetration of Airbnb occurs from the global to the local scale, identifying the main actors mobilized in this process. We now turn to understanding how capital accumulation by Airbnb and by other actors involved becomes possible and desirable, through the exploitation of labor power and the expansion of land rent, thereby stimulating the replacement of residential rentals by short-term rentals. To this end, we draw in particular on the theories of value, surplus value, and rent developed by Karl Marx and revisited by David Harvey.

1.3. Mechanisms of Accumulation and the Movement of Capital on the Airbnb Platform

The interactions between the upper and lower circuits, based on the actors involved in short-term rental activities, are only possible because they are enabled by mechanisms of accumulation controlled by digital platforms, which, in turn, are established by the movement of capital that circulates through them. In this section, based on Airbnb's activities, it is argued that the platform's accumulation operates through two mechanisms (Figure 4). Through the *appropriation of value and surplus value*, Airbnb benefits from the labor of hosts, co-hosts, and other outsourced workers in the short-term rental market. In this mechanism, a commodity is produced: the temporary use of *tourist accommodation*—that is, *lodging*. Through the *appropriation of land rent*, Airbnb captures the rent transferred from guests to property owners through the platform, benefiting from the expansion of this rent through spatial factors, periods of high demand for accommodation, and existing economic inequalities between countries. Although Airbnb's accumulation is examined here through this division for analytical purposes, the two mechanisms form parts of a totality, are interconnected, and help us understand the movement of capital in its process of circulation through Airbnb.

Figure 4 – Mechanisms of Capital Accumulation on the Airbnb Platform



Source: Author's own work.

By incorporating the activities of the platform, the two circuits of the urban economy provide the means, actors, and interactions necessary for the production of this commodity, thus reinforcing a dialectical and interdependent relationship between them. While the upper circuit—and more specifically Airbnb—depends on the labor provided by the lower circuit for capital accumulation, the latter depends on the platform's activities to obtain *land rent* and *value*. The terms *land rent* and *value* are used here based on Marxian conceptualization: *land rent*—or simply *rent*—as a mechanism for the appropriation of surplus value through the monopoly of land, and *value*, in turn, as the quantity of socially necessary labor required for the production of a commodity. In the latter case, it is understood that the value generated through Airbnb arises from a form of intermittent labor, performed on demand, which has become increasingly common in the context of labor precarization and the expansion of social informality, and is more broadly associated with work carried out through different digital platforms, such as Uber and iFood, among others. The same applies to the term *capital*, here understood as *value in motion*.

To more fully understand these concepts and how this process unfolds, the analysis is divided into four sections: (a) *the actors involved in the circulation of capital, the Airbnb commodity, and the means of production*; (b) *labor and the appropriation of value and surplus value by Airbnb*; (c) *the appropriation of land rent and strategies for its expansion*; and (d) *accumulation by dispossession and the impoverishment of the working class*. This analysis is, in general terms, grounded in the theories of value, surplus value, and rent developed by Marx (2013), as well as in the considerations advanced by Harvey throughout his work, particularly in *The Limits to Capital* (2013) and *The Madness of Economic Reason: Marx and Capital in the Twenty-First Century* (2018). It also takes into account the process of pauperization of the masses (Marini, 2013), the precarization of labor (Antunes, 2018), the expansion of scarcity to the middle classes (Santos, 2008), and the global impoverishment of the working class (Davis, 2006; Santos, 2008).

(a) the actors involved in the circulation of capital, the Airbnb commodity, and the means of production

To understand the process of capital accumulation by Airbnb, it is first necessary to understand how it is enabled by the functioning of the platform itself. In general terms, Airbnb operates by connecting *guests* and *hosts*, thereby linking

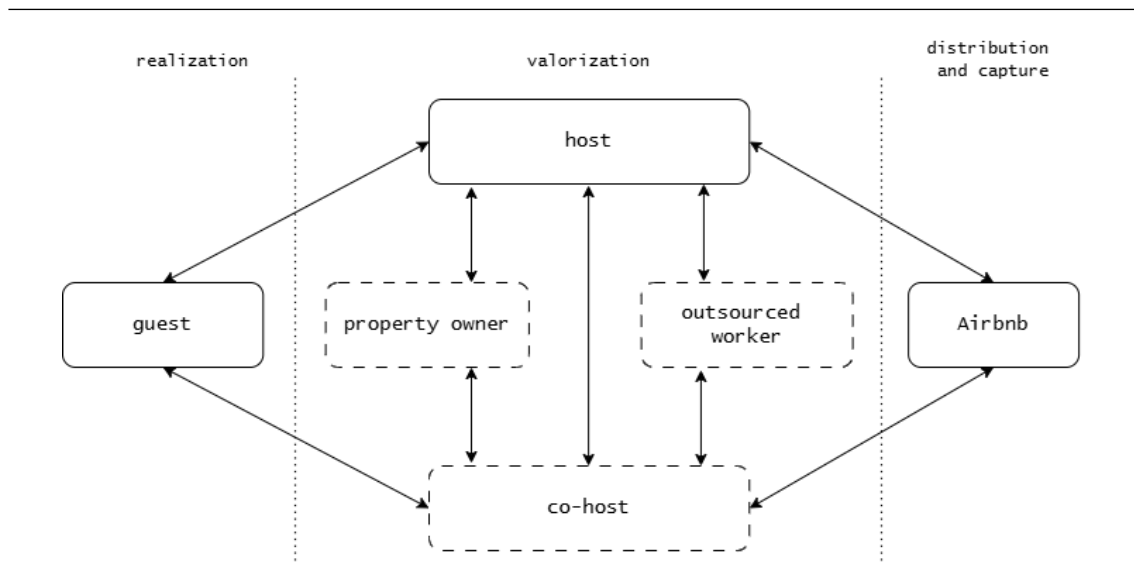
the consumer to the producer of the commodity, while the platform assumes the role of controlling and mediating its production and sale. Thus, Airbnb's operation is structured around the relationship between three main actors: the *guest*, the *host*, and the *platform* itself. Currently, Airbnb also allows for the inclusion of another actor—the *co-host*—who shares a range of activities with the host. In addition to the co-host, it is also common for *outsourced workers* to be incorporated into platform-related activities, even though they are not directly connected to the digital infrastructure. There is no requirement, at least for now, for these workers to be registered on the platform in order to participate in the production of the commodity, since their activities are managed by hosts and co-hosts themselves. These actors, in turn, are connected through a *listing*—that is, the registration of the tourist accommodation used to advertise the commodity offered through Airbnb's digital infrastructure.

As will be discussed in greater detail in the second part of this thesis through the example of Rio de Janeiro, hosts and co-hosts may perform a variety of functions, and the distinctions between them are often not clearly defined. In some listings, the property owner is the host, while the co-host may be a family member or a management company—the reverse also occurs, such that the owner may be registered as a co-host. There are also cases in which the management company is listed as the host, while the co-host is one of its employees, a profile focused on customer service, or even a service provider, such as an individual host who works with different management companies—the reverse may also occur. In these cases, the property owner may not be registered as either host or co-host. These examples demonstrate that the relationship between host and co-host can vary considerably, taking the form of a family arrangement, a small-scale operational arrangement, or becoming part of more complex corporate and real estate structures. They also highlight that the property owner may not be registered on the platform.

Thus, Airbnb's operation enables interaction among essential actors—*guests*, *hosts*, and the *platform*—and the direct or indirect inclusion of additional actors, such as *co-hosts*, *outsourced workers*, and *property owners who are not registered on the platform*. It is through these *essential and additional actors* (Figure 5), directly or indirectly related to the activities controlled by the platform, as well as through the commodities listed on Airbnb, that some of the actors identified within the two circuits of the urban economy are organized, such as listing management companies, construction companies, and real estate investors. These

actors, in turn, arrange themselves in relation to one another according to their different levels and possibilities of organization. Moreover, the relationships established between Airbnb's essential and additional actors also constitute the four processes of the complete cycle of capital circulation: *valorization*, *realization*, *distribution*, and *capture* (Harvey, 2018, p. 32).

Figure 5 – Actors in the Process of Capital Circulation Controlled by Airbnb



Source: Author's own work.

As summarized by Harvey, the four processes that make up this cycle are:

[...] that of **valorization**, in which capital is produced in the form of surplus value in production; that of **realization**, in which value is transformed back into the money form through the exchange of commodities; that of the **distribution** of value and surplus value among the various claimants; and, finally, that of the **capture** of part of the money circulating among claimants and its conversion into money capital, from which it continues its path through valorization. Each distinct process is independent and autonomous in certain respects, but all are fully interconnected in the circulation of value. (Harvey, 2018, p. 32, emphasis added)

Within this configuration, reproducing class relations, “[t]hose who seek profit assume the role of the capitalist, and those who relinquish surplus labor to sustain that profit assume the role of the worker” (Harvey, 2013, p. 77). Given the variety of functions performed especially by hosts and co-hosts, as well as the different arrangements between them and other actors, it is not possible to provide a categorical definition of the roles played by hosts and co-hosts within class relations

on the platform. Instead, it can be observed that both may assume the roles of *capitalist* and *worker*. Understanding this dynamic is important because, in the scientific literature on short-term rentals, the professionalization of hosts is commonly interpreted as an indication of increased profit among professional hosts and, less frequently, as an expression of labor precarization. What is observed in practice is the coexistence of both scenarios, also in a dialectical relationship. Bosma (2022) had already highlighted power asymmetries in the dynamics of *host professionalization* in Berlin. Moreover, it is now necessary to adopt a more dynamic perspective on the relationships established through the platform, since capitalists are divided into blocs of power with distinct interests—such as rentier, commercial, and financial capitalists (Harvey, 2018, p. 33), groups not always directly associated with the figure of the host.

With regard to the relationships established on the platform, part of them take place in the stages of *valorization*—where a commodity is produced—and *realization*—where that commodity is consumed. As Marx defines, “[a] commodity is, first of all, an external object, a thing which, through its properties, satisfies human needs of whatever kind” (Marx, 2013, p. 113). In this sense, the guest does not participate in the circulation of capital through production, but through consumption—that is, through the satisfaction of their needs. In this process, the *commodity* offered by Airbnb consists of *lodging*, that is, the right to use a given accommodation for a specified period—a commodity whose production process, in the context of short-term rentals, involves human labor expressed in the form of service provision. This commodity is consumed by the guest in the very act of staying, making it necessary to produce it again for each subsequent stay.

It is from this process that the labor necessary for the circulation and consequent accumulation of capital by Airbnb originates. The two means of production are the *digital infrastructure* itself—monopolized by Airbnb and which enables digital labor, such as listing management—and *housing*—monopolized by the property owner and which enables the provision of various services, such as guest reception, cleaning, and technical maintenance, among other examples. In this way, the platform controls the process of capital circulation, while also possessing one of the means of production. Airbnb is also responsible for the distribution of capital, within which value, surplus value, and land rent are captured.

Thus, short-term rentals differ substantially from residential rentals by incorporating a significantly greater amount of labor into the cycle of capital circulation,

enabling not only accumulation through the appropriation of land rent, but also through the appropriation of value and surplus value generated through labor. In the case of residential rentals, the circulation of capital occurs essentially through the transfer of land rent, without the production of a new commodity. It is not necessary to produce value periodically for capital distribution to take place: a tenant pays to use the property under a long-term contract, and the labor required for this is limited to specific stages of the process, such as the initial and final services provided by real estate agencies. In essence, the tenant pays monthly to use a given piece of land, whose ownership is monopolized by another individual—this monopoly is what underpins land rent.

Airbnb, as a result of a different rental modality, requires the production of a commodity: after all, it is not possible for the guest to consume the *lodging commodity* without services such as reception, cleaning, listing management, among others. Thus, payment is not made solely for the use of the property, but also for the services embedded in this commodity. To this end, the platform maintains at its disposal a significant number of people working for it without needing to employ them directly, instead charging fees that are expressed as a form of rent derived from the monopoly of digital infrastructure. This situation is made possible by a context of labor precarization and social informality, in which intermittent labor—through services performed on demand—emerges as an alternative to unemployment (Antunes, 2018, p. 39). At the same time, it is driven by the possibility—restricted to a portion of the population—of increased profit derived from land rent, allowing the exploitation of factors such as the monopoly over properties in privileged locations. In this way, Airbnb benefits both from the impoverishment of the working class with access to private property and from the profit-driven aspirations of different capitalist groups.

The two scenarios coexist and are shaped by historically established socio-spatial inequalities. They also reflect the very dialectic of the capitalist mode of production, whose logic of accumulation intensifies inequalities between social classes as well as among different fractions of the working class. In this process, the monopoly over land emerges as a key factor in intensifying these inequalities. To understand how this occurs, it is necessary to examine more closely what *value*, *surplus value*, and *land rent* are, and how these elements are embedded in the processes of capital circulation through Airbnb.

(b) labor and the appropriation of value and surplus value by Airbnb

As discussed earlier, Airbnb gained popularity by providing an alternative source of subsistence income in a context of crisis in capitalism, which was itself generated by the impoverishment of the working class. This impoverishment, over recent decades, has also manifested within the so-called middle classes, which constitute a relatively privileged layer of the working class that has increasingly experienced conditions of labor precarization and social informality previously associated exclusively with more vulnerable workers. In *Por uma outra globalização*, first published in 2000, Santos had already pointed to a process of expanding scarcity affecting this group:

In recent years, first in a slow or sporadic manner and now in a systematic and continuous way, the middle class has come to experience difficulties that point toward an existential condition quite different from that which it had known only a few years earlier. These difficulties arrive all at once: the education of children, access to healthcare, the purchase or rental of housing, the possibility of paying for leisure, the lack of job security, the deterioration of wages, negative savings, and increasing indebtedness are leading to discomfort in relation to the present and insecurity in relation to the future, both the distant future and the immediate one. Such uncertainties are further aggravated by new prospects regarding social security and pension systems, the promised reform of private insurance, and labor legislation. To all this are added, within the household itself, children's anxieties regarding their professional future and the everyday manifestations of this unease. (Santos, 2008, p. 138)

As a reflection of this impoverishment, short-term rentals have become both a source of income and a form of work for fractions of the working class. Initially for property-owning workers, but also extending to workers who provide various services and to those who sublet long-term rental properties, short-term rentals are increasingly used as a means of replacing wages and pensions. These arrangements vary widely and reflect attempts to navigate the fragility of the class's conditions of subsistence, often marked by unemployment, individual financial instability, rising living costs, and the erosion of rights. This process unfolds within a broader context of an increase in the number of *global intermittent workers* (Antunes, 2018, p. 43), that is, workers engaged in a form of labor characterized by discontinuity, irregularity, and temporary or on-demand contracts. In this sense, it is argued that Airbnb's capital accumulation is not carried out solely through the appropriation of rent transferred from guests to property owners, but also through the appropriation of value and surplus value generated through the labor of hosts, co-hosts, and out-sourced workers involved in the production of the *lodging commodity*.

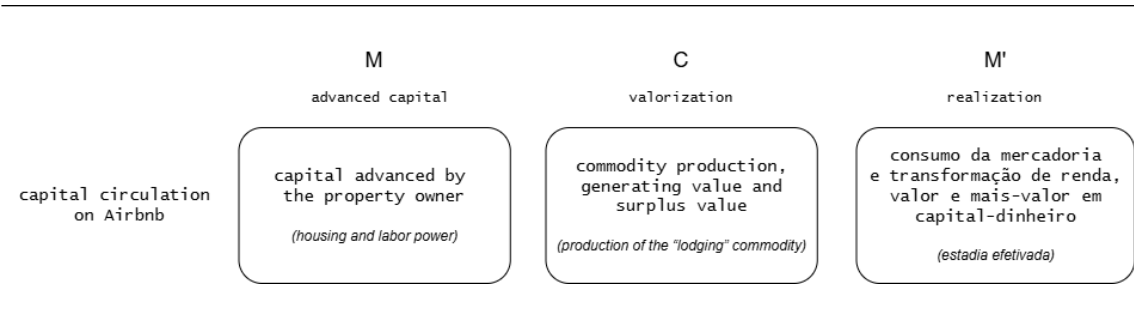
This production, in turn, is frequently repeated on Airbnb: after all, each stay requires a series of services—even when these are partially replaced by unpaid activities, such as self-service, involving the participation of the guest, or by the addition of functions to workers external to the platform, such as doormen, whose involvement in check-in stems from their service to the building and does not necessarily imply additional remuneration. The more frequent production of the lodging commodity, as an expression of the shortening of rental cycles—from long-term contracts to overnight stays—also signals a tendency toward the acceleration of capital turnover times, as a result of technological innovations oriented toward this purpose, such as Airbnb’s digital infrastructure, which also reverberate in the rhythms of everyday life (Harvey, 2018, p. 41). More is accumulated in less time.

With this context as a backdrop, in order to develop the analysis of the appropriation of value and surplus value, we briefly revisit concepts developed by Marx (2013) and analyzed by Harvey (2013). The aim is not to provide an exhaustive theoretical review, but rather to assemble the necessary conceptual foundation to advance the considerations presented in this section. Beginning with the *commodity*: as an object that satisfies a need through consumption, “it is conceived as an embodiment of both use value and exchange value” (Harvey, 2013, p. 56). Moreover, it is constituted by *use value* (its utility) and *exchange value* (the equivalence between two use values), the latter being expressed as *price* when the form of equivalence used is money (Marx, 2013, p. 146; Harvey, 2013, p. 59). For a commodity to possess exchange value, it is not enough for it to have use value: it must contain human labor, measured by the socially necessary labor time required for its production (Marx, 2013, p. 116; Harvey, 2013, p. 64). Thus, every commodity materializes human labor.

The worker, by selling the commodity *labor power* (their capacity to work), produces *value* and *surplus value*. *Value* corresponds to the labor time necessary to reproduce their wage, while *surplus value* corresponds to surplus labor time, unpaid and therefore appropriated by the capitalist. Surplus value constitutes the capitalist’s profit and is what makes capital accumulation possible—in other words, accumulation depends on the exploitation of labor power. In this way, workers “exchange the use value of the only commodity they possess for a money wage” and “then convert this money into commodities sufficient to reproduce their own existence” (Harvey, 2015, p. 109). Capital accumulation, in turn, occurs through the successive reinvestment of the surplus value obtained from the sale of commodities. These concepts condense the fundamental principles of the capitalist mode of production.

This process can be understood through the basic cycle of capital circulation in Airbnb, analyzed here through the general formula of capital circulation presented by Marx (2013, p. 228), which synthesizes the logic of *accumulation for accumulation*: money–commodity–money (M–C–M'). This formula helps us understand the processes of production and realization of surplus value as capital, which summarize the capitalist mode of production (Harvey, 2013, p. 158). Based on this—and, at this stage, without yet addressing land rent—the cycle of capital circulation in Airbnb is composed of: (M) the money initially invested by the property owner to insert the property into the platform (including the capital fixed in private property); (C) the production of the commodity through labor power (including, for example, the preparation of the accommodation and the management of the listing, typically involving the host or co-hosts and outsourced workers); (M') the transformation of the commodity's potential value into realized value in the form of money capital, through the consumption of the commodity by the guest. This process represents the circulation of capital in Airbnb (Figure 6). Production occurs both through housing—via the provision of various services—and through the platform—via the digital labor involved in listing management.

Figure 6 – Basic Cycle of Capital Circulation on Airbnb

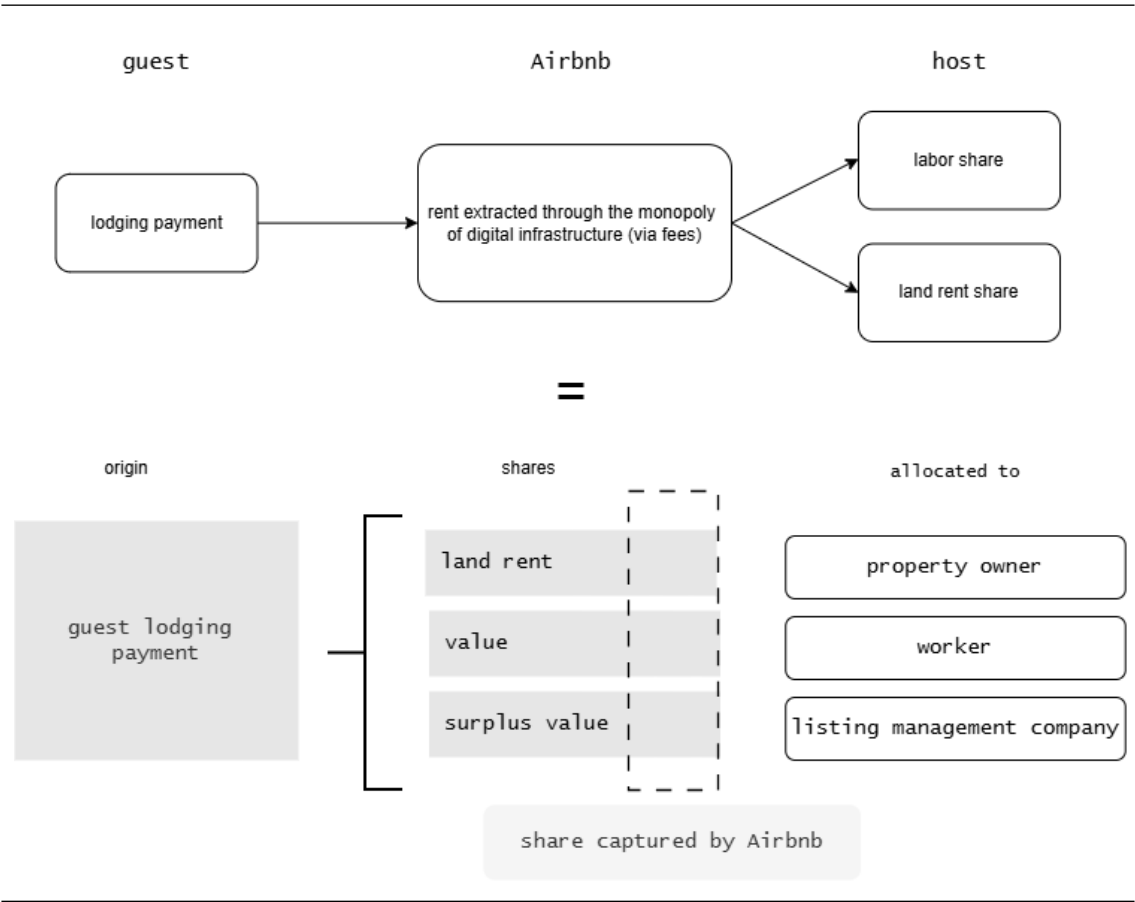


Source: Author's own work.

At the stage of valorization, capital circulates through the value and surplus value generated in the production of the commodity (M). *Value* originates from the labor performed either by hosts and co-hosts operating independently or by individuals hired by property owners or by management companies, corresponding to the exchange value of their labor power. When some form of employment relationship exists, *surplus value* is extracted from *value*—for example, in the case of hosts or co-hosts working under the direction of companies. In both cases, the extraction

of surplus value may also occur through the hiring of outsourced workers responsible for tasks such as cleaning, maintenance, or customer service. Although we do not undertake a detailed analysis of land rent at this stage, it is important to note that the payment for lodging is composed of the *rent* transferred by the guest and the *value* and *surplus value* generated in the production process (Figure 7). Within platform relations, as noted earlier, the host may simultaneously be both property owner and worker. The emergence of listing management companies, in turn, signals the intensification of profit-oriented activities within the platform and new levels of organization of production.

Figure 7 – Distribution of Lodging Payments



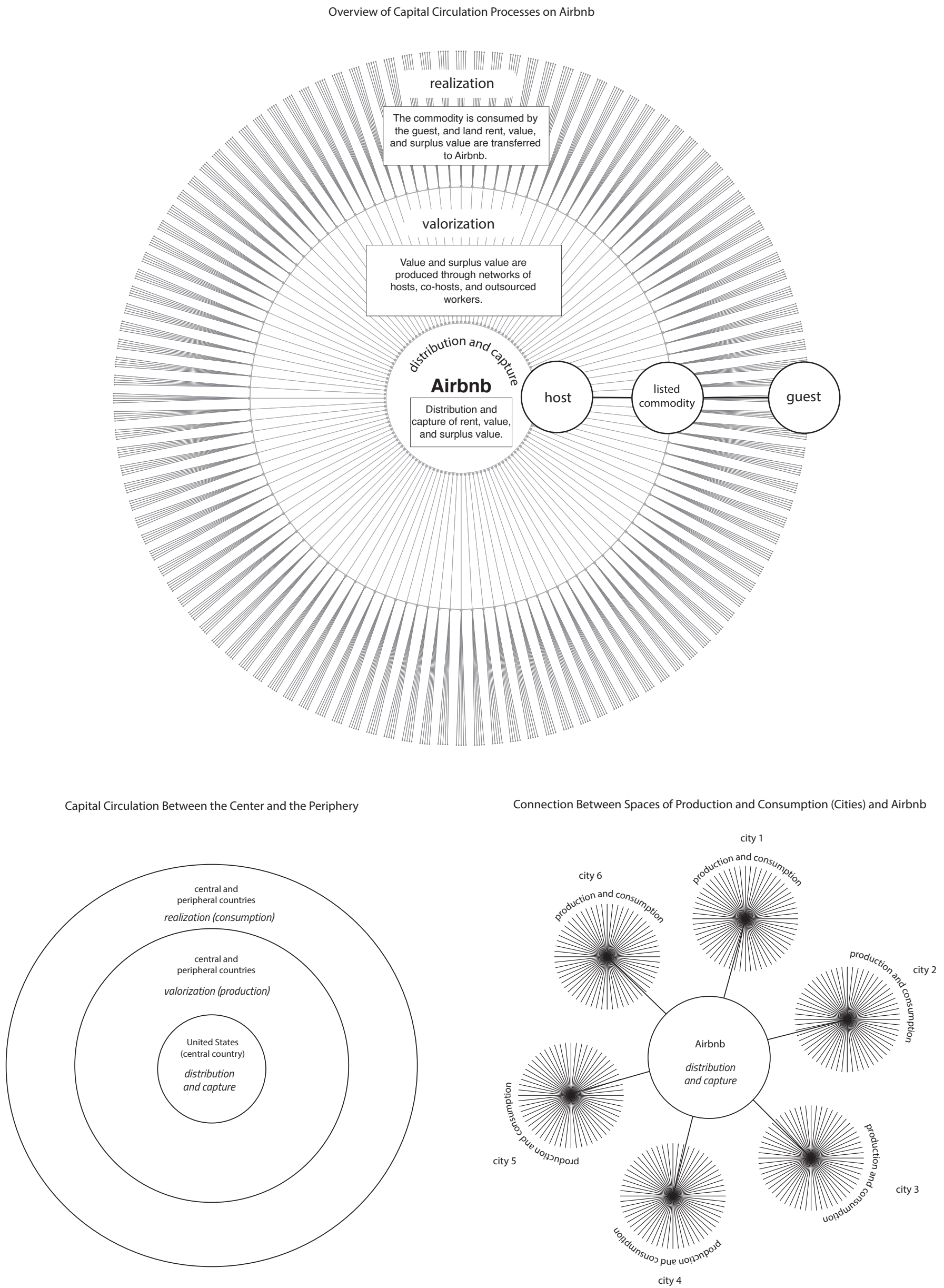
Source: Author’s own work.

Figure 7 schematizes the flow of capital distribution on Airbnb, highlighting how platforms control this stage through the monopoly of digital infrastructure. In the case of Airbnb, distribution and capture are facilitated by improvements in the

platform's own infrastructure, which currently allows separate payments to hosts and co-hosts, without the need for monetary exchange between them. Figure 8, in turn, illustrates how distribution relates to the other stages of capital circulation through the connections between Airbnb, the host, the listing, and the guest, also indicating how the platform's capital flow is organized between the center and the periphery of capitalism. Through its digital infrastructure, Airbnb connects with a network of hosts who list commodities produced with their own resources (capital advanced by property owners); these hosts, in turn, connect with an even broader network of guests through listings, enabling the consumption of *lodging*. The circulation of capital is accelerated by the organization of rentals into *overnight stays*. For the realization of value to occur—that is, the “successful movement of capital through each of its phases” (Harvey, 2013, p. 159–160)—there must be effective demand for the consumption of the commodity, which is enabled by advertising and follows a just-in-time model based on production on demand. Capital is then distributed among its claimants.

In presenting the different forms of capital distribution in the twenty-first century, Harvey highlights the existence of five main claimants: individual capitalists, industrial capitalists, commercial capitalists, landowners, and banking and financial institutions (Harvey, 2018, p. 43–50). Within platform relations, the functions of these claimants tend to overlap, since, as noted, hosts may simultaneously be property owners, individual capitalists, and industrial capitalists, given that a commodity is being produced. Banking and financial institutions benefit from transactions carried out on the platform, both through *final consumption*—that is, the consumption of lodging by the guest—and through *productive consumption*, that is, consumption oriented toward the production of housing that will subsequently serve in the production of the *lodging commodity*. Thus, banking and financial institutions are also linked to the dynamics of the real estate market oriented toward short-term rentals. Finally, Airbnb performs functions typical of the commercial capitalist, namely “organizing sales efficiently and at low cost (chronically exploiting labor power in the process)”, as well as shaping wants, needs, and desires through marketing strategies and techniques of persuasion (Harvey, 2018, p. 45).

Figure 8 – Complete Cycle of Capital Circulation Through the Connection Between Airbnb, Host, Listing, and Guest



Source: Author's own work.

The commercial capitalist, much like an individual seller, establishes a particular relationship with the process of surplus value production, which Harvey describes as a *strange* and *parasitic* relation, since at no stage of production does it create value: it simply *appropriates* the value created. On the other hand, by performing the role of a commercial capitalist, Airbnb enables “the acceleration of capital and the reduction of the necessary costs of circulation” (Harvey, 2013, p. 139), as the company centralizes advertising and provides a reliable digital infrastructure that facilitates higher occupancy rates and easier access to consumers. Thus, without Airbnb, property owners would hardly be able to achieve the same scale and speed of value realization. This strange and parasitic relation therefore helps explain why the *appropriation of value and surplus value* is possible in practice. As developed throughout this section, this occurs because the platform becomes attractive to different claimants.

In this way, the importance of the production of value and surplus value for the accumulation of Airbnb and other claimants of capital is demonstrated, highlighting the centrality of labor to the platform, as well as the relationships established between essential and additional actors, which reproduce class relations. However, this importance does not explain why a property owner would choose to generate income through short-term rentals rather than opt for a more stable and less labor-intensive rental model: residential renting. If the property owner does not engage in the production process, all other stages of circulation become impossible—since they are interdependent—thus representing a barrier to Airbnb’s accumulation. To understand the property owner’s choice, it is necessary to examine what land rent is and how it can be expanded through short-term rentals.

(c) the appropriation of land rent and strategies for its expansion

Let us consider a recurring scenario in which a choice is made between the two rental modalities, based on their respective possibilities of transferring rent according to property occupancy (Figure 9). In hypothetical occupancy scenarios, the land rent transferred to the property owner through residential renting is more stable and has the advantage of requiring less labor: through long-term contracts, there is a guarantee that this rent will be transferred on a monthly basis. By placing their property on the short-term rental market, the owner must either work or hire someone to enable the frequent rental of the same property, without any guaran-

tee that occupancy will occur. Thus, occupancy in short-term rentals, in essence, varies significantly throughout the year. Why, then, would short-term rentals be more advantageous? Why would a property owner exchange a guaranteed and relatively stable income for one that is unstable and labor-intensive?

Figure 9 – Hypothetical Scenarios of Property Occupancy Over Time



Source: Author’s own work.

To answer this question, it is necessary to understand what *land rent* is and how it is constituted. So far, the term *land rent* has been used to refer to the value transferred from tenants to property owners as payment for the use of a monopolized piece of land, whether this use occurs over a long period (typical of residential renting) or over a short period (typical of short-term rentals). In this sense, land rent appears as a form of appropriation of a portion of the tenant’s wage—that is, part of the value of their labor power—by a property owner who monopolizes private property. Harvey further argues that rent is a form of appropriation of surplus value, since, through it, the property owner appropriates socially produced surplus value without, however, organizing its production (Harvey, 2013, p.

576). In practical terms, this means that, by renting out their property, the owner accesses the surplus value produced by society without needing to produce a commodity. Relating the theory of rent to the theory of surplus value was a challenge addressed by Harvey in order to demonstrate, based on Marx's writings, that the value appropriated through rent is socially produced and, therefore, does not arise from the land through "magical powers", but also originates in the exploitation of labor power (Harvey, 2013, p. 491). Rent, in this context, functions as a mechanism of distribution, since "landowners do not directly intervene in the production of surplus value" (Harvey, 2013, p. 511). Understanding this relationship between surplus value and rent makes it possible to reintegrate elements often treated as separate and unrelated, such as increased profits derived from rent and the exploitation of the working class. As Harvey points out, this separation is a mechanism historically used to obscure the foundation of land rent, which is also exploitation:

Separating land, labor, and capital as independent and supposedly autonomous factors of production had a double advantage for the dominant classes, as it allowed them to proclaim "the physical necessity and the eternal justification of their sources of revenue", while at the same time obscuring any notion of exploitation, since the act of production could, in principle, be portrayed as the harmonious combination of separate and independent factors of production. (Harvey, 2013, p. 103)

Understanding these foundations is also important because they make it possible to grasp the basis of processes such as gentrification and touristification, which are frequently identified as impacts of short-term rentals and are structured around speculation on potential rent, based on the expectation that higher rent may be obtained in the future. The actions of actors seeking to obtain and expand profit are thus oriented toward increasing land rent and accelerating the circulation of capital so that this can occur in the shortest possible time and with the greatest possible frequency, with a variety of strategies employed to achieve these objectives. These same foundations also explain why short-term rental platforms contribute to the impoverishment of the working class by intensifying the transfer of land rent. If the basis of renting lies in the appropriation of value from tenants through portions of their wages, short-term rentals make it possible for this process to occur more intensively through the wages of *guests*. Moreover, by contributing to rising residential rents, short-term rentals also enable increasingly larger portions of the wages of *local residents* to be captured by property owners.

In this sense, it is argued that platform-mediated short-term rentals have proven more attractive than residential renting because they allow for a more intensive exploitation of land rent, through different strategies aimed at its expansion, which are, in turn, based on spatial factors, periods of high demand for accommodation, and existing economic inequalities between countries. In addition, it is understood that capital accumulation—whether by the platform itself or by intermediary capitalists, such as management companies and construction firms—has proven so effective that it further drives the refinement of the system of production organized by Airbnb and managed through its digital infrastructure, while also extending beyond it through various operational arrangements established among property owners, hosts, co-hosts, and outsourced workers. To develop this argument, we draw on the concepts of *absolute rent*, *monopoly rent*, and *differential rent* presented by Marx and analyzed in greater detail by Harvey, as well as on the understanding of the division of the global capitalist system into *center* and *periphery*, as developed by theorists of underdevelopment and discussed throughout this chapter.

At this point, it is necessary to clarify the understanding adopted here regarding the terms *land rent* and *rent*, which are treated as synonyms, following Harvey (2013, p. 489). The author draws on Marx's explanation of rent as payment made for the use of land, regardless of the improvements incorporated into it. Marx, in turn, identifies four distinct types of rent, which, as Harvey argues, explain the revenues derived from specific characteristics of land and from improvements added to it.

The first type is *absolute rent*, which consists of payment derived simply from the monopoly of land: by owning a property, I can rent it out and obtain rent from it. Absolute rent demonstrates that even the least productive property—such as a tourist accommodation in a non-privileged location with low occupancy—can generate rent. The second type is *monopoly rent*, which consists of payment derived from the monopoly of a property with unique characteristics: by owning a property with a sea view, I can charge more for it. The third type is *differential rent I*, which results from differences in natural characteristics or location: by owning a property located in Copacabana, I can charge more for it. Differential rent I can be increased through investments in the surrounding area, for example through urban renewal processes. The fourth type is *differential rent II*, which results from additional investments in the land: by owning a property, I can invest in improvements—furniture, decoration, appliances, etc.—and charge more for it. This last

type of rent has been extensively exploited on Airbnb by hosts who design accommodations as immersive settings, such as properties that replicate the apartment from *Friends* or the *AirbnBarbie*—the Barbie house, where Ken is the host (Sampson, 2023; Almirante, 2024). Thus, we must consider that different forms of rent can be derived from land, since:

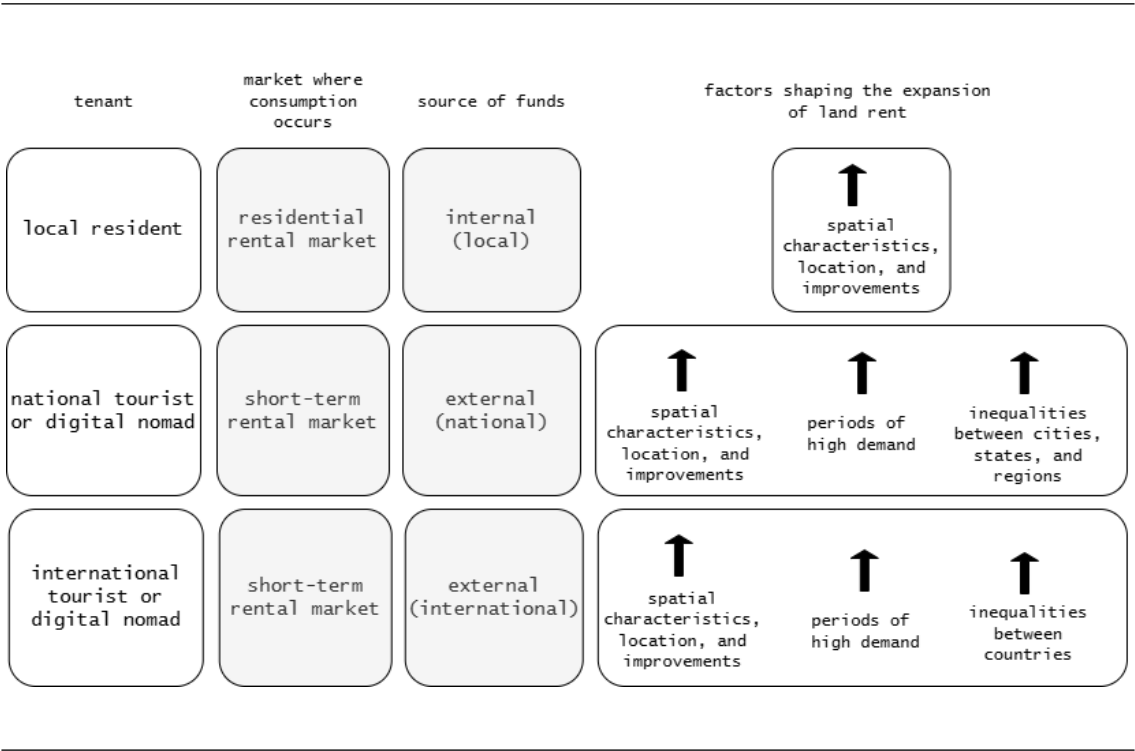
All rent is based on the monopolistic power of private owners over portions of the globe. But we can also assume, without contradiction, that users compete freely for plots of land of differing quality in different locations, and that landowners also compete with one another for the rent they can control. (Harvey, 2013, p. 511)

Considering the four types of rent, it is understood that the conversion of housing into tourist accommodation allows for the expansion of *absolute rent*, such that any property owner—regardless of the location of their property—can benefit from increased rent due to the change in the type of consumer, provided that effective demand is created for the realization of capital. This potential rent derives from the simple fact that the owner holds a monopoly over private property. In practice, however, this owner faces several challenges for this potential rent to be realized as capital, which helps explain, for example, the low occupancy rates of tourist accommodations in suburban areas of Rio de Janeiro, where demand for accommodation is limited. To overcome this situation, possible strategies include stimulating tourism, which may be enabled with the support of the state, thereby reinforcing processes of gentrification and touristification. In this sense, any housing unit converted into tourist accommodation and used within the platform-mediated short-term rental market constitutes, by definition, a source of expanded rent compared to that obtained through residential renting.

Moreover, in short-term rentals, as in residential renting, land rent is enabled through absolute rent and continues to be expanded through the three remaining types of rent by incorporating advantages related to physical singularities, location, and improvements to the property, thereby benefiting from characteristics of *socially produced space*. However, these four types of rent are now further expanded through a transformation in the type of tenant, allowing access to new parameters that determine pricing, which are largely defined by economic dynamics external to the city. As noted earlier, in residential renting, land rent originates from the labor performed by the tenant, a local resident: the tenant works throughout the month to fulfill the rental contract, allocating a portion of their wage to pay for the temporary use of the property. In short-term rentals, however, the profile

of the tenant is transformed and expanded. With this shift, the property owner increases their ability to access higher land rent, because the rent transferred is no longer exclusively tied to *habitation*, but increasingly incorporates the *tourist experience*. Furthermore, this rent no longer originates solely within the circuits of the city where the property is located, but also from external circuits—other cities or countries. With the replacement of the *local resident* by the *visitor (national or international)*, renting allows combinations for rent expansion that were previously not feasible, increasingly incorporating external consumption demands, no longer linked to the local housing market but to the national and international tourism industry (Figure 10).

Figure 10 – Factors Influencing the Expansion of Land Rent According to the Type of Renter



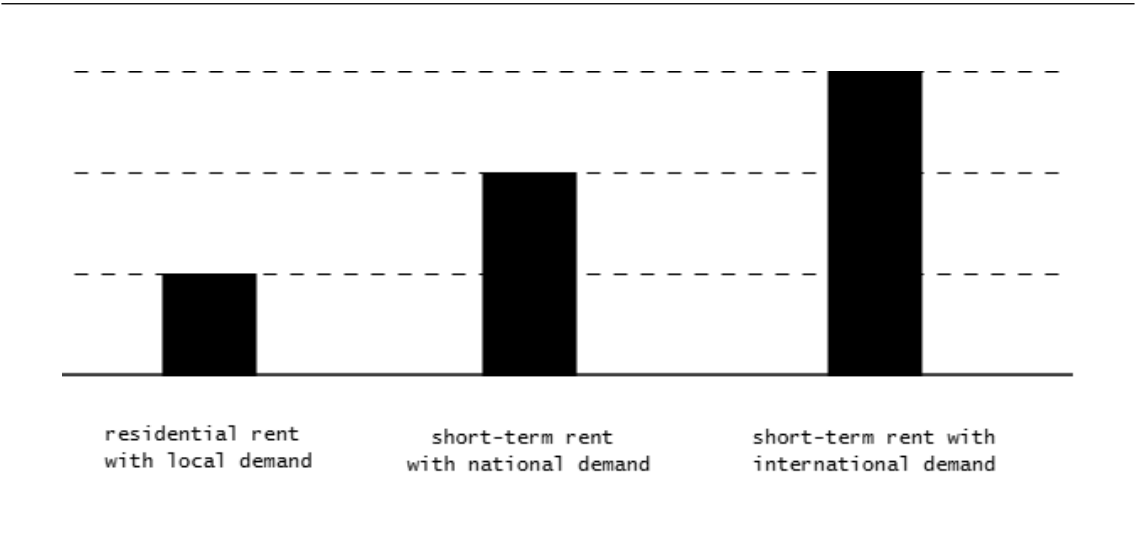
Source: Author’s own work.

By being structured around short-term contracts—comprising stays of a few nights—short-term rentals also make it possible to explore what may be called *periods of extraordinary revenue*, intervals during which high demand for accommodation intensifies occupancy rates and expands the different types of rent. Examples include holidays, as well as days marked by festivals and mega-events. In this context, the state also plays a decisive role in driving the expansion of land rent through tourism development policies, which increase the presence of visitors in cities, and through urban renewal processes, which expand differential rent I in specific areas.

In this way, the conversion of housing into tourist accommodation reveals a search for maximum profitability. Property owners, in this sense, are like cake sellers who discover that, if they sold cookies instead, they would earn more. However, to do so, they need a new recipe, to acquire new tools or adapt the ones they already have, to reach a new audience, and to learn the appropriate baking time. Thus, it can be said that there is a degree of experimentation in current short-term rental practices, and this should not be overlooked, as it indicates the possibility of even higher profits and guides the actions of different claimants of capital in that direction. At present, the paths that appear most promising for the market point toward the increasing internationalization of tourism in peripheral countries, as local property owners have a particular interest in capturing rent enhanced by economic inequalities, especially that derived from consumers earning in core currencies such as the dollar and the euro (Figure 11). The state is also interested in channeling part of these resources for itself.

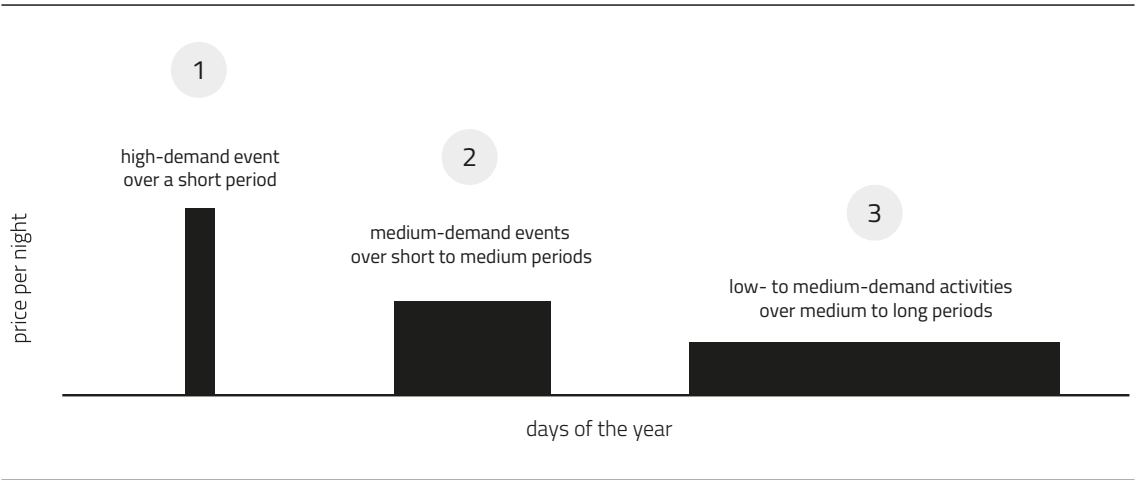
In this context, initiatives can be observed that aim to introduce new periods of extraordinary revenue throughout the year, making them increasingly frequent. The focus on digital nomads also emerges as a strategy to expand demand for tourist accommodation over longer periods, such as weeks or months of stay. More generally, these experimental practices allow for the combination of *demand*, *time*, and *price* in the composition of hosts' revenues (Figure 12). Thus, in some scenarios: it is possible to achieve a substantial increase in rent over a short period (1); a moderate increase over intermediate periods (2); a more modest increase over longer periods; among other possibilities.

Figure 11 – Expansion of Land Rent According to Rental Type and Demand



Source: Author’s own work.

Figure 12 – Conceptual Examples of Demand, Time, and Price Combinations



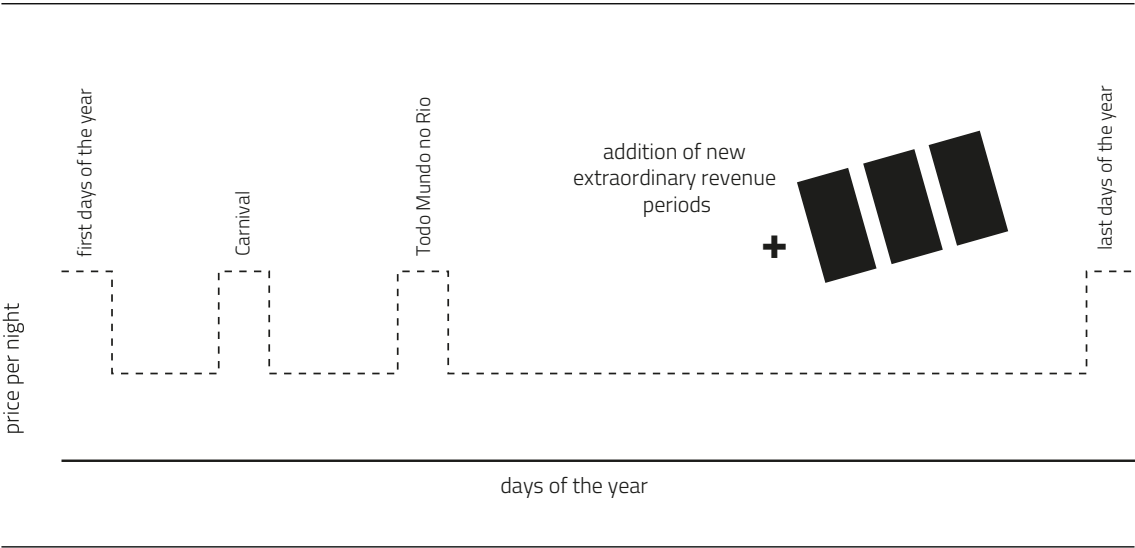
Source: Author’s own work.

Experimentation can be observed, for example, in the months leading up to the 30th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP30), to be held in the city of Belém in November 2025, which has significantly altered the behavior of the tourist accommodation market. The adoption of exorbitant prices by hotels and hosts on digital platforms has triggered an accommodation crisis in the city, resulting in lower participation by international delegations in the event. The example of COP30 reveals a certain mismatch between

the perception of potential rent derived from an international consumer base and the strategies required to make it effective. This is not limited to rising prices, but rather reflects a speculative logic that projects future rents without considering the concrete conditions of realization, thereby leading to a contraction in demand. Mismatches such as that observed in COP30 tend to diminish as the management of tourist accommodations shifts from the lower circuit to the upper circuit, that is, as it reaches higher levels of organization.

In Rio de Janeiro, more recently, the municipal government has promoted the consolidation of a new period of high tourist demand in early May through a series of mega-events known as *Todo Mundo no Rio*, which appears to represent a more promising pathway for capital accumulation through short-term rentals. In 2024, the event attracted approximately 1.6 million people to Madonna’s concert, and in 2025, around 2.1 million people to Lady Gaga’s concert (Rio de Janeiro, 2024; 2025). This new period adds to two already established peak periods of tourist demand in the city: the New Year period (covering the last week of December and the first week of January) and Carnival (with dates that vary annually) (Figure 13). As previously mentioned, the municipal government has also recently launched the *Rio Digital Nomads program*, aimed at attracting digital nomads to the city, which also tends to contribute to the expansion of land rent. In Chapter 4, the expansion of land rent in Rio de Janeiro will be examined in greater detail.

Figure 13 – Conceptual Scheme of Periods of Extraordinary Revenue in Rio de Janeiro



Source: Author’s own work.

At this point, it is important to recognize that, in short-term rentals, the appropriation of surplus value through land rent is potentially more profitable than in residential renting, expanding the possibilities for speculation. This characteristic, in turn, makes this rental modality more attractive to the real estate market, which, through its pursuit of higher profits, also intensifies the process of capital accumulation by Airbnb. As a result, the real estate market is expected to rely increasingly on the organization of the production stage through the platform and to seek new ways to expand land rent, as occurs, for example, through urban renewal processes. This alliance between international capital and the local real estate market reproduces the same logic identified by theorists of Dependency Theory during the technological modernization that took place in Brazil from the 1950s onward, in which the industrial bourgeoisie aligned with international capital to expand its profits at the expense of the super-exploitation of the working class, as mentioned earlier. Having outlined the mechanisms of accumulation and their advantages, it is now necessary to understand how they intensify the dispossession of resources from the working class, generating more poverty and contributing to the deepening of the globalized structural poverty described by Santos (2008).

(d) accumulation by dispossession and the impoverishment of the working class

In seeking different ways to understand the phenomenon of short-term rentals controlled by digital platforms, researchers and activists around the world are often driven by a shared perception: that the activities of platforms such as Airbnb are negatively affecting the lives of local populations in different neighborhoods and cities by generating evictions, displacing long-term residents, and increasing housing costs. In debates on the financialization of housing, there is also a growing disillusionment with the former dream of *homeownership*, which appears increasingly out of reach for younger generations. This disillusionment intensifies as individuals confront their own reality as workers and realize that, despite working longer hours, access to private property has become increasingly difficult. In light of this context, this section examines how activities controlled by Airbnb contribute to dispossession and to the global impoverishment of the working class, understood as constitutive elements of the dialectic of capital accumulation and as expressions of the contradictions of the capitalist system. Dispossession and impoverishment manifest in different ways. Here, four interconnected processes are highlighted:

(1) accumulation by dispossession controlled by Airbnb through tourist accommodations owned by the working class; (2) dispossession resulting from short-term rental activities (gentrification, touristification, evictions, etc.); (3) rising costs of living; and (4), at a broader scale, the transfer of surplus value produced in both peripheral and central countries to the United States.

The term dispossession is used here based on the concept of accumulation by *dispossession*, understood as a means of accumulating capital through the appropriation of resources from the working class. Accumulation by dispossession can occur—and historically has occurred—in various ways (Harvey, 2005, p. 125), and has become increasingly structural in the context of housing financialization and the imperial expansion carried out by digital monopolies. To understand how this process unfolds through Airbnb, it is necessary to recall that accumulation constitutes the ultimate objective of capital circulation. As previously noted, the purpose of production is not the consumption of the commodity, but the circulation of capital with a view to its accumulation (Marx, 2013, p. 228), which underpins *accumulation for accumulation's* sake. In other words, Airbnb does not facilitate the production of lodging because it seeks to satisfy guests around the world, but because it seeks profit. Within this logic, capital is invested to generate more capital, which is then reinvested in an endless cycle. As previously emphasized, one of the consequences of capital accumulation is poverty: the process through which some accumulate wealth is the same that deepens the impoverishment of others.

Dispossession, in turn, becomes central as a mechanism for resolving the problem of overaccumulation (Harvey, 2005, p. 124), which occurs when there is an excess of capital that does not generate valorization. In situations of overaccumulation, there is capital available for investment, but new avenues are required for its realization. This was the context of the 2008 crisis: excess capital, generated speculatively, without a corresponding production of value capable of sustaining sufficient profits to ensure capital reproduction. Platformization, as a response to this crisis, anchored itself in the dispossession of working-class resources as a pathway to accumulation. In the case of Airbnb, excess capital in the form of housing was reinserted into the global circulation of capital as tourist accommodation.

Accumulation by dispossession constitutes the basis for the circulation of capital through Airbnb, since the platform's accumulation itself is grounded in the use of housing that does not belong to the company. In this sense, the fact that segments of the working class with access to private property make their homes available as

a source of land rent for Airbnb already constitutes an expression of accumulation by dispossession, even when it does not manifest, for example, in the loss of the property and even when it generates some form of return for the owner—that is, rent and labor. This is because Airbnb accumulates capital without advancing fixed capital in the form of tourist accommodations, since this capital is advanced by local property owners. Although the expansion of the short-term rental market indicates a trend toward the increasing professionalization of listing management—progressively removing this activity, or even the monopoly over accommodation, from the hands of the working class—it is undeniable that a large part of Airbnb’s accumulation fundamentally relies on resources from this class. Transforming one’s own home, or part of it, into an element of a productive system controlled by international capital constitutes, in itself, an expression of dispossession and the impoverishment of the working class. But dispossession is not only the origin—it is also a consequence of the activities controlled by Airbnb.

As highlighted in the scientific literature, Airbnb’s activities have generated processes of gentrification and touristification, accompanied by population displacement, evictions, and other forms of dispossession, including the transformation of neighborhood spaces into spaces increasingly shaped by international demands. At present, urban conflicts surrounding the activities of digital platforms reveal not only the impacts of this dispossession, but also forms of resistance and collective organization by the working class against this process. Thus, the dispossession of resources from individuals not directly integrated into platform activities constitutes a further outcome of Airbnb’s operations. In this context, Airbnb benefits from processes of dispossession that predate its activities, while also indirectly generating new forms of dispossession rooted in capital accumulation by local actors. To a large extent, dispossession at the local scale has been intensified by the activities of actors such as construction firms, listing management companies, and individual hosts, all seeking to expand their profits.

The investment home is also an example of this dynamic, as it expresses accumulation by dispossession driven by the real estate market. With the incorporation of short-term rentals into the process of housing financialization, the dispossession of working-class resources—such as wages, pensions, and savings—expands structurally within national real estate markets as well. This is because, when an individual acquires a property to invest in the short-term rental market, they enter the cycle of capital circulation in the housing production sector as a *consumer*,

and subsequently as a producer within Airbnb's capital cycle. Airbnb and the financial system resolve the problem of effective demand for the commodity "*investment home*," enabling and accelerating its circulation. While Airbnb is used to create the desire to purchase this commodity—for example, through advertising promoted by construction firms—the financial system enables consumers to acquire it through bank credit, under the imposition of interest payments.

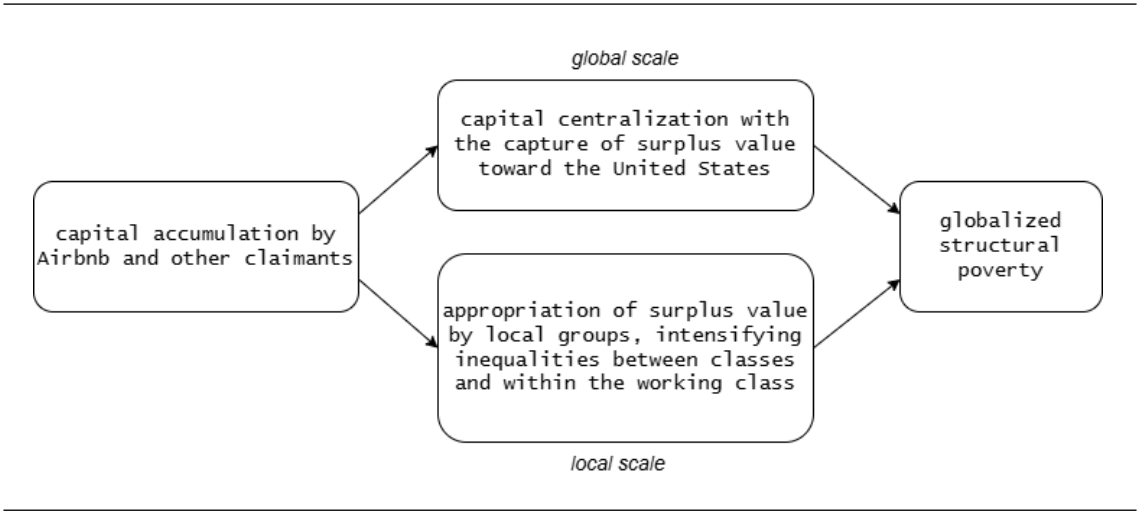
Thus, Airbnb—and other short-term rental platforms—and the financial system make consumption possible, offering new pathways for the realization of capital in the housing production sector. Within the process of housing financialization, however, the worker's monopoly over land is illusory, as it takes the form of debt. This illusory monopoly is, in reality, a guarantee of the worker's future labor to cover mortgage payments, whether through income derived from short-term rentals or from other sources if such activities do not ensure subsistence. In this way, the risks of the *investment home* are structurally transferred to the worker: it is up to them to make it profitable in the short-term rental market. If this profitability is achieved, it will also benefit other actors involved in the process, such as listing management companies. In cases where the worker is unable to service the debt, repossession of the property is ensured through various instruments, such as *fiduciary alienation* in Brazil, which keeps ownership tied to the bank until full repayment of the loan.

Short-term rental activities, by intensifying the participation and control of external economic forces over local economies, also contribute to rising living costs, which become increasingly shaped by dynamics external to the city. In the rental market, the impacts of short-term rentals also tend to benefit those seeking to accumulate through residential renting, as they enable increases in residential rents, ensuring the capture of larger portions of the wages of local residents. As in other cases, this dynamic is grounded in the dispossession of working-class resources accompanied by the intensification of labor exploitation.

Finally, as previously argued, the process of converting a city's housing stock into tourist accommodation reveals the progressive replacement of the local resident by the visitor in the process of transferring land rent through rental activities. At a global scale, this conversion signals a transformation in the dynamics of accumulation through the monopoly of land, which are increasingly shaped by processes occurring across different parts of the world, often in a transnational manner: the guest's wage is generated in one country, the production and consumption of lodging take place in another, and the center of control is Airbnb, which channels

accumulation to the United States. In this process, the platform, benefiting from economic inequalities between countries, appropriates surplus value produced in different cities and reinforces the centralization of capital, articulating with local actors who benefit individually, but whose participation contributes to the reproduction of the contradictions of capitalism, including poverty, which becomes structurally embedded across multiple scales (Figure 14).

Figure 14 – Airbnb and the Production of Globalized Structural Poverty



Source: Author’s own work.

Expressing one of the fundamental contradictions of this system, the centralization of capital by Airbnb implies the impoverishment of the working class in both peripheral and central countries—in short, the deepening of *globalized structural poverty*, which constitutes a consequence of the expanded reproduction of capital, that is, of the cycle of reinvestments that underpins *accumulation for accumulation's* sake. This process occurs through the transfer of surplus value from both peripheral and central countries to the United States, but also through the increased transfer of surplus value from the most vulnerable segments of society to the most privileged within the same city. In this sense, as a strategy initially adopted by segments of the working class with access to private property in order to address their own impoverishment, short-term rentals controlled by digital platforms contribute to the expansion of poverty in structural and global terms.

2. An urban-digital layer based on Inside Airbnb data

2.1. An Urban-Digital Layer in the Periphery of Capitalism

By containing information on processes of production and consumption within cities—as well as on the interactions established between the upper and lower circuits in cities located in the periphery of capitalism—Airbnb data constitute an urban-digital layer. An urban-digital layer is understood here as a set of information on interscalar economic activities digitally controlled and territorially embedded within cities (Cruvinel; Teixeira, 2024), such that multiple layers currently coexist within the same city, sometimes complementing and intersecting with one another, each related to different types of activities controlled by digital monopolies, as introduced earlier. Based on this understanding, this section proposes an analytical approach to Airbnb data as an urban-digital layer capable of describing, albeit partially, the process of capital circulation through the platform via labor and land rent originating from different cities around the world. To this end, the origins of these data and existing sources are presented, as well as the possibilities, challenges, and limitations involved in their use, considering the proposal to employ them in the analysis of capital circulation through short-term rental activities controlled by Airbnb.

First, it is important to emphasize that understanding Airbnb data requires considering their origin—that is, why and how they are produced. In essence, these data result from activities controlled by the platform and oriented toward mediating temporary lodging reservations. Thus, the entire publicly available Airbnb database is structured around the company's core activity and currently reflects the connection between three types of users: *hosts*, *co-hosts*, and *guests*. Data collection from Airbnb, as well as from other digital platforms, has been conducted through web scraping techniques, which consist of collecting data made available on a website at a specific moment in time. In simple terms, each collection functions as a snapshot of the platform's data, recording and freezing its state at a particular instant. A single collection is therefore capable of describing Airbnb's economic activities at a given moment, and may also contain information relating to earlier periods, depending on the nature of the collected data. Likewise, the set of collections carried out over a given period—such as those conducted by Inside Airbnb for the city of Rio de Janeiro since 2015—constitutes not merely a circumstantial record, but an archive that makes it possible to follow the movement of capital through the platform across time and space.

In general terms, access to Airbnb data for research purposes currently occurs in two main ways. The first consists of the direct collection of platform data through the use of tools such as web scrapers or proprietary Python scripts. This approach has been adopted in numerous studies on the subject (Barron et al., 2018; Adamiak et al., 2019; López-Gay et al., 2019) and applied to analyses at different scales, having been particularly important for the development of the earliest studies on Airbnb's impacts, since during the early 2010s—when the platform was still in its initial years of operation—there was little systematically collected and organized material available. As mentioned in some studies, the codes developed by Tom Slee¹—as well as the data collections he conducted until 2017 for more than 100 cities, including São Paulo and Salvador—also contributed to advances in data-driven debates on the topic. Over time, a second form of access to Airbnb data became consolidated: the use of datasets collected by projects and companies dedicated to this activity, such as Inside Airbnb, Data-Hippo², and AirDNA³. With distinct and sometimes antagonistic objectives, these projects have provided data for a wide range of analyses concerning the activities of Airbnb and other digital short-term rental platforms.

This research uses data from Inside Airbnb, an independent project founded in 2015 by activist Murray Cox with the objective of collecting, making available, and mapping Airbnb data, focusing on debates surrounding the platform's impacts on cities and access to housing, while supporting communities and social movements confronting processes of gentrification and touristification. The project has been widely used by researchers, activists, social movements, journalists, and governmental institutions as a source of data on platform activities in different cities around the world. In Brazil, the only city mapped by the project is Rio de Janeiro, with data available since 2015. Since its foundation, Inside Airbnb has progressively expanded both the areas mapped and the scales of data collection.⁴

¹ For more information and access to the codes and datasets, see: <https://tomslee.net/airbnb-data-collection-get-the-data>

² It was a collaborative project launched in 2017, developed by Santiago Espinosa and dedicated to collecting data from Airbnb and HomeAway (now Vrbo) in Portugal, Spain, and Andorra, having been used in different studies on the subject within the context of the Iberian Peninsula. More information at: <https://montera34.com/project/datahippo-plataforma/>

³ AirDNA is a private company that commercializes Airbnb and Vrbo data, with activities primarily oriented toward real estate investors, individual hosts, and property managers, aiming to guide strategic investment decisions and improve listing performance. The company provides revenue estimates, price histories, and performance analyses, with data covering different cities around the world, enabling more diverse spatial analyses. Although it is widely used in scientific studies—especially those addressing listing availability and booking activity, due to its more detailed datasets—it is fundamentally a tool oriented toward the real estate market, with paid access and data collection and analysis criteria that are not fully disclosed. More information at: <https://www.airdna.co/about>

⁴ More information at: <https://insideairbnb.com/about/>

There is currently an intense debate surrounding the importance of public and accessible access to data from digital platforms, given that their activities have produced significant impacts on social, economic, and spatial dynamics in the twenty-first century. In the case of Airbnb, this debate also encompasses the power the platform has acquired within regulatory processes (van Doorn, 2020), due to the privileged control it exercises over these data, which allows it, among other things, to shape analyses, withhold information of public interest, and influence political decisions. In response, governmental initiatives have sought to implement strategies for regulating short-term rentals through the construction of local databases—essentially through registration systems designed to grant licenses for operating such activities—which depend on hosts' compliance, thereby posing challenges for their effective implementation (Nieuwland; van Melik, 2020). There are also regulatory proposals advocating the real-time monitoring of platform data (Ferreri; Sanyal, 2018), as well as the development of software capable of predicting the location of unlicensed properties (Colomb; Moreira de Souza, 2024). As argued in Chapter 1, this process is constituted through disputes between the state and digital platforms over the control of short-term rental activities, aiming at the distribution of capital among its different claimants.

Inside Airbnb data combine information collected from Airbnb with proprietary indicators, such as estimated occupancy rates and listing revenues. In general terms, the data publicly made available by Inside Airbnb, considering the *listings.csv.gz*⁵ file, can be divided into nine main thematic blocks (Table 1): (1) General information about the listing and the data collection; (2) Host information; (3) Location information; (4) Property characteristics; (5) Price; (6) Booking rules; (7) Availability; (8) Reviews; and (9) Regulation. Based on these data, it is possible to analyze a wide range of processes related to Airbnb's activities. Drawing on these and other attributes, this research proposes an analysis based on Inside Airbnb data and oriented toward understanding two processes: the circulation of Airbnb's capital through its territorial penetration in the city of Rio de Janeiro; and the expanded accumulation resulting from this circulation.

⁵ See: <https://insideairbnb.com/get-the-data/>

Table 1 – Inside Airbnb: Attributes of the *listings.csv.gz* file grouped into thematic blocks

Thematic block	Attribute
(1) General Information about the Listing and Data Collection	id
	listing_url
	scrape_id
	last_scraped
	source
	name
	description
	picture_url
(2) Host Information	host_id
	host_url
	host_name
	host_since
	host_location
	host_about
	host_response_time
	host_response_rate
	host_acceptance_rate
	host_is_superhost
	host_thumbnail_url
	host_picture_url
	host_neighbourhood
	host_listings_count
	host_total_listings_count
	host_verifications
	host_has_profile_pic
	host_identity_verified
	calculated_host_listings_count
	calculated_host_listings_count_entire_homes
	calculated_host_listings_count_private_rooms
	calculated_host_listings_count_shared_rooms

(3) Location Information	neighborhood_overview
	neighbourhood
	neighbourhood_cleansed
	neighbourhood_group_cleansed
	latitude
	longitude
(4) Property Characteristics	property_type
	room_type
	accommodates
	bathrooms
	bathrooms_text
	bedrooms
	beds
	amenities
(5) Price	price
(6) Booking Rules	minimum_nights
	maximum_nights
	minimum_minimum_nights
	maximum_minimum_nights
	minimum_maximum_nights
	maximum_maximum_nights
	minimum_nights_avg_ntm
	maximum_nights_avg_ntm
	instant_bookable
(7) Availability	calendar_updated
	has_availability
	availability_30
	availability_60
	availability_90
	availability_365
	calendar_last_scraped
(8) Reviews	number_of_reviews
	number_of_reviews_ltm
	number_of_reviews_l30d
	first_review
	last_review
	review_scores_rating
	review_scores_accuracy
	review_scores_cleanliness

	review_scores_checkin
	review_scores_communication
	review_scores_location
	review_scores_value
	reviews_per_month
(9) Regulation	license

Source: Author's own work, based on Inside Airbnb data. In gray, the main attributes used in this research. The analysis was based on the Inside Airbnb data dictionary: <https://docs.google.com/spreadsheets/d/1iWCNjcSutYqpULSQHINyGlnUvHg2BoUGoNRIGa6Szc4/edit?usp=sharing>

In addition to the public data made available by Inside Airbnb, this research also considers information available in its database, such as data on revenues and co-hosts. In general, the main attributes explored are concentrated in blocks 1 to 5, highlighted in gray in the table. The analysis, in turn, is defined by spatial and temporal dimensions, as well as by the possibility of cross-referencing these data with additional datasets, such as socioeconomic information. Further details regarding the technical procedures of analysis are presented in Section 2.1 and throughout the chapters composing the second part of this thesis.

Finally, drawing on the concept of the urban-digital layer, it is argued that Airbnb data—as well as data from other digital platforms—currently represent a means of understanding activities carried out within the lower circuit of peripheral cities, a circuit that has traditionally faced the problem of the absence or limited existence of statistical information (Santos, 2004), as well as misleading interpretations of existing data (Santos, 1978, p. 13). Within this context, the relevance and necessity of applying an analytical methodology grounded in theories addressing inequalities and dependency relations between the periphery and the center of capitalism are emphasized, in order to avoid the mere “transfer of concepts developed for Europe or North America and applied to underdeveloped countries” (Santos, 1978, p. 14).

In this same sense, data analysis is articulated with the method of historical-dialectical materialism, since, as Santos argues, “[s]tatistics depend on a systematic understanding of the mechanisms of the phenomena one seeks to study” (Santos, 1978, p. 14). Thus, the data analysis conducted for Rio de Janeiro and other Brazilian cities must take into account that activities controlled by Airbnb produce distinct effects, varying according to the specific functions peripheral countries perform within the global capitalist system. In this sense, the analysis proposed

here is contextual rather than causal. The analysis also recognizes that the application of mathematical methods does not necessarily guarantee greater rigor in the study of urban space in underdeveloped countries (Santos, 2004, p. 19), nor does it automatically produce the most appropriate interpretations for understanding urban phenomena. As Santos argues:

Theoretically, the use of multivariable techniques makes it possible to understand why and how cities and systems of cities function. However, if the available statistical material, as well as spatial theories, are grounded in Western realities, mathematical rigor will merely serve to perpetuate interpretative errors and inadequate theories. Moreover, not all economic problems lend themselves to mathematical formulation, and those whose mathematical analysis is feasible are not necessarily the most important ones. (Santos, 2004, p. 19)

This articulated approach combining historical-dialectical materialism and data analysis proves especially relevant in the context of the rise, in the twenty-first century, of what Harvey calls *economic science*, which, given advances in the combination of science, technology, and information, has become increasingly based on large datasets under the assumption that they are capable of fully explaining phenomena of different natures. According to the author, “a supposedly scientific, highly mathematized and data-driven field of study called ‘economic science’ achieved the status of orthodoxy, a supposedly rational closed body of knowledge” (Harvey, 2018, p. 13). Within the context of the growing participation of the financial sector in the circulation of capital, this field gains greater adherence as social and productive relations become more complex, acquire new scales, and become increasingly difficult to comprehend. According to Harvey:

This field is fueled by an increasing belief in the power of computational capacity (which doubles every two years) to construct, dissect, and analyze enormous datasets about almost everything. For some influential analysts, backed by large corporations, this supposedly opens the way toward a techno-utopia of rational management (for example, smart cities) governed by artificial intelligence. This fantasy is based on the assumption that, if something cannot be measured and condensed into spreadsheets and datasets, then it is irrelevant or simply non-existent. There is no doubt that large datasets can be extremely useful, but they do not exhaust the terrain of what needs to be known. And they certainly do not help solve the problems of alienation and the deterioration of social relations. (Harvey, 2018, p. 13)

In light of this, both the relevance and the limits of analyzing Airbnb data in a peripheral city such as Rio de Janeiro become evident. It is argued that these data alone are insufficient to explain the circulation of Airbnb’s capital and the territorial

penetration of the platform in Rio de Janeiro when not articulated with the theoretical foundations that explain this process and that are themselves related to the functioning of the global economic system, as argued throughout Chapter 1. In this sense, based on the data provided by the Inside Airbnb project, as well as on the contributions of Santos, Marx, and Harvey, this research proposes a data analysis structured around the theoretical argument previously developed, focusing on the conditions of capital circulation through peripheral urban space and on the strategies adopted by different claimants of capital to expand their accumulation. Before presenting this analysis, however, the guidelines and technical foundations that informed the Rio de Janeiro case study are discussed in greater detail, based on the Python programming language and Geographic Information Systems (GIS).

2.2. Data Analysis with Python and Geographic Information Systems (GIS)

By understanding Airbnb data as records expressing the circulation of capital controlled by the platform, the second part of this thesis analyzes the processes of capital accumulation and territorial penetration of Airbnb in the city of Rio de Janeiro based on Inside Airbnb data. It is argued that the dataset collected over the last decade by this project contributes to understanding the processes of production and consumption of the *lodging commodity* in Rio de Janeiro, as well as the interactions between its two economic circuits, thereby constituting an urban-digital layer of the city. In general terms, the analysis was divided into two main axes and was based on analytical procedures developed using the Python programming language and Geographic Information Systems (GIS), which in turn resulted in the graphic resources—maps, charts, and tables—used throughout the second part of this thesis. Based on this, this section presents the guidelines and technical foundations that informed this data analysis.

The analysis is grounded in two main axes: (1) the process of capital circulation through Airbnb; and (2) the principal strategies for expanding this accumulation. These two axes structure Chapters 3 and 4, formulated as follows:

- Chapter 3 examines the interdependent processes that condition the circulation of capital and enable Airbnb's territorial penetration in the city of Rio de Janeiro, based on the stages of *capital advancement* in the form of housing units made available by local property owners; *valorization* through the labor of hosts, co-hosts, and other outsourced workers involved in these activities; and finally *realization* (accompanied by *distribution* and *capture*) through the consumption of lodging, as described by Marx and later revisited by Harvey.
- Chapter 4 presents the strategies for expanding capital accumulation by its different claimants, focusing on the *conversion of housing stock into tourist accommodation stock*; the expansion of profits through periods of extraordinary revenue; and, finally, expanded accumulation through mega-events and urban renewal processes.

The analytical methodology developed for this thesis is based on a sequence of procedures designed for data processing, consisting of stages formulated both for the analysis of Inside Airbnb data and for their cross-referencing with exter-

nal datasets. The development of these procedures in the Python programming language aimed to structure the stages of analysis in a modular way at the municipal scale, organizing the workflow from data input—through .csv.gz files and a structured database—to the generation of static visualizations in .png format, as well as maps in .html format when relevant. The analytical procedures themselves were based on analytical experimentations previously tested in QGIS⁶. Their development was made possible through the support of Inside Airbnb, which provided the datasets collected for the city of Rio de Janeiro between 2016 and 2025, totaling 549 files corresponding to 101 data collections, in addition to access to its SQL database containing data for the city since 2015. The analysis was conducted through a hybrid approach based on .csv, .csv.gz, and shapefile formats, as well as database queries.

In general terms, Python was chosen due to its capacity to analyze large datasets composed of multiple data collections, as well as the greater control and reproducibility it provides for analytical procedures and graphical representations. Python enables a broad range of applications that are not limited to geospatial analysis. Within the context of this research, three main libraries are explored: *pandas*, *geopandas*, and *shapely*. *Pandas*⁷ was used for the treatment and organization of tabular datasets derived from .csv files and from the Inside Airbnb database, thereby constituting the so-called DataFrames. *Geopandas*⁸, which is an extension of *pandas*, was used to analyze tabular data containing geometries—such as points, lines, polygons, or combinations of these—which constitute *GeoDataFrames*⁹. Finally, *shapely*¹⁰ was employed to perform geometric operations between spatial objects, such as intersections, distance calculations, and buffer generation.

Because it contains a column describing georeferenced geometric entities, the *GeoDataFrame* constitutes the basis for spatial analysis in Python using georeferenced data, enabling the application of operations to the geometries associa-

⁶ In addition to procedures developed in QGIS, this research also draws on knowledge acquired through the collection of Airbnb platform data for specific Brazilian cities, using codes developed by the author during the preparation of this thesis. In September 2024, these codes were shared in a preliminary stage with the team of LabCidade/FAU-USP and with Computer Science researchers from IME-USP. The codes subsequently served as the basis for the work carried out by the author between September 2024 and January 2025 for the Global Observatory of Short-Term Rentals (OGAT). For more information: labcidade.fau.usp.br/observatorio-global-alugueis-temporarios/ e <https://og-at.org/#/>

⁷ For the *pandas* documentation, see: <https://pandas.pydata.org/docs/#>

⁸ For the *geopandas* documentation, <https://geopandas.org/en/stable/docs.html>

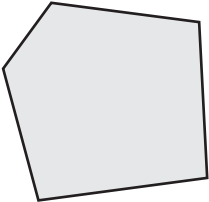
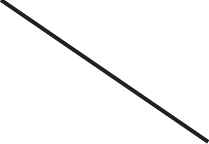
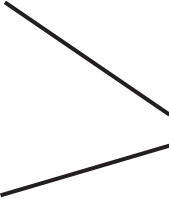
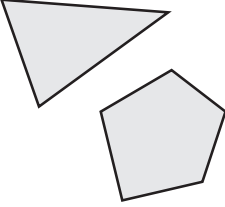
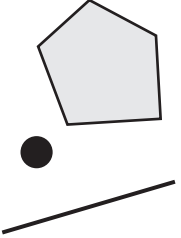
⁹ *GeoDataFrames* make it possible to perform spatial operations directly on the data and are similar to vector layers in software such as QGIS and ArcGIS.

¹⁰ For the *shapely* documentation, see: <https://shapely.readthedocs.io/en/stable/>

ted with tabular data. These geometries, in turn, may take different forms—such as points, lines, polygons, or combinations of these structures—depending on the nature of the spatial data being represented. A *point* (*Point*) represents, for example, a place, a listing, or a property. A *polygon* (*Polygon*) represents a neighborhood, a city, or a country. A *line* (*LineString*), by connecting two or more points, represents a connection, a route, or a path. A *set of points* (*MultiPoint*) represents different locations associated with the same element—for example, the set of listings belonging to a host. A *set of lines* (*MultiLineString*) represents a network—for example, the set of connections between listings based on a shared attribute, such as the host. A *set of polygons* (*MultiPolygon*) represents areas belonging to the same category—for example, neighborhoods composed of different polygons, as is the case of Ipanema, whose territory includes the Cagarras Islands Archipelago. Finally, a *collection of geometries* (*GeometryCollection*) aggregates points, lines, and polygons according to a shared spatial logic, combining the examples presented above (Figure 15).

In this thesis, this characteristic of the *GeoDataFrame* was used to plan and execute different forms of data cross-referencing and aggregation—from simpler operations, such as calculating the number of listings per neighborhood, to more complex analyses, such as identifying networks of listings, hosts, and co-hosts based on georeferenced data. In addition, the analysis was structured to be presented through three complementary analytical resources—maps, charts, and tables—whose results serve as the basis for the writing of the final analytical text. In general terms, maps are used as tools of spatial representation, assisting in the visualization of data across the territory and in the identification of variations between different parts of the city. Charts, in turn, are used in this research primarily to represent data over time and are therefore especially useful for historical analysis, although they may also be applied to different purposes. Finally, tables are used as supporting resources for detailing the information represented in maps and charts, contributing to the understanding and deepening of the analysis.

Figure 15 – Types of geometries in a *GeoDataFrame*

Point	Polygon	LineString	MultiPoint	MultiLineString	MultiPolygon	GeometryCollection
 a place	 an area	 a connection	 multiple places	 multiple connections	 multiple areas	 places, areas, and connections

Source: Author's own work.

This planning, in turn, served as the basis for structuring the Python scripts, considering the three main stages adopted in the data analysis: (1) data loading; (2) analysis; and (3) graphical representation (plotting and/or exporting) (Table 2). For plotting, the main library used was *matplotlib*¹¹, since most of the maps and charts produced are static. Additionally, *folium*¹² was used for the creation of interactive maps, especially in cases where static editing required more adjustments, facilitating the editing and visualization of labels. *Contextily*¹³, in turn, was used to add basemaps, while *mapclassify*¹⁴ was applied to create data categories and color scales, with the *Natural Breaks (Jenks)* method being the classification technique most frequently used throughout the analysis. Essentially, this method makes it possible to identify natural groupings within the data and to better represent actual variations between different parts of the city. Given the asymmetry of the distributions—with concentrations of values in specific ranges and, in some cases, the presence of extreme values—this method proved more suitable than others, such as quantiles or equal intervals, which would tend to force divisions that are poorly representative of the actual distribution of the data, thereby compromising the visualization of spatial patterns.

Table 2 – Main stages adopted in data analysis with Python

Stage	Main Libraries Used
Data Loading	pandas, geopandas
Analysis	pandas, geopandas, shapely
Graphical Representation (Plotting and/or Exporting)	matplotlib, folium, contextily, mapclassify

Source: Author's own work.

Based on this methodological framework, the present study was developed through the analysis of data obtained from Inside Airbnb, the Brazilian Institute of Geography and Statistics (IBGE), DATA.Rio—the official open data portal of the city—the FipeZAP Index, and the QuintoAndar Imovelweb Index. Regarding the In-

¹¹ For the *matplotlib* documentation, see: <https://matplotlib.org/stable/contents.html>

¹² For the *folium* documentation, see: <https://python-visualization.github.io/folium/latest/#>

¹³ For the *contextily* documentation, see: <https://contextily.readthedocs.io/en/stable/>

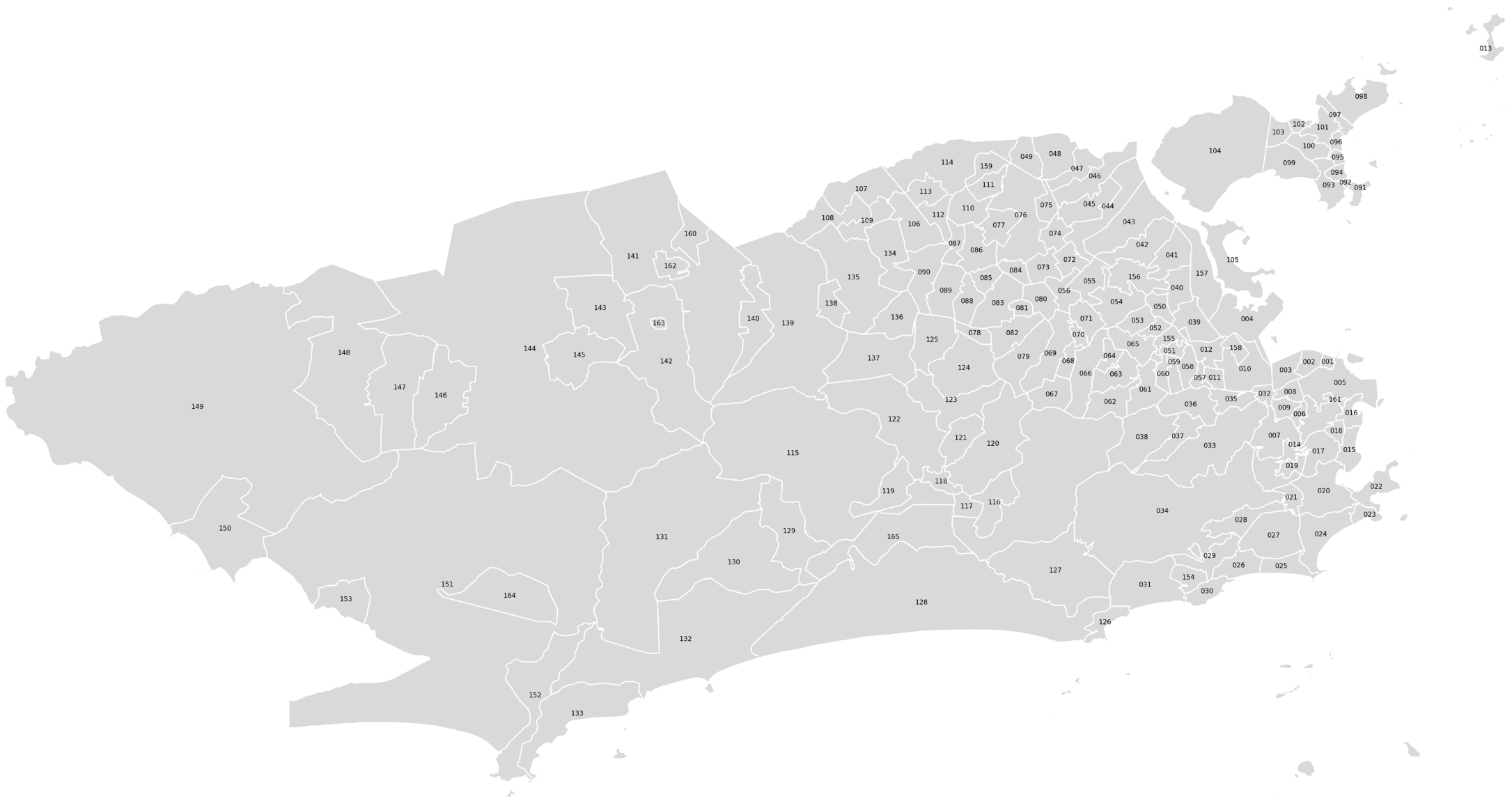
¹⁴ For the *mapclassify* documentation, see: <https://pysal.org/mapclassify/>

side Airbnb data, the main dataset used corresponds to the collection conducted on May 26, 2025. Specifically for temporal analyses, 111 data collections carried out between August 2015 and May 2025 were used. In some cases, to facilitate the production of comparative maps, a smaller set of collections was adopted, corresponding to the following dates: 05-12-2015, 13-12-2016, 14-12-2017, 14-12-2018, 23-12-2019, 23-12-2020, 24-12-2021, 29-12-2022, 26-12-2023, 27-12-2024, and 26-05-2025. As a selection criterion for these collections, the last collection of each year was considered and, for 2025, the most recent collection available during the preparation of the analysis. The evolution of the number of listings over time was also taken into account. Throughout the second part of this thesis, additional information regarding the adopted methodological procedures is presented whenever relevant.

This analysis considers two main types of intraurban divisions: the official neighborhood boundaries of Rio de Janeiro and a hexagonal grid specifically designed for analytical purposes. For the spatial delimitation of neighborhoods, a shapefile from the DATA.Rio portal was used (Figure 16). There may be discrepancies between the representations of administrative boundaries in this thesis and those based on files provided by the IBGE or by Inside Airbnb. This occurs because the files from these sources do not yet incorporate recent updates to the official neighborhood boundaries, such as Barra Olímpica, a neighborhood officially created in 2024. Accordingly, the official municipal data source was adopted. For the hexagonal grid (Figure 17), a radius of 250 meters was adopted, corresponding to the distance between the center of each hexagon and one of its vertices. This grid was used as an alternative form of intraurban division detached from official administrative boundaries, with the objective of facilitating the standardization of spatial analysis by area. In addition, it was adopted as an alternative to heatmaps, since it allows for greater analytical control over data distribution. The radius length of the hexagonal grid was chosen both to facilitate data representation within the territorial scale of Rio de Janeiro and to minimize inaccuracies associated with the approximate geolocation of listings provided by Airbnb.

<https://alinecruvinel.com/thesis/>

Figure 16 – Neighborhoods of Rio de Janeiro



Code		Neighborhood																	
001	Saúde	022	Urca	043	Penha	064	Todos os Santos	085	Turiaçú	106	Guadalupe	127	Itanhangá	148	Paciência				
002	Gamboa	023	Leme	044	Penha Circular	065	Cachambi	086	Rocha Miranda	107	Anchieta	128	Barra da Tijuca	149	Santa Cruz				
003	Santo Cristo	024	Copacabana	045	Brás de Pina	066	Engenho de Dentro	087	Honório Gurgel	108	Parque Anchieta	129	Camorim	150	Sepetiba				
004	Caju	025	Ipanema	046	Cordovil	067	Água Santa	088	Osvaldo Cruz	109	Ricardo de Albuquerque	130	Vargem Pequena	151	Guaratiba				
005	Centro	026	Leblon	047	Parada de Lucas	068	Encantado	089	Bento Ribeiro	110	Coelho Neto	131	Vargem Grande	152	Barra de Guaratiba				
006	Catumbi	027	Lagoa	048	Vigário Geral	069	Piedade	090	Marechal Hermes	111	Acari	132	Recreio dos Bandeirantes	153	Pedra de Guaratiba				
007	Rio Comprido	028	Jardim Botânico	049	Jardim América	070	Abolição	091	Ribeira	112	Barros Filho	133	Grumari	154	Rocinha				
008	Cidade Nova	029	Gávea	050	Higienópolis	071	Pilares	092	Zumbi	113	Costa Barros	134	Deodoro	155	Jacarezinho				
009	Estácio	030	Vidigal	051	Jacaré	072	Vila Kosmos	093	Cacuia	114	Pavuna	135	Vila Militar	156	Complexo do Alemão				
010	São Cristóvão	031	São Conrado	052	Maria da Graça	073	Vicente de Carvalho	094	Pitangueiras	115	Jacarepaguá	136	Campo dos Afonsos	157	Maré				
011	Mangueira	032	Praça da Bandeira	053	Del Castilho	074	Vila da Penha	095	Praia da Bandeira	116	Anil	137	Jardim Sulacap	158	Vasco da Gama				
012	Benfica	033	Tijuca	054	Inhaúma	075	Vista Alegre	096	Cocotá	117	Gardênia Azul	138	Magalhães Bastos	159	Parque Colúmbia				
013	Paquetá	034	Alto da Boa Vista	055	Engenho da Rainha	076	Irajá	097	Bancários	118	Cidade de Deus	139	Realengo	160	Gericinó				
014	Santa Teresa	035	Maracanã	056	Tomás Coelho	077	Colégio	098	Freguesia (Ilha)	119	Curicica	140	Padre Miguel	161	Lapa				
015	Flamengo	036	Vila Isabel	057	São Francisco Xavier	078	Campinho	099	Jardim Guanabara	120	Freguesia (Jacarepaguá)	141	Bangu	162	Vila Kennedy				
016	Glória	037	Andaraí	058	Rocha	079	Quintino Bocaiúva	100	Jardim Carioca	121	Pechincha	142	Senador Camará	163	Jabour				
017	Laranjeiras	038	Grajaú	059	Riachuelo	080	Cavalcanti	101	Tauá	122	Taquara	143	Santíssimo	164	Ilha de Guaratiba				
018	Catete	039	Manguinhos	060	Sampaio	081	Engenheiro Leal	102	Moneró	123	Tanque	144	Campo Grande	165	Barra Olímpica				
019	Cosme Velho	040	Bonsucesso	061	Engenho Novo	082	Cascadura	103	Portuguesa	124	Praça Seca	145	Senador Vasconcelos						
020	Botafogo	041	Ramos	062	Lins de Vasconcelos	083	Madureira	104	Galeão	125	Vila Valqueire	146	Inhoaíba						
021	Humaitá	042	Olaria	063	Méier	084	Vaz Lobo	105	Cidade Universitária	126	Joá	147	Cosmos						

Source: Author’s own work, based on DATA.Rio data.

Figure 17 – Hexagonal Grid



Source: Author's own work, based on DATA.Rio data.

PART II

*The Circulation of Airbnb's Capital
in the City of Rio de Janeiro*

*I want your love and all your lover's revenge
You and me could write a bad romance.*

"Bad Romance" - Lady Gaga

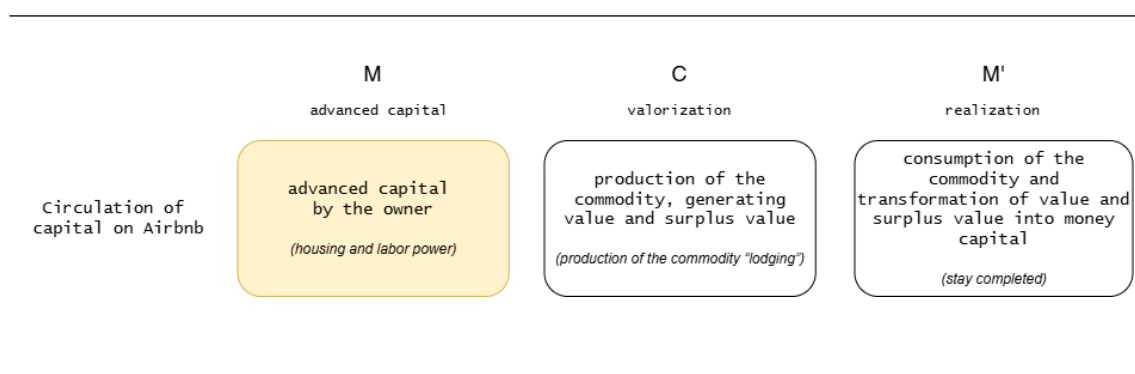
3. Conditions for the Circulation of Capital

3.1. Anticipating capital:

Airbnb listings in Rio de Janeiro

As developed in the first chapter, the process of capital accumulation through Airbnb can be understood through the formula $M-C-M'$ (Figure 18), presented by Marx to explain the basic cycle of capital circulation through a production process oriented toward accumulation (Marx, 2018, p. 228). Based on this formula, Chapter 3 is dedicated to the study of each stage of the movement of capital, with this section focusing on the first stage of circulation (M), in which capital is advanced by the owner for the subsequent production of the commodity (C). This section proposes an articulation between the analysis presented throughout Chapter 1 and considerations by Milton Santos, especially in his book *Espaço e Método* (1985), regarding the application of historical-dialectical materialism to the analysis of space. In this context, it is understood that “[s]pace must be considered as a totality, like the society that gives it life,” and analysis as “a form of fragmentation of the whole that allows, at its conclusion, the reconstitution of this whole” (Santos, 1985, p. 5). This approach does not differ from that adopted throughout this thesis, but here we dedicate ourselves more specifically to the interactions between local and global scales through the case study of Rio de Janeiro.

Figure 18 – Circulation of capital on Airbnb: study of the M stage



Fonte: Elaboração própria.

To support the proposed analysis, four analytical categories adopted by Santos (1985, p. 49) are employed: *form*, *function*, *process*, and *structure*. According to the author, *form* corresponds to the visible aspect of a thing (which may be an object, a person, an institution, among other examples); *function* is the expected activity

of the form; *process* is the continuous action toward a given result (thus encompassing temporal aspects); and, finally, *structure* implies the interaction between the parts that constitute the whole (Santos, 1985, p. 50). These four categories are considered not only at the local level — that is, within the city of Rio de Janeiro — but also through their interscalar relations. As argued throughout this thesis, historical-dialectical materialism is understood as a consistent path for analyzing a phenomenon deeply marked by the capitalist mode of production, by economic and spatial inequalities at different scales, and by class relations, as we have already demonstrated to be the case of short-term rentals controlled by digital platforms. In Chapters 3 and 4, this approach proves especially relevant when considering the limitations of an analysis based solely on local and physical aspects of urban space, which necessarily disregards space as a totality and therefore results in an incomplete and thus mistaken apprehension of concrete reality.

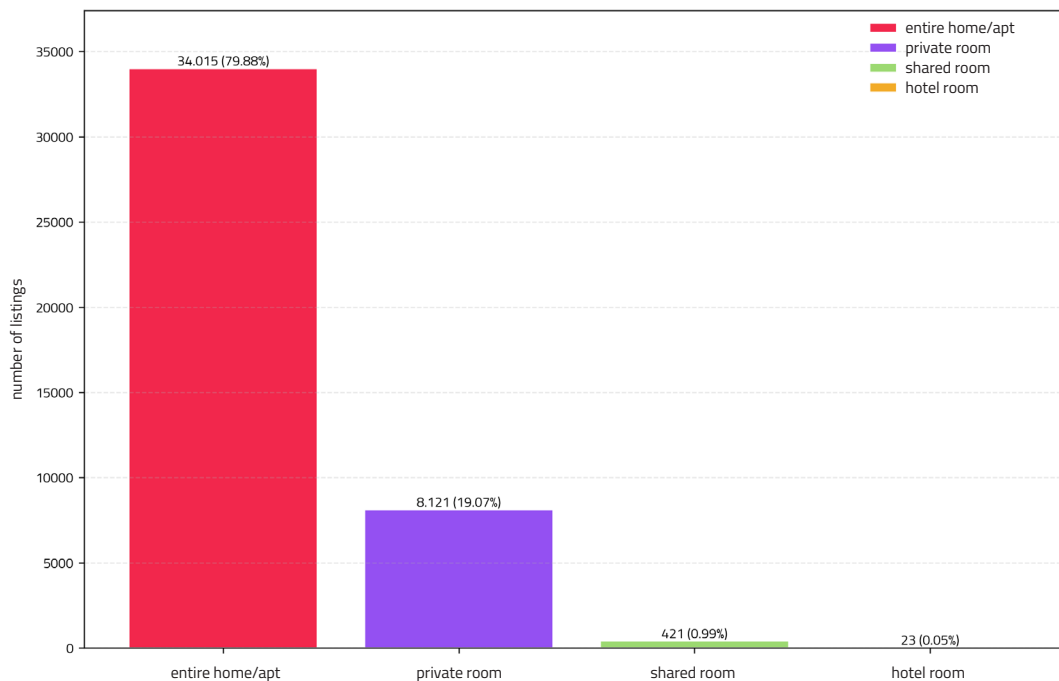
In the same sense, proposing an analysis divided according to the stages of capital circulation does not mean that these stages will be analyzed in isolation, without considering their interactions with one another. On the contrary, it means investigating more carefully how these interactions are reflected in the *forms*, *functions*, *processes*, and *structures* evident in each of these stages, since the proposed analysis is, in essence, *dialectical*. Let us recall what was already stated in Chapter 1: *urban analyses grounded in historical-dialectical materialism are dedicated to the understanding of relations*. This implies, therefore, an analysis that is contextual rather than causal in nature. As Santos argues, “[t]he issue is not, therefore, to take causalities into account, but contexts, since “[c]ausality would put into play the relations between elements, even if these relations were multilateral” (Santos, 1985, p. 11). In other words, “only through the movement of the ensemble, that is, of the whole, or of the context, can we correctly evaluate each part and analyze it, in order subsequently to concretely recognize this whole” (Santos, 1985, p. 11). With this in mind, the M stage must also be understood in relation to the subsequent phases of capital circulation: valorization (C) and the realization of value (M’).

Within this theoretical framework, *housing* is considered the *form* most evident in the M stage, since, as an advance of capital by the owner, it enables the production of the *lodging commodity*. In this way, within the process of Airbnb capital circulation in the city of Rio de Janeiro, housing acquires a new *function*: to serve as a means of production for *lodging*. The interactions between different forms constituting space — in this chapter, mainly the interactions between hosts, co-

hosts, and listings — define the *structure* that enables capitalist production, a structure that is, in turn, territorialized through a global network of tourist accommodations. In this sense, the set of accommodations in Rio de Janeiro is understood as part of a broader set of listings, controlled by Airbnb through processes of production and consumption organized at the local scale by hosts and co-hosts. Based on this, this section proposes a more detailed analysis of Airbnb listings in Rio de Janeiro in order to characterize the supply according to different aspects: distribution and density of listings by neighborhood; listing types; spatial typologies; the presence of listings in Rio's favelas; and, finally, their distribution within neighborhoods. These aspects help us understand how the fixed capital advanced by property owners in Rio de Janeiro is currently configured in the form of housing, thereby characterizing Airbnb's territorial penetration in the city.

With this in mind, the set of 42,572 listings currently available in the city of Rio de Janeiro is understood as expressing the total capital advanced by owners to be circulated through Airbnb's digital infrastructure. This advance secures the first stage of circulation (M). The housing units made available by local owners, together with other elements of space, such as hosts, co-hosts, and outsourced workers, compose the structure necessary for the circulation of capital in Rio de Janeiro and its capture by Airbnb. As indicated by Inside Airbnb data (Figure 20), the capital advanced by owners has been made available primarily through entire homes, which account for 34,015 listings (79.88%), followed by 8,121 private rooms (19.07%), 421 shared rooms (0.99%), and 24 hotel rooms (0.05%). Thus, entire homes and private rooms represent the main listing types used in the circulation of capital in the city, both responding to the search for expanded profit, alternative income, and labor pursued by different claimants to capital involved in Airbnb activities.

Figure 19 – Rio de Janeiro: Distribution of listing types



Source: Prepared by the author, based on data collected by Inside Airbnb on 26-05-2025.

The spatial distribution of the supply of tourist accommodations reveals where this capital is advanced. The neighborhoods of Rio de Janeiro with the largest number of Airbnb listings are: Copacabana, with 13,174 listings (30.94% of the city's total listings); Ipanema, with 3,606 (8.47%); Barra da Tijuca, with 3,559 (8.36%); Recreio dos Bandeirantes, with 2,126 (4.99%); Botafogo, with 1,877 (4.41%); Leblon, with 1,866 (4.38%); Olympic Barra, with 1,805 (4.24%); Centro, with 1,734 (4.07%); Santa Teresa, with 1,483 (3.48%); and Flamengo, with 971 (2.28%). The supply of accommodations is thus concentrated mainly in neighborhoods of the South Zone, West Zone, and the city center (Figure 20; Table 3)¹. The density of tourist accommodations, in turn, reveals the areas of the city that most intensely incorporate activities controlled by Airbnb, that is, by international capital. When considering the number of listings in

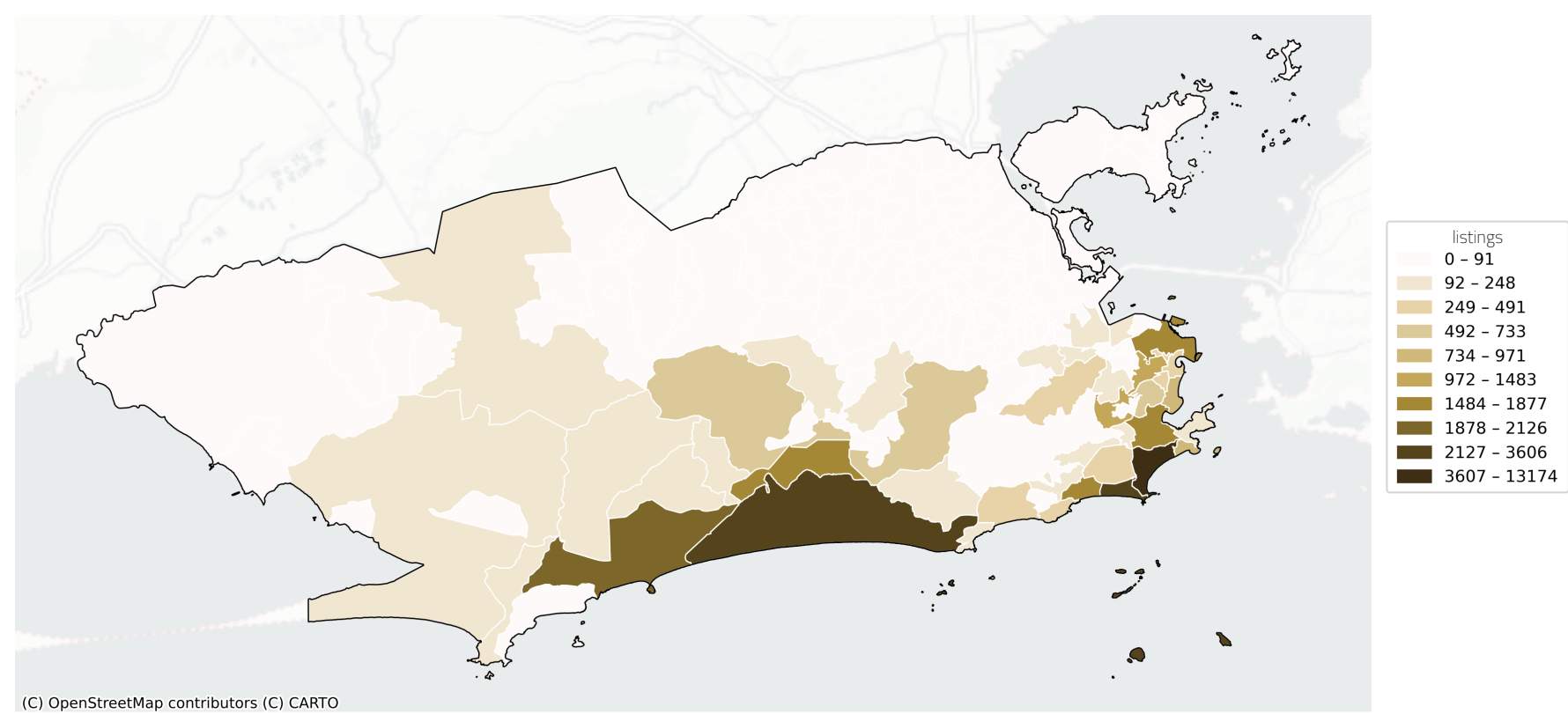
¹ The number of accommodations offered in other neighborhoods can be found in Table 3, which presents this and other information for the 50 neighborhoods with the highest number of Airbnb listings.

relation to neighborhood area², the highest densities (listings/km²) are found in: Copacabana, with 3,212.49; Lapa, with 1,307.29; Ipanema, with 1,168.91; Leme, with 888.25; Leblon, with 866.65; Catete, with 619.65; Flamengo, with 589.82; Botafogo, with 391.12; Centro, with 319.64; and Glória, with 315.77 (Figure 21; Table 3).

These data indicate that the neighborhoods with the highest concentration of listings are located in the South Zone and in the city center. The neighborhoods of the West Zone, although they contain a high number of listings, present a less concentrated distribution due to their vast territorial extension. In the central neighborhoods, on the other hand, the smaller supply tends to be more concentrated because of the reduced area available. In general, listing density is interpreted as revealing the areas where international capital penetrates most easily, which, in turn, depends on specific local configurations that often predate the activities of digital short-term rental platforms. It is important to emphasize that, at this stage of the analysis, the neighborhood scale is being considered. This does not mean, however, that within these and other neighborhoods there are not smaller areas with intense capital circulation through Airbnb, as will be shown later. Complementarily, it can be observed that neighborhoods with the highest supply and density of listings generally feature predominantly entire home listings (Figure 22; Table 3): in Copacabana, this type of listing represents 84.81% of the supply; in Ipanema, 88.49%; in Barra da Tijuca, 85.87%; in Lapa, 89.49%; in Leblon, 92.34%; and in Centro, 88.93%, among other examples. However, there are cases in which the distribution between entire homes and private rooms is more balanced: in Santa Teresa, for example, the supply consists of 56.17% entire home listings and 39.99% private rooms; in Laranjeiras, 67.91% and 31.41%; in São Conrado, 40.94% and 58.66%; in Tijuca, 39.77% and 56.82%; and in Vidigal, 59.36% and 40.11%, among other examples. This distribution reflects the profiles and degrees of professionalization of hosts, although, on a smaller scale, there are also professional hosts and property management companies operating within the private room submarket in different cities, as observed in Lisbon (Cruvinel; Crespo; Paraizo, 2025).

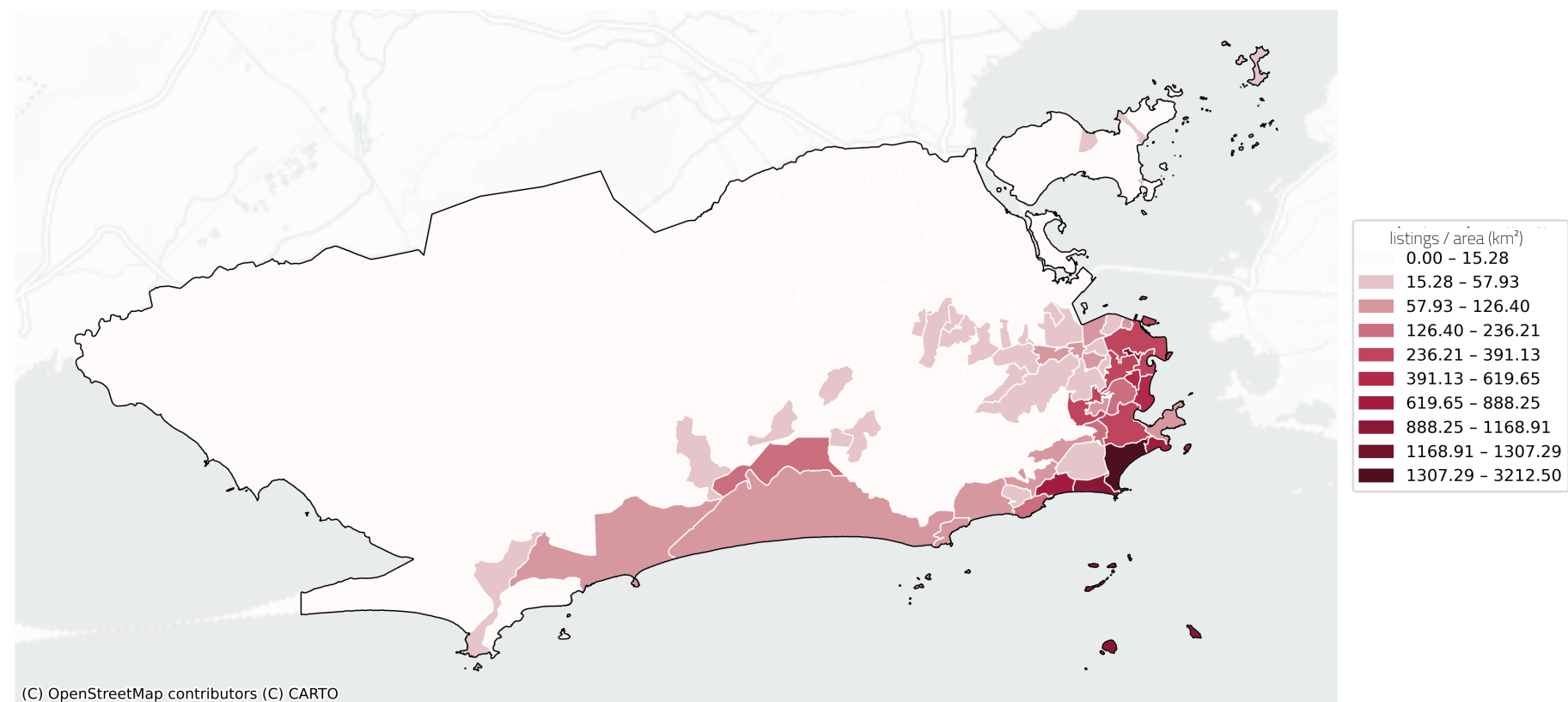
² As neighborhoods in Rio de Janeiro vary greatly in their territorial extent, the density of listings (number of listings/km²) was calculated for each neighborhood in order to identify those with the highest concentration of accommodations. The citywide average listing density was also calculated, reaching 35.35 listings/km². To interpret this figure, it is necessary to consider that Rio de Janeiro contains extensive non-buildable areas, such as Tijuca National Park and Pedra Branca State Park. Thus, listing density may vary significantly between cities depending on their spatial configuration. A city may present a low average density while still concentrating a large number of accommodations in specific areas. This understanding is especially important when conducting comparative analyses between cities.

Figure 20 – Rio de Janeiro: Number of listings by neighborhood



Source: Author’s own work, based on the data collection conducted by Inside Airbnb on 26-05-2025.

Figure 21 – Rio de Janeiro: listing density by neighborhood



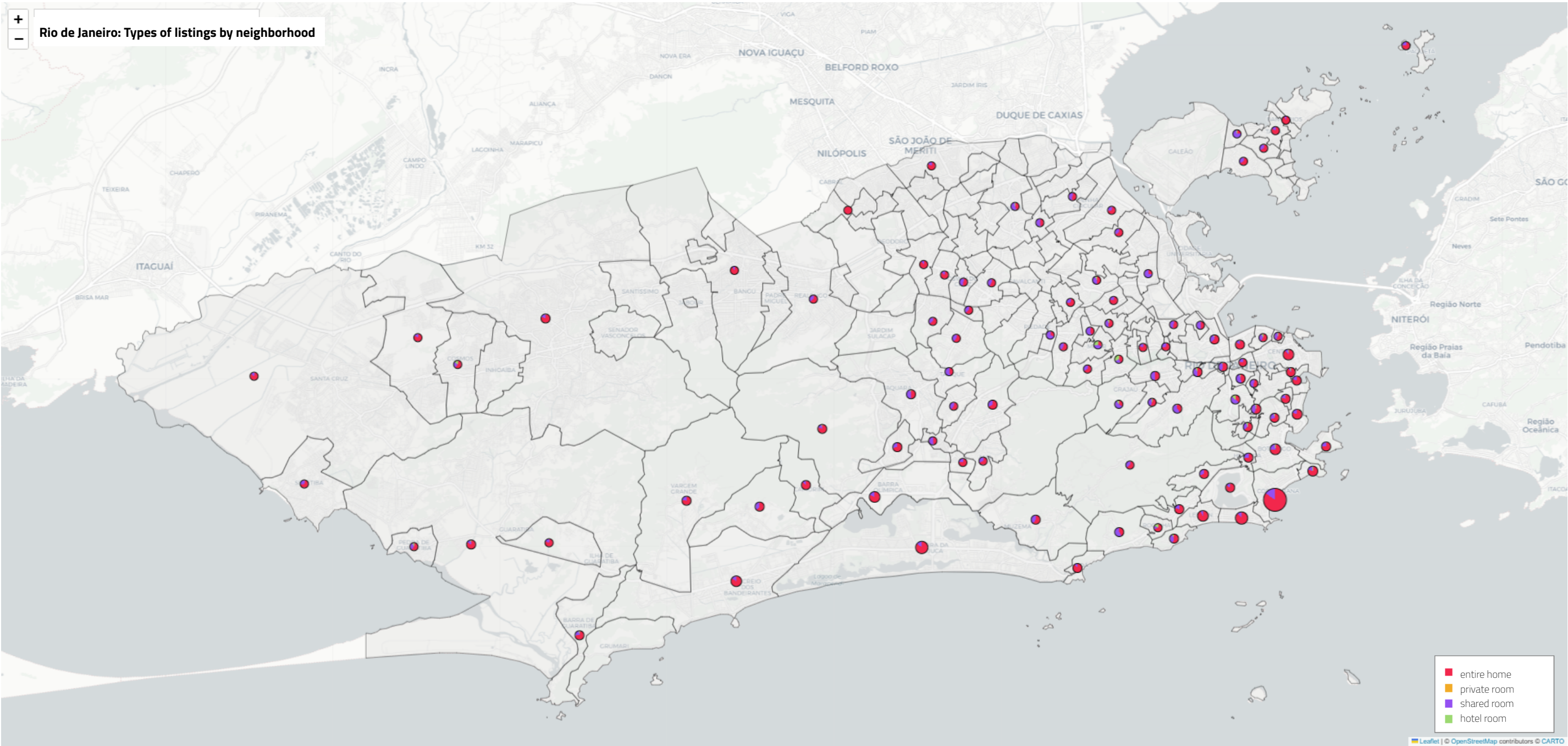
Source: Author’s own work, based on the data collection conducted by Inside Airbnb on 26-05-2025.

Table 3 – Rio de Janeiro: Distribution of Istings by neighborhood

Neighborhood	Number of listings	% of listings	Listing density	Number of listings by type				Percentage of listings by type			
				Entire homes	Private rooms	Shared rooms	Hotel rooms	Entire homes	Private rooms	Shared rooms	Hotel rooms
Copacabana	13174	30,94%	3212,49	11173	1914	86	1	84,81%	14,53%	0,65%	0,01%
Ipanema	3606	8,47%	1168,91	3191	403	11	1	88,49%	11,18%	0,31%	0,03%
Barra da Tijuca	3559	8,36%	76,91	3056	499	2	2	85,87%	14,02%	0,06%	0,06%
Recreio dos Bandeirantes	2126	4,99%	69,35	1779	341	6	0	83,68%	16,04%	0,28%	0,00%
Botafogo	1877	4,41%	391,12	1366	489	19	3	72,78%	26,05%	1,01%	0,16%
Leblon	1866	4,38%	866,65	1723	140	1	2	92,34%	7,50%	0,05%	0,11%
Barra Olímpica	1805	4,24%	164,49	1479	319	4	3	81,94%	17,67%	0,22%	0,17%
Centro	1734	4,07%	319,64	1542	177	12	3	88,93%	10,21%	0,69%	0,17%
Santa Teresa	1483	3,48%	287,56	833	593	55	2	56,17%	39,99%	3,71%	0,13%
Flamengo	971	2,28%	589,82	782	187	2	0	80,54%	19,26%	0,21%	0,00%
Leme	868	2,04%	888,25	692	165	11	0	79,72%	19,01%	1,27%	0,00%
Jacarepaguá	733	1,72%	10,74	591	121	20	1	80,63%	16,51%	2,73%	0,14%
Laranjeiras	589	1,38%	236,21	400	185	4	0	67,91%	31,41%	0,68%	0,00%
São Conrado	491	1,15%	75,67	201	288	2	0	40,94%	58,66%	0,41%	0,00%
Tijuca	440	1,03%	43,71	175	250	15	0	39,77%	56,82%	3,41%	0,00%
Catete	422	0,99%	619,65	333	78	11	0	78,91%	18,48%	2,61%	0,00%
Lapa	390	0,92%	1307,29	349	34	3	4	89,49%	8,72%	0,77%	1,03%
Glória	360	0,85%	315,77	288	72	0	0	80,00%	20,00%	0,00%	0,00%
Vidigal	359	0,84%	221,41	199	135	25	0	55,43%	37,60%	6,96%	0,00%
Lagoa	296	0,70%	57,92	247	48	1	0	83,45%	16,22%	0,34%	0,00%
Camorim	248	0,58%	33,73	215	33	0	0	86,69%	13,31%	0,00%	0,00%
Gávea	236	0,55%	91,48	186	50	0	0	78,81%	21,19%	0,00%	0,00%
Jardim Botânico	223	0,52%	82,92	158	65	0	0	70,85%	29,15%	0,00%	0,00%
Humaitá	201	0,47%	190,61	151	50	0	0	75,12%	24,88%	0,00%	0,00%
Itanhangá	187	0,44%	14,16	111	75	1	0	59,36%	40,11%	0,53%	0,00%
Barra de Guaratiba	181	0,43%	19,16	135	45	1	0	74,59%	24,86%	0,55%	0,00%
Urca	172	0,40%	74,16	133	39	0	0	77,33%	22,67%	0,00%	0,00%
Vargem Pequena	169	0,40%	11,70	103	64	2	0	60,95%	37,87%	1,18%	0,00%
Taquara	166	0,39%	12,56	83	79	4	0	50,00%	47,59%	2,41%	0,00%
Joá	161	0,38%	95,28	141	20	0	0	87,58%	12,42%	0,00%	0,00%
Guaratiba	155	0,36%	1,17	128	25	2	0	82,58%	16,13%	1,29%	0,00%
Campo Grande	153	0,36%	1,46	124	27	2	0	81,05%	17,65%	1,31%	0,00%
Santo Cristo	150	0,35%	89,03	127	19	4	0	84,67%	12,67%	2,67%	0,00%
Vargem Grande	150	0,35%	3,80	118	32	0	0	78,67%	21,33%	0,00%	0,00%
Vila Isabel	147	0,35%	45,69	74	72	1	0	50,34%	48,98%	0,68%	0,00%
Freguesia (Jacarepaguá)	142	0,33%	13,74	97	44	1	0	68,31%	30,99%	0,70%	0,00%
Rio Comprido	141	0,33%	42,18	51	70	20	0	36,17%	49,65%	14,18%	0,00%
Maracanã	137	0,32%	82,16	68	59	10	0	49,64%	43,07%	7,30%	0,00%
São Cristóvão	126	0,30%	30,68	81	42	3	0	64,29%	33,33%	2,38%	0,00%
Praça da Bandeira	91	0,21%	126,40	50	36	4	1	54,95%	39,56%	4,40%	1,10%
Curicica	87	0,20%	26,05	63	24	0	0	72,41%	27,59%	0,00%	0,00%
Cosme Velho	87	0,20%	97,47	55	26	6	0	63,22%	29,89%	6,90%	0,00%
Estácio	83	0,19%	84,65	38	42	3	0	45,78%	50,60%	3,61%	0,00%
Engenho de Dentro	72	0,17%	18,36	44	28	0	0	61,11%	38,89%	0,00%	0,00%
Grajaú	71	0,17%	12,37	23	42	6	0	32,39%	59,15%	8,45%	0,00%
Pechincha	65	0,15%	22,96	39	26	0	0	60,00%	40,00%	0,00%	0,00%
Anil	62	0,15%	17,71	42	20	0	0	67,74%	32,26%	0,00%	0,00%
Méier	62	0,15%	25,09	20	26	16	0	32,26%	41,94%	25,81%	0,00%
Paquetá	58	0,14%	34,00	44	14	0	0	75,86%	24,14%	0,00%	0,00%
Andaraí	55	0,13%	24,32	31	22	2	0	56,36%	40,00%	3,64%	0,00%

Source: Author’s own work, based on the data collection conducted by Inside Airbnb on 26-05-2025.
Methodological note: The 50 neighborhoods with the highest number of listings were selected.

Figure 22 – Rio de Janeiro: Types of listings by neighborhood



Source: Author's own work, based on the data collection conducted by Inside Airbnb on 26-05-2025.
Methodological note: For visualization purposes, only neighborhoods with more than ten listings were considered.

Before advancing in the analysis of the data, let us examine more closely what the advance of capital and the concentration of listings in a neighborhood reveal about the interscalar processes of capital circulation. Up to this point, we have understood that, by listing an accommodation on Airbnb, a property owner advances capital (M) for the production of lodging and then adds, directly or indirectly, new value to this accommodation (C). Mainly in the forms of *entire homes* and *private rooms*, the means of production for lodging are advanced primarily in the South, West, and central regions of the city, with the neighborhood of Copacabana standing out both in absolute and relative terms. When considering the spatial relations expressed by the distribution of tourist accommodations in Rio de Janeiro, at least two interconnected movements can be observed: at the global scale, the platform penetrates from the center toward the periphery, that is, from a core country into a peripheral country; and at the local scale, this penetration becomes territorialized first in areas better prepared to receive this modernization, that is, areas better integrated into the global circuits of capital circulation, as is the case of Copacabana. As Santos emphasizes:

In each period, the system seeks to impose characteristic forms of modernization, an operation that proceeds from the center toward the periphery. This is not a random operation. The spaces affected are those that, at a given moment, respond to the needs of growth or functioning of the system in relation to its center. (Santos, 1985, p. 31)

At another moment, Santos reminds us that the existence of unequal geographies also defines configurations “better prepared for certain innovations than others” (Santos, 1985, p. 50), giving rise to: (a) areas where innovations are immediately accepted and integrated; (b) areas where changes are necessary for integration into the system; and (c) areas where existing forms are relatively opposed to innovations (Santos, 1985, p. 50). Following Santos’s reasoning, listing density is interpreted less as the physical concentration of tourist accommodations and more as an indication of the degree of integration of certain areas of the city into the global economic system. This understanding helps clarify why Copacabana alone accounts for 30.94% of all listings in Rio de Janeiro, especially when we turn to the analysis of the urban economy through its two circuits. In this neighborhood, which functions as a subcentrality of the city (Abreu, 2006), Airbnb benefits from a historically established tourist orientation that shapes the main interactions between the upper and lower circuits in the South Zone through,

for example, events that intensify economic activities, such as the New Year's Eve celebration in Copacabana, which annually attracts visitors from around the world to Rio de Janeiro.

Among the actors that have traditionally composed the upper circuit in Copacabana and its surroundings through the tourism sector are large hotels and national and international hotel chains, sponsors, event production companies, and the State. Within the lower circuit are, for example, service providers, street vendors, and, more recently, Airbnb hosts as well. Thus, in Copacabana, Airbnb comes to benefit from interactions with consolidated circuits that predate platformization, relying on an organization and capital investments already in place and relatively more sophisticated than those found in other areas of the city. These local specificities ensure that demands originating outside the city are more easily incorporated into neighborhood dynamics. This occurs because, in a context of capital unification commanded by the center, production and consumption become increasingly dependent on dynamics defined externally. As a consequence of this process, one also observes what Santos calls *deculturation*, in which traditions and forms of social relations are "replaced by new forms of relations whose roots are foreign and whose adaptation to place has a purely commercial foundation" (Santos, 1978, p. 46). Added to this process is the possibility of exploiting already existing demands through old and renewed desires, such as the desire of a tourist to stay specifically in Copacabana rather than in another area of the city, including surrounding neighborhoods.

If there are, therefore, areas differentiated according to their degrees of integration into the global economic circuit, the concentration of listings, rather than spatially expressing an opposition between traditional and modern, backward and advanced, or even between what is of interest to capital and what is not — a dualism already refuted by theorists dedicated to understanding underdevelopment — signals where capital is already able to fully realize itself and where it still encounters barriers. It is through this perspective that the analysis of the supply of accommodations in Rio de Janeiro is proposed throughout Chapters 3 and 4. As we have seen, similarly to other cities around the world, Airbnb listings have become territorialized primarily in tourist neighborhoods, such as Copacabana and its surroundings, as well as in neighborhoods associated with cultural activities and nightlife, such as Lapa and Santa Teresa. Let us now examine how Airbnb territorializes itself within Rio's favelas.

In a quantitative analysis based on the crossing of Airbnb data with the boundaries of Rio de Janeiro's favelas³, it was found that there are 845 listings distributed across 134 favelas, out of the 1,072 registered in the city, corresponding to 1.98% of the city's total listings. It should be emphasized that the quantitative analysis of listings in favelas faces initial limitations due to the characteristics of the geo-spatial data available on Airbnb's website, which compromise their precision when applied to small-scale areas, since the geographic coordinates provided by Airbnb are approximate and may present an inaccuracy of up to 150 meters in relation to the original address⁴. This difficulty is intensified by the fact that some of these favelas are located near areas with a high density of listings, such as the favelas Morro do Cantagalo, Pavão-Pavãozinho, Babilônia, and Chapéu Mangueira, located in Copacabana and Ipanema.

Currently, the favelas with the highest number of listings are: Parque Chico Mendes, with 138 listings; Vidigal, with 130; Morro do Cantagalo, with 68; Pavão-Pavãozinho, with 65; Babilônia, with 53; Rocinha, with 36; Morro dos Cabritos, with 26; Vila Santo Amaro, with 24; Chapéu Mangueira, with 19; and Ladeira dos Tabajaras, with 11 listings. The vast majority of these favelas are located in the South Zone of Rio de Janeiro⁵ (Figure 23). In general terms, the data show that Airbnb has expanded its presence even into areas with undefined property ownership, as is the case in much of Rio's favelas. In this sense, it is demonstrated that, for Airbnb, at least in a first moment — that of territorial penetration —, it matters little who holds the monopoly over land at the local level, so long as housing units can be incorporated as fixed capital and commodified as tourist accommodations. This is because territorial penetration constitutes a first stage in Airbnb's monopolistic expansion, followed by a process of territorial expansion that tends to make the local production process increasingly complex and organized through the activities of different actors from both economic circuits, such as professional hosts, property management companies, outsourced workers, and also actors involved in housing production.

³ Shapefile available on the DATA.Rio website and referring to the year 2019. Available at: <https://www.data.rio/datasets/PCRJ::limite-favelas-2019/explore>

⁴ More information at: <https://insideairbnb.com/data-assumptions/>

⁵ It should be emphasized that the data were aggregated by favela rather than by complexes — that is, groupings of favelas. Furthermore, given the limitations presented by the quantitative analysis, it is understood that a more in-depth study of the supply of Airbnb accommodations in Rio's favelas requires a qualitative approach, such as ethnographic research, capable of characterizing this supply through its local specificities and capturing territorial and social nuances that would hardly be apprehended solely through quantitative data.

Figure 23 – Rio de Janeiro: Airbnb listings in favelas

a. Distribution of Airbnb Listings in the Parque Chico Mendes Favela and Surrounding Areas, in the Recreio dos Bandeirantes Neighborhood (26-05-2025)



b. Distribution of Airbnb Listings in the Babilônia and Chapéu Manguera Favelas, in the Leme Neighborhood and Along the Border with Botafogo and Urca (26-05-2025)



c. Distribution of listings in the Cantagalo and Pavão-Pavãozinho favelas, between the neighborhoods of Copacabana, Ipanema, and Lagoa (2025-05-26)



d. Distribution of listings in the Rocinha and Vidigal favelas and surrounding areas, between the neighborhoods of Leblon and São Conrado (2025-05-26)



e. Distribution of listings in the Morro dos Cabritos and Ladeira dos Tabajaras favelas and surrounding areas, between the neighborhoods of Copacabana and Lagoa (2025-05-26)



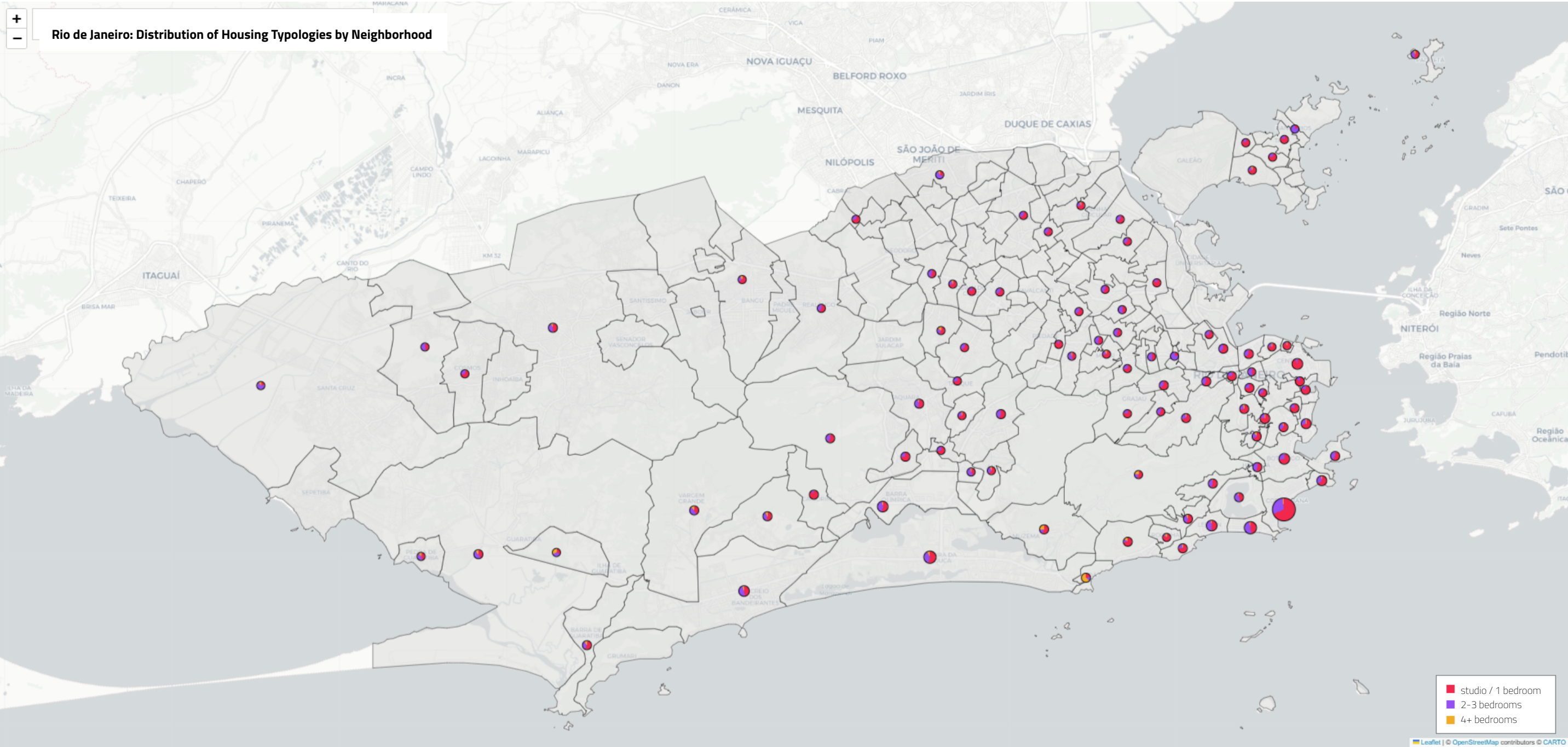
Source: Prepared by the author, based on data collected by Inside Airbnb on 2025-05-26.
Methodological note: The buffer area has a width of 150 meters.

Furthermore, as the data and maps demonstrate, Airbnb's penetration into favelas is guided especially by proximity to areas already integrated into the tourist circuit. In this process, Airbnb acts as a vector of touristification, subordinating these territories to external demands and integrating them into the global economy as its territorial penetration advances and capital is realized through the creation or stimulation of an effective demand for consumption. In cases where integration into the tourist circuit already exists, such as in Vidigal, conditions that facilitate this penetration can be observed. In this sense, the tendency is for Airbnb's territorial penetration to intensify in favelas where accommodations are already being offered and to expand into other favelas, following the broader trends of Airbnb activity expansion in the city of Rio de Janeiro. Finally, this dynamic tends to intensify conflicts over land tenure, as these territories become incorporated into the global circulation of capital and converted into sources of expanded land rent.

Following the analysis of Airbnb in Rio's favelas, the supply of listings was also examined according to the housing typologies advertised on the platform, with the objective of identifying the main typologies exploited by the local short-term rental market, thereby indicating what type of property has been advanced by owners. For this purpose, three categories⁶ of analysis were defined for the set of entire home listings: (1) studios or one-bedroom properties; (2) two- and three-bedroom properties; and (3) properties with four bedrooms or more. In general terms, 56.37% of the city's tourist accommodation supply is composed of studios and one-bedroom properties, 39.82% of two- or three-bedroom properties, and 3.81% of properties with four bedrooms or more. The neighborhoods with the highest number of listings — considering the sum of the three categories — present a relatively diverse typological composition (Figure 24; Table 4), generally divided between categories 1 and 2.

⁶ The *bedrooms* attribute was used. Specifically in the case of studios, properties with bedrooms equal to zero were considered, while listings with null values were excluded.

Figure 24 – Rio de Janeiro: Distribution of housing typologies by neighborhood



Source: Prepared by the author, based on data collected by Inside Airbnb on 26-05-2025.

Methodological note: For visualization purposes, only neighborhoods with more than ten listings were considered, based on the sum of the three categories.

Table 4 – Rio de Janeiro: Distribution of housing typologies by neighborhood

Number of listings by housing typology							
Percentage of listings by housing typology							
Neighborhood	Total listings across the three categories*	Studio or 1 bedroom	2 or 3 bedrooms	4 bedrooms or more	Studio or 1 bedroom	2 or 3 bedrooms	4 bedrooms or More
Copacabana	11120	7143	3720	257	64,24%	33,45%	2,31%
Ipanema	3185	1340	1733	112	42,07%	54,41%	3,52%
Barra da Tijuca	3043	1481	1322	240	48,67%	43,44%	7,89%
Recreio dos Bandeirantes	1778	702	967	109	39,48%	54,39%	6,13%
Leblon	1722	817	865	40	47,44%	50,23%	2,32%
Centro	1535	1415	117	3	92,18%	7,62%	0,20%
Barra Olímpica	1476	622	841	13	42,14%	56,98%	0,88%
Botafogo	1360	872	473	15	64,12%	34,78%	1,10%
Santa Teresa	826	565	233	28	68,40%	28,21%	3,39%
Flamengo	772	504	260	8	65,28%	33,68%	1,04%
Leme	690	380	298	12	55,07%	43,19%	1,74%
Jacarepaguá	590	292	288	10	49,49%	48,81%	1,69%
Laranjeiras	396	190	191	15	47,98%	48,23%	3,79%
Lapa	343	295	46	2	86,01%	13,41%	0,58%
Catete	332	244	84	4	73,49%	25,30%	1,20%
Glória	285	219	61	5	76,84%	21,40%	1,75%
Lagoa	247	90	140	17	36,44%	56,68%	6,88%
Camorim	212	183	28	1	86,32%	13,21%	0,47%
São Conrado	201	81	54	66	40,30%	26,87%	32,84%
Vidigal	197	120	67	10	60,91%	34,01%	5,08%
Gávea	186	77	92	17	41,40%	49,46%	9,14%
Tijuca	175	74	97	4	42,29%	55,43%	2,29%
Jardim Botânico	157	68	81	8	43,31%	51,59%	5,10%
Humaitá	151	63	86	2	41,72%	56,95%	1,32%
Joá	140	22	20	98	15,71%	14,29%	70,00%
Barra de Guaratiba	135	72	55	8	53,33%	40,74%	5,93%
Urca	133	67	64	2	50,38%	48,12%	1,50%
Guaratiba	127	40	69	18	31,50%	54,33%	14,17%
Santo Cristo	127	78	49	0	61,42%	38,58%	0,00%
Campo Grande	123	52	62	9	42,28%	50,41%	7,32%
Vargem Grande	118	39	62	17	33,05%	52,54%	14,41%
Itanhangá	110	37	28	45	33,64%	25,45%	40,91%
Vargem Pequena	103	29	61	13	28,16%	59,22%	12,62%
Freguesia (Jacarepaguá)	97	37	59	1	38,14%	60,82%	1,03%
Taquara	83	24	54	5	28,92%	65,06%	6,02%
São Cristóvão	81	37	44	0	45,68%	54,32%	0,00%
Vila Isabel	74	30	43	1	40,54%	58,11%	1,35%
Maracanã	68	21	46	1	30,88%	67,65%	1,47%
Curicica	63	43	19	1	68,25%	30,16%	1,59%
Cosme Velho	55	27	20	8	49,09%	36,36%	14,55%
Rio Comprido	51	18	26	7	35,29%	50,98%	13,73%
Praça da Bandeira	50	32	18	0	64,00%	36,00%	0,00%
Paquetá	43	19	21	3	44,19%	48,84%	6,98%
Engenho de Dentro	44	18	25	1	40,91%	56,82%	2,27%
Anil	42	21	18	3	50,00%	42,86%	7,14%
Pechincha	39	23	15	1	58,97%	38,46%	2,56%
Estácio	38	20	18	0	52,63%	47,37%	0,00%
Alto da Boa Vista	32	14	7	11	43,75%	21,88%	34,38%
Jardim Guanabara	32	20	9	3	62,50%	28,13%	9,38%
Santa Cruz	32	5	24	3	15,63%	75,00%	9,38%

Source: Prepared by the author, based on data collected by Inside Airbnb on 26-05-2025.

Note: The sum of the three categories does not always match the total number of entire home listings, as there are cases in which the number of bedrooms is null.

In Copacabana, the supply is composed predominantly of studios and one-bedroom properties (64.24%), followed by two- and three-bedroom properties (33.45%). In Ipanema, in turn, most of the supply consists of two- and three-bedroom properties (54.4%), followed by 42.07% studios and one-bedroom properties. In Barra da Tijuca, the distribution is more balanced: 48.67% studios and one-bedroom properties and 43.44% two- and three-bedroom properties, in addition to a more expressive share of properties with four or more bedrooms (7.89%). The same occurs in Leblon, with 50.23% of the supply consisting of two- and three-bedroom properties and 47.44% of studios and one-bedroom properties. In Recreio dos Bandeirantes, more than half of the listings (54.39%) consist of two- and three-bedroom properties, followed by 39.48% studios and one-bedroom properties and 6.13% properties with four or more bedrooms. Central neighborhoods and those at the beginning of the South Zone present high shares of the first category: 92.18% of Centro's supply consists of studios and one-bedroom properties; in Lapa, the share is 86.01%; in Catete, 73.49%; and in Glória, 76.84%. A high proportion (86.32%) is also identified in Camorim, in the West Zone. Regarding properties with four or more bedrooms, neighborhoods such as Joá, with 70% of the supply, and Itanhangá, with 40.91%, stand out in this category.

The distribution of housing typologies on Airbnb follows the historically constituted housing stock of Rio de Janeiro. In this sense, at least three distinct dynamics can be identified in the composition of the housing stock used by Airbnb:

- In Copacabana and surrounding areas, the accommodations offered derive from the verticalization process initiated in the 1940s, which established a local real estate boom and consolidated the neighborhood as a subcenter of the city. In other words, this is an old and consolidated housing stock that, specifically in Copacabana, is marked by the significant presence of studio apartments as a housing typology and accompanied by a high population density established throughout the twentieth century (Abreu, 2006).
- In Barra da Tijuca and surrounding areas, the housing stock is more recent — the neighborhood's urbanization plan was initiated in 1969 and inspired by North American city models — and is still in formation, especially in surrounding areas and through the stimulation of tourism and the hosting of events, with the 2016 Olympic Games constituting an emblematic example, from which the neighborhood Olympic Barra emerged in 2024. This mega-event accelerated housing production and boosted real estate

valorization in West Zone neighborhoods, which have been progressively integrated into the short-term rental market.

- In the central neighborhoods, the housing stock is composed of buildings from different historical periods, reflecting the very process of formation of the region, marked by the overlapping of different urban plans. Currently, this stock is being expanded and modified through revitalization projects such as *Porto Maravilha* (Complementary Law No. 101/2009) — recently expanded into the neighborhood of São Cristóvão (Complementary Law No. 267/2023) — and *Reviver Centro* (Complementary Law No. 229/2021).

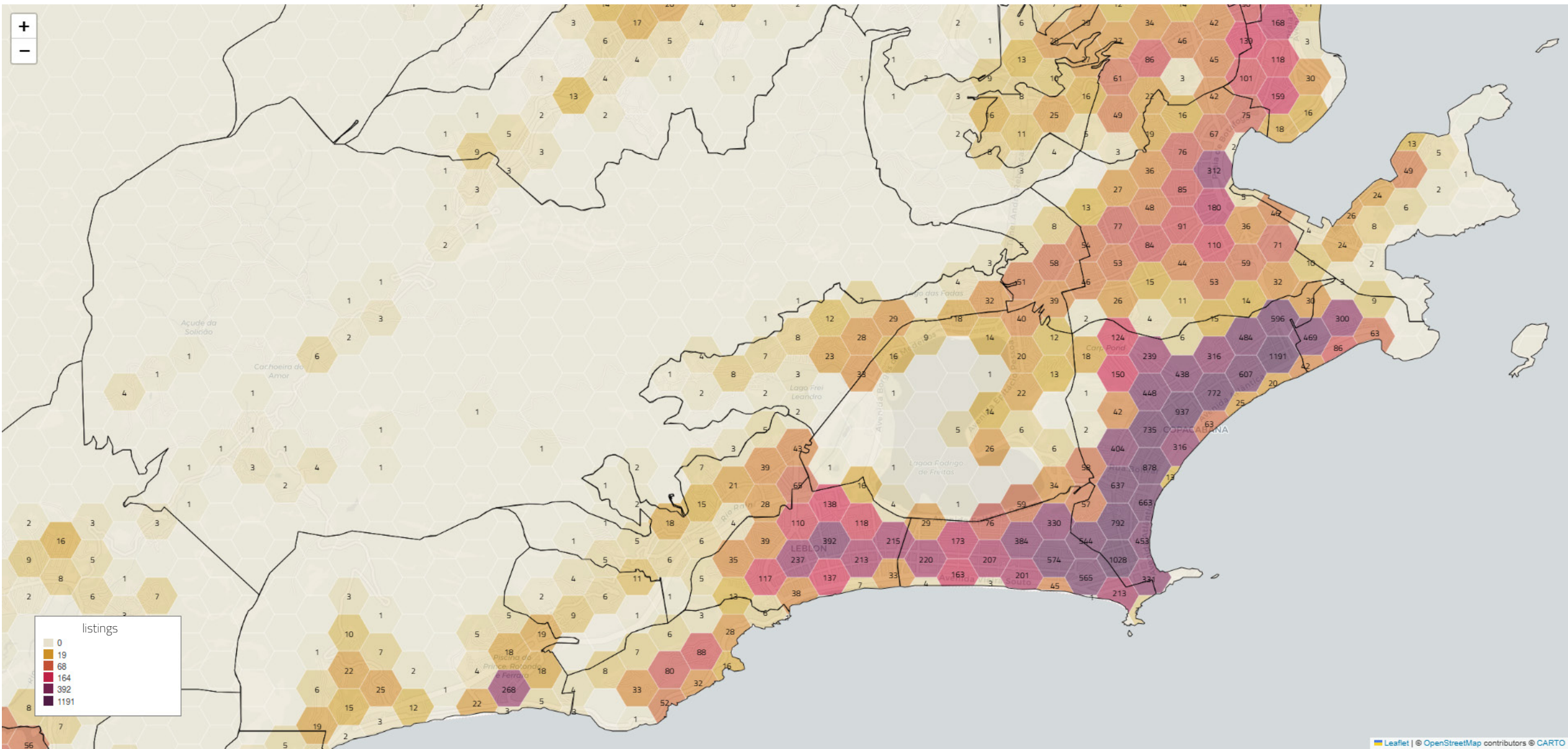
Enabled by these initiatives, real estate developments launched or under construction in the central region of Rio de Janeiro have adopted, as a marketing strategy, the possibility of converting units into tourist accommodations aimed at digital platforms, also including the retrofit of buildings (Stroher; Canan; Santoro, 2024). As a result, these developments become part of the stock of accommodations available to the main platforms operating in the region (Manduca, 2025), thereby establishing coalitions as well as conflicts in the process of reconfiguring the city center (Stroher et al., 2025). Although the governmental projects implemented in the central region rely on a discourse of expanding access to housing, what can be observed is that they are directed toward a restricted segment of the population, prioritize the production of studios as the main housing typology, and stimulate the commodification of housing (Coelho; Ribeiro, 2025). In light of this, it is concluded that Rio de Janeiro's short-term rental market combines the use of the existing housing stock with the expansion of *investment homes* currently under production.

Finally, as the last analytical stage, the distribution of listings within neighborhoods was investigated (Figure 25), through which it was possible to identify at least five main spatial patterns that reveal different degrees of Airbnb's territorial penetration in Rio de Janeiro:

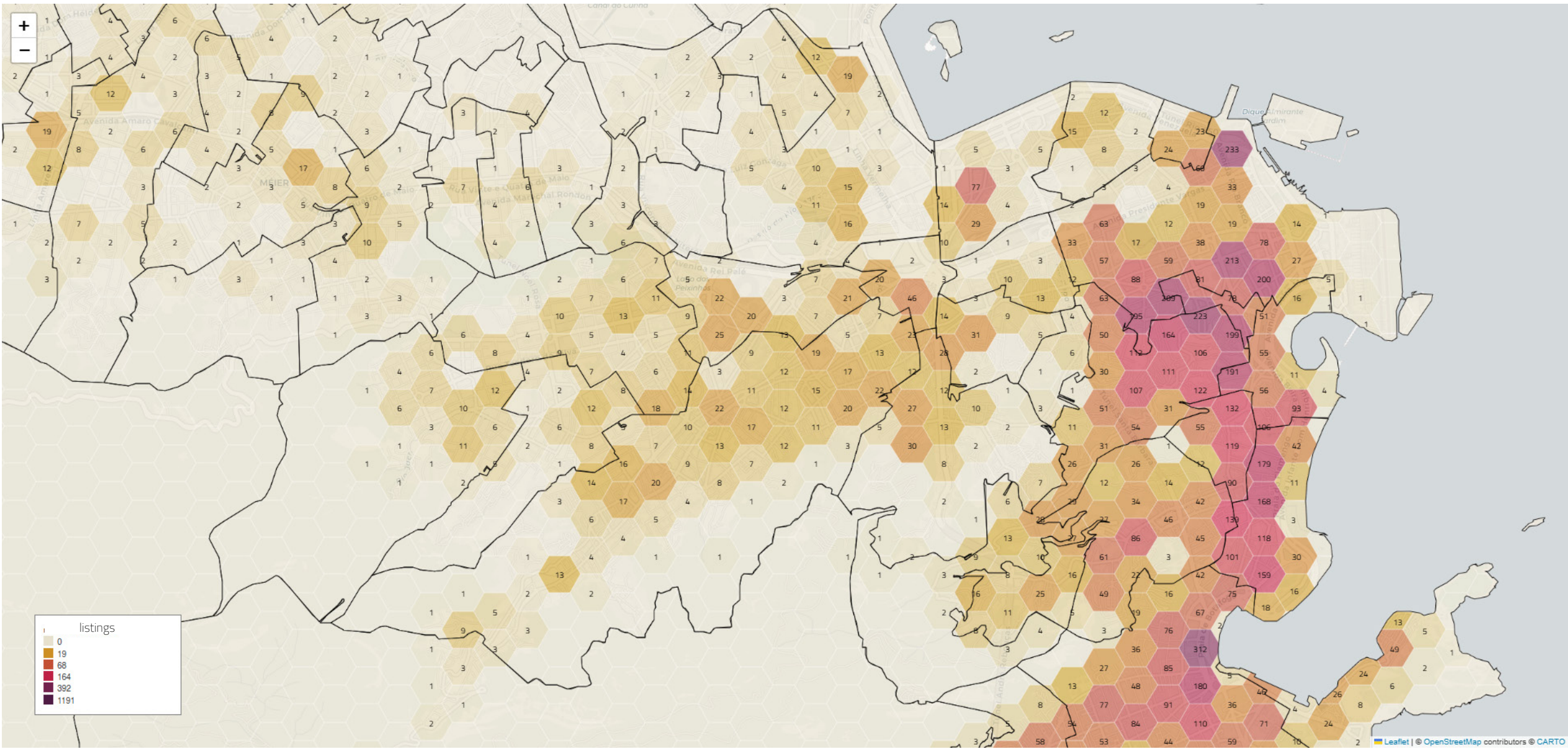
Figure 25 – Rio de Janeiro: Distribution of listings within neighborhoods



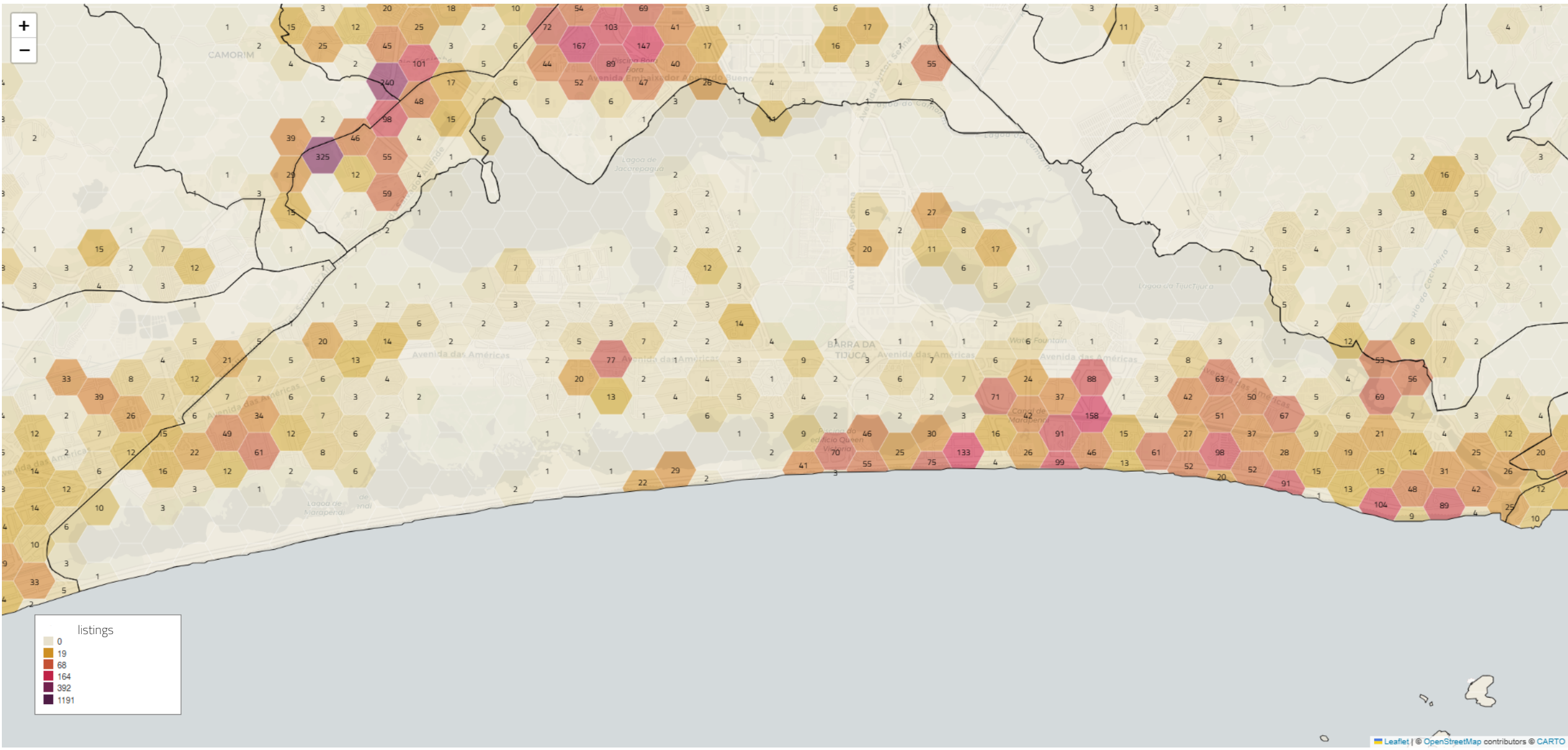
a. Distribution of listings in Copacabana and surrounding neighborhoods (26-05-2025)



b. Distribution of listings in the central region and in neighborhoods of the North Zone (26-05-2025)

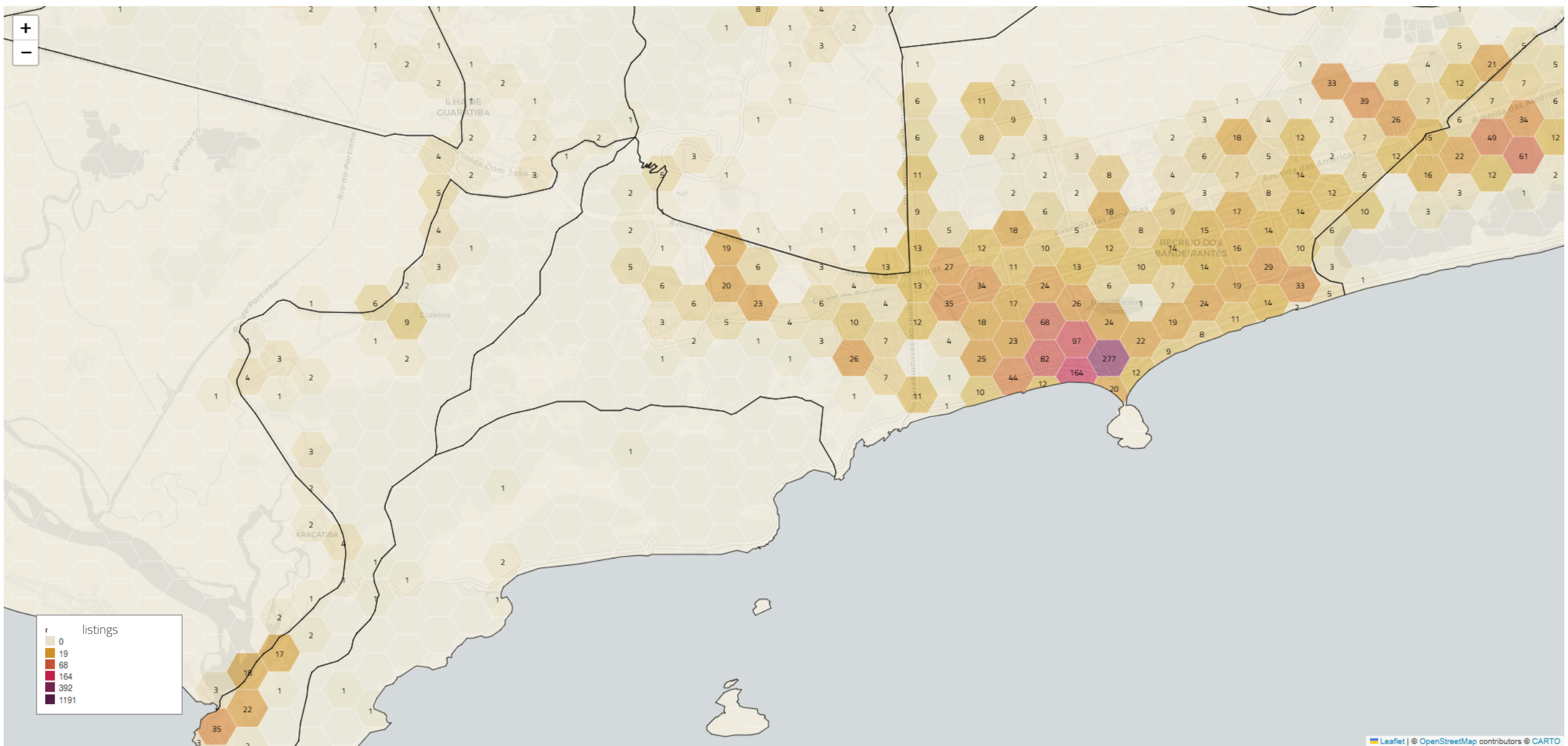


c. Distribution of listings in Barra da Tijuca (26-05-2025)

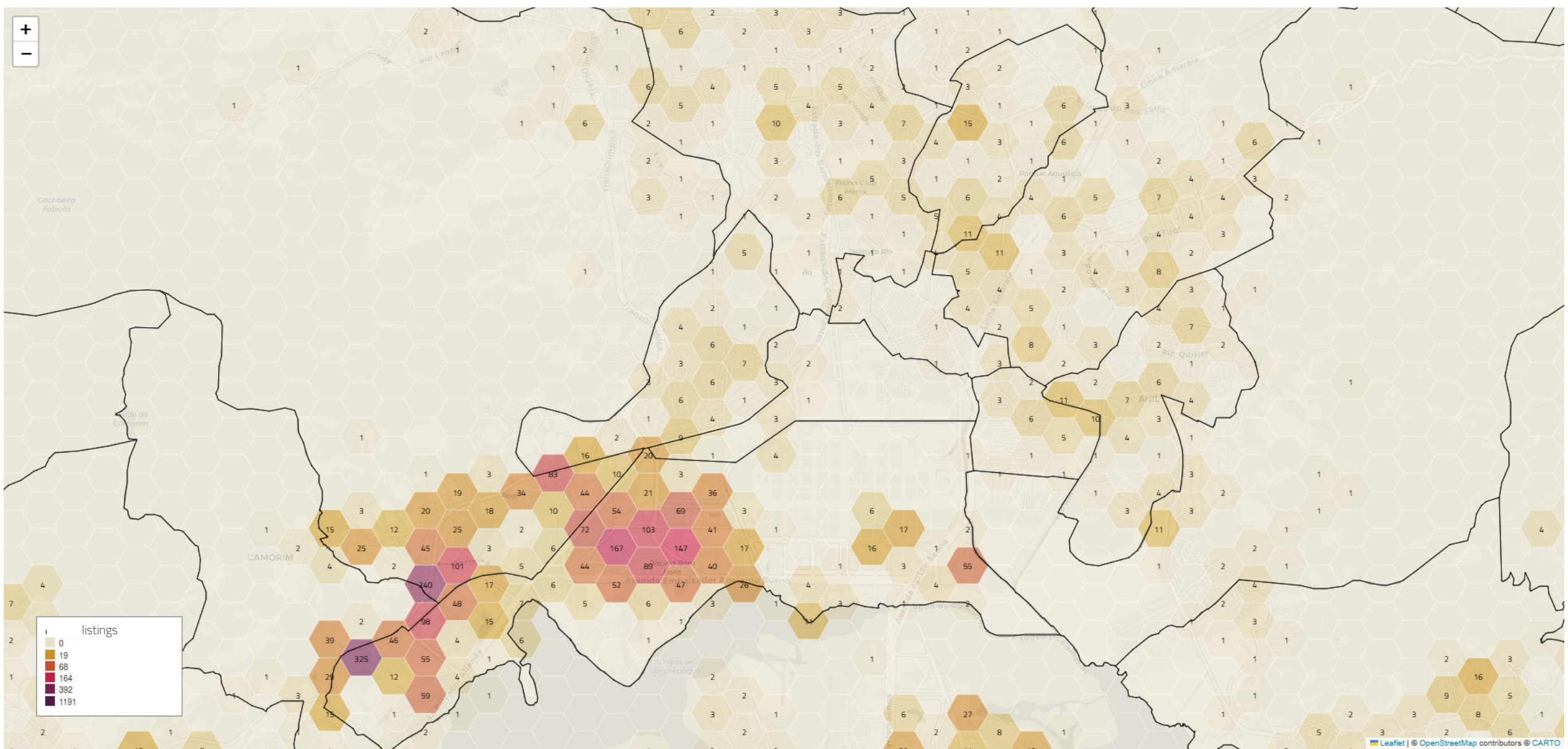


Source: Prepared by the author, based on data collected by Inside Airbnb on 26-05-2025. The full map can be accessed at: <https://alinecruvinel.com/thesis/>

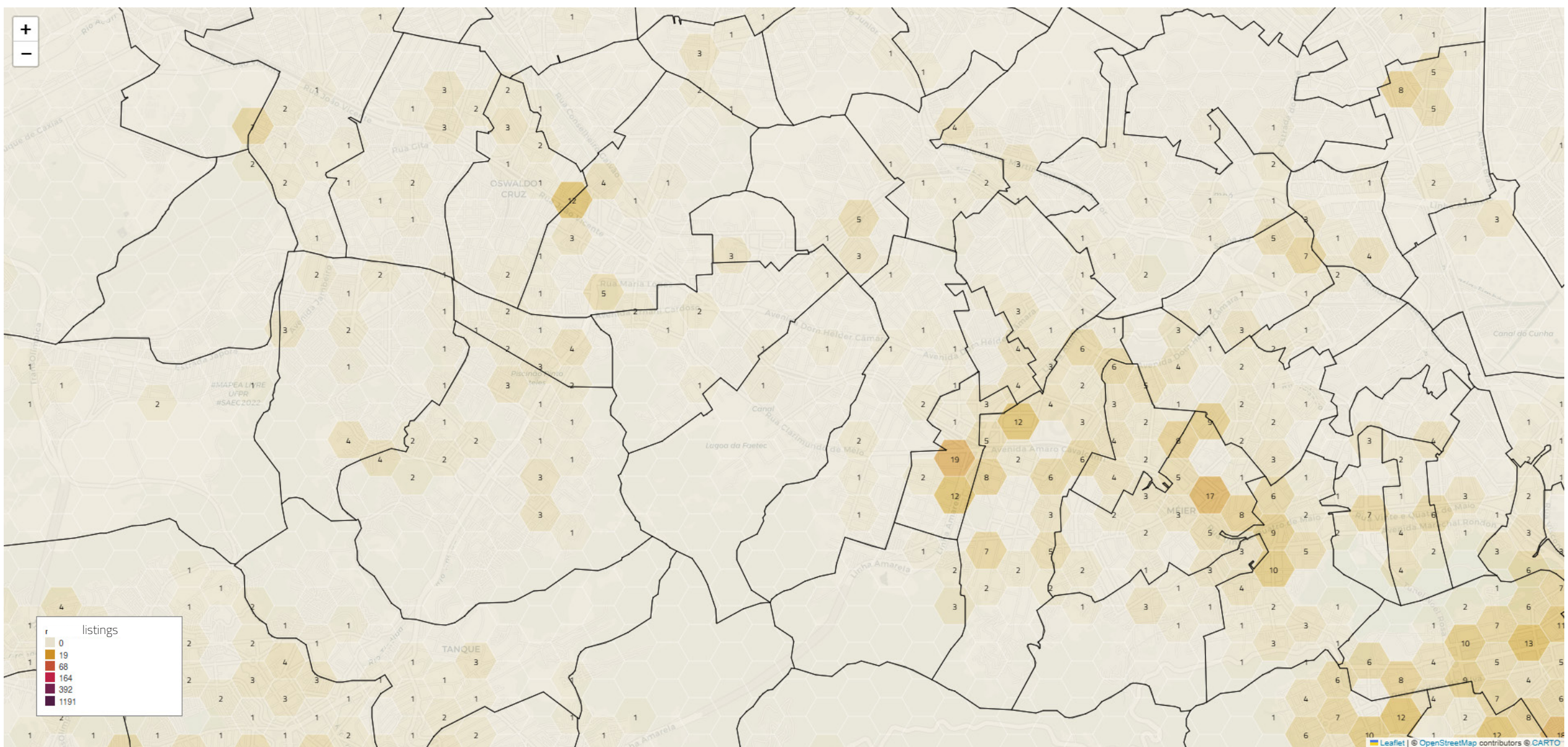
d. Distribution of listings in Recreio dos Bandeirantes and surrounding neighborhoods (26-05-2025)



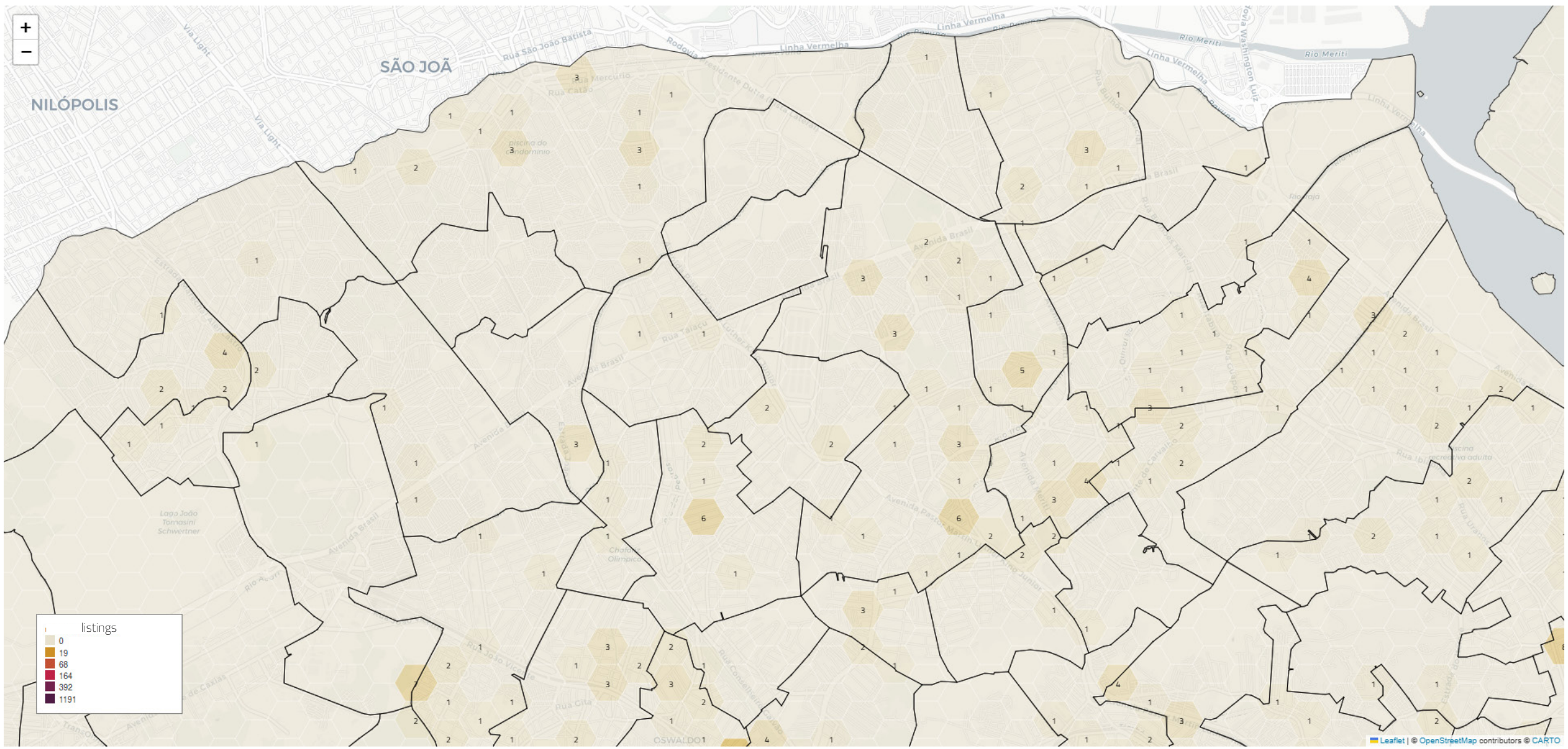
e. Distribution of listings in the Olympic Barra and surrounding neighborhoods (26-05-2025)



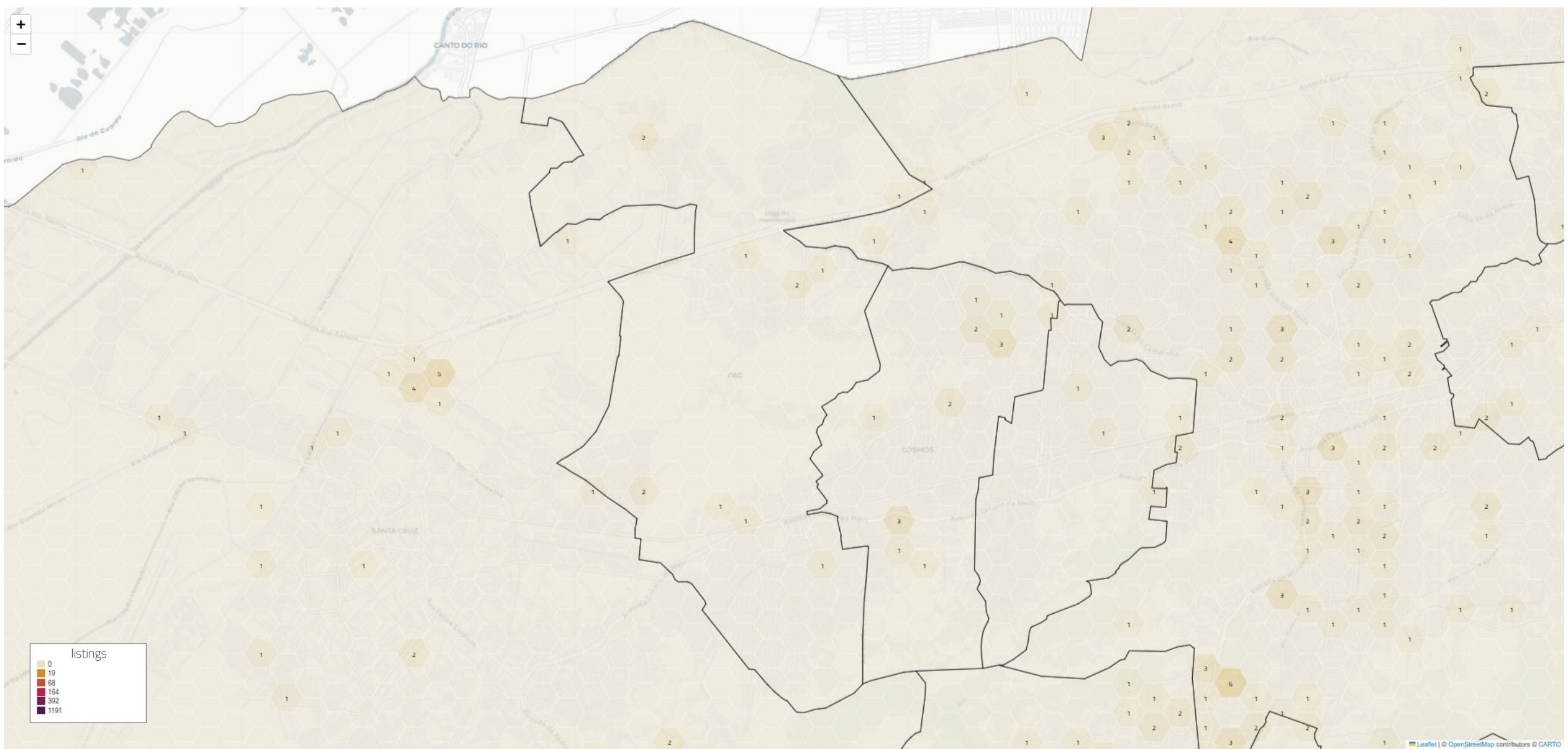
f. Distribution of listings in neighborhoods of the North Zone (26-05-2025)



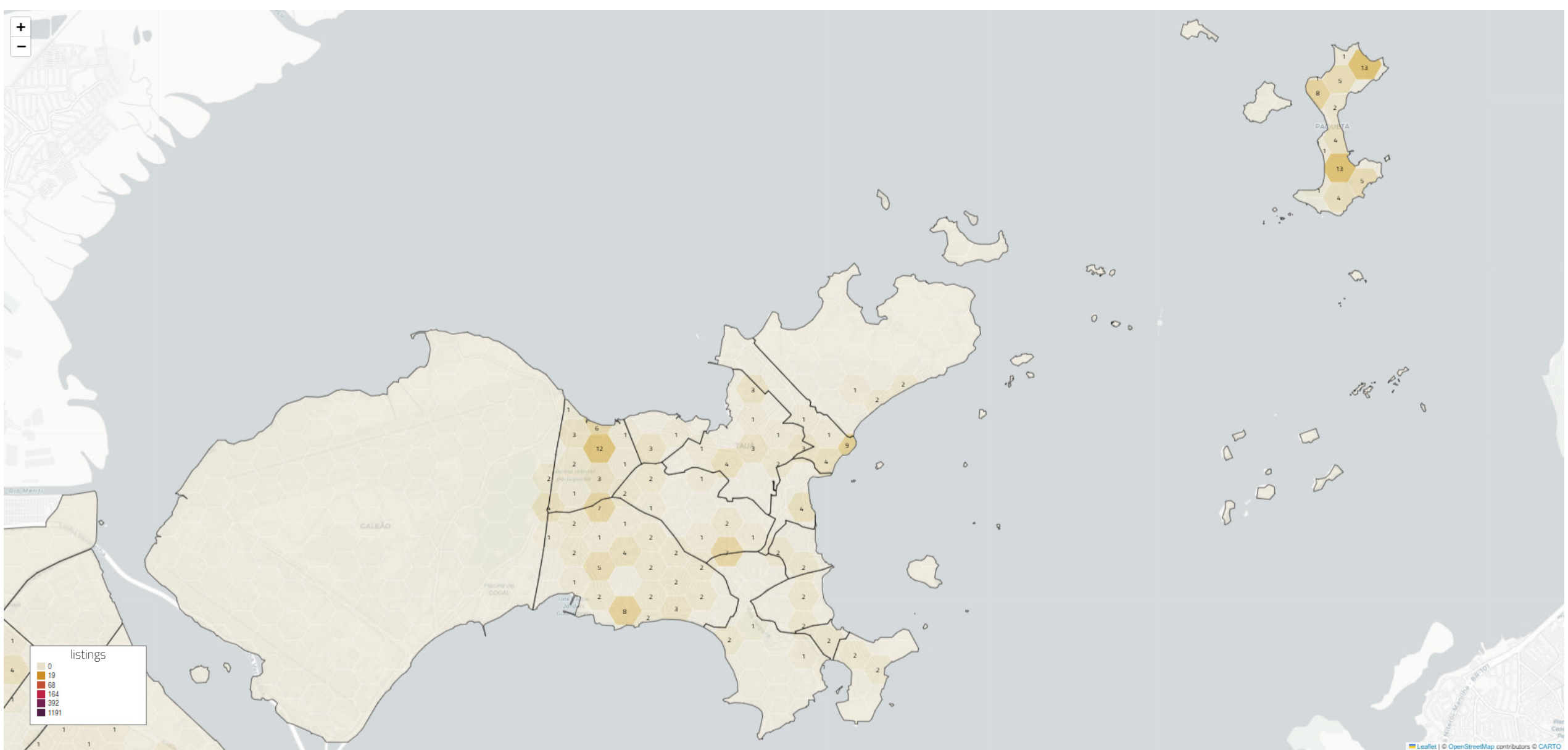
g. Distribution of listings in neighborhoods of the North Zone (26-05-2025)



h. Distribution of listings in neighborhoods of the West Zone (26-05-2025)



i. Distribution of listings on Governor Island and in Paquetá (26-05-2025)



1. *Areas of high concentration*, represented in shades of purple. The largest area of listing concentration in the city covers practically the entire extent of the neighborhood of Copacabana (Figure 25a), which also contains the hexagon with the highest occurrence of listings in the entire city: 1,191 listings near Praça do Lido. The hexagons continue to show high numbers of listings along the entire length of Avenida Nossa Senhora de Copacabana, reaching 1,028 listings near Pedra do Arpoador, between Copacabana and Ipanema. The high concentration of listings gradually becomes less intense toward Ipanema and Leblon. *Areas of high concentration indicate where Airbnb's territorial penetration occurs more easily and benefits from a pre-existing integration into the global economy.*
2. *Areas of localized concentration*, represented by isolated purple or purplish hexagons that stand out not only because of the high number of listings within one or a few hexagons, but also because of the contrast with the distribution of listings in surrounding areas. Examples of this pattern can be observed in: São Conrado, near Morro Dois Irmãos, with a hexagon containing 268 listings, in contrast to neighboring hexagons with at most 22 listings (Figure 25a); Botafogo, near Botafogo Beach, with a hexagon containing 312 listings, accompanied by others with up to 180 listings (Figure 25a); between Olympic Barra, Camorim, and Jacarepaguá, with hexagons containing 325 and 240 listings, surrounded by others with up to 101 listings (Figure 25e); Recreio dos Bandeirantes, near Pedra do Pontal, with a hexagon containing 277 listings and neighboring hexagons with up to 164 listings (Figure 25d); and Centro, in the surroundings of the Museum of Tomorrow, with a hexagon containing 233 listings, accompanied by hexagons with up to 60 listings (Figure 25b). These areas reveal points in the city where Airbnb's territorial penetration intensifies in a localized manner, indicating housing stocks exploited on a more restricted scale and helping identify possible relationships with factors that stimulate short-term rentals, such as proximity to tourist attractions. In some cases, these areas also indicate the operation of companies at the local level and help identify so-called *multifamily buildings* — multifamily buildings managed by a single company and oriented toward large-scale rental activity. *Thus, areas of localized concentration indicate places that currently present greater potential for accumulation, serving as potential expansion nuclei, as well as locations where a greater organization of production and consumption tends to occur.*

3. *Intermediate or transitional areas*, represented by purplish and pinkish tones, encompass both areas of Ipanema and Leblon — influenced by their proximity to Copacabana — and the city's central region, including the beginning of the South Zone. Particularly noteworthy is the stretch between Catete and Centro, which includes parts of Lapa, Santa Teresa, and Glória (Figure 25b). Similar tendencies can also be observed in Olympic Barra. In general, this distribution pattern concentrates a significant volume of listings, although with a lower density than that observed in neighborhoods with the highest concentrations, also configuring itself as an area of potential expansion for the supply of accommodations. *Intermediate or transitional areas indicate places where stimuli are required for the realization of capital and expanded accumulation, which tends to occur through the combination of housing production, investments in urban improvements, and the expansion of effective consumer demand.*
4. *Areas of low and continuous concentration*, represented by hexagons in shades of yellow and orange, where the number of listings is considerably lower than that recorded in areas of higher concentration, but whose distribution extends across different parts of the city. These areas stand out not because of the number of listings within each isolated hexagon, but because of the presence of multiple hexagons distributed throughout the city, often contiguously to the areas of high and intermediate concentration previously described. Areas of low and continuous concentration can be identified in neighborhoods such as Tijuca, Maracanã, Vila Isabel, and Recreio dos Bandeirantes. *These areas demonstrate the diffusion of Airbnb throughout the territory, even in places where the realization of capital does not occur in an accelerated manner and where short-term rental activities, in general, have not yet become professionalized.*
5. *Listings dispersed throughout the city*, present in neighborhoods where a high supply of Airbnb listings is not observed. Examples of this distribution pattern include most neighborhoods in the North Zone and part of the neighborhoods in the West Zone, generally working-class neighborhoods located farther from tourist attractions and characterized by low effective consumer demand. *Dispersed listings indicate the initial movements of Airbnb's expansion into areas where territorial penetration remains residual. The dynamics of these areas, in turn, may be altered as new stimuli to tourism are introduced into the city.*

In this section, we focused on analyzing the supply of Airbnb tourist accommodations in the city of Rio de Janeiro, understanding it as an expression of Airbnb's territorial penetration into the periphery of capitalism through the capital advanced by local property owners. As developed in Chapter 1, this advance enables Airbnb's monopolistic expansion across different cities around the world, consolidating a global network of tourist accommodations. As presented in this section, in the case of Rio de Janeiro, the fixed capital advanced is predominantly characterized by entire home listings distributed across different areas of the city, but especially in neighborhoods of the South Zone, West Zone, and central region, following Rio de Janeiro's traditional tourist circuit. Furthermore, the supply is also present in Rio's favelas, demonstrating Airbnb's territorial penetration even where land monopoly is undefined and indicating that this penetration is facilitated by pre-existing factors, such as the prior integration of these territories into tourism.

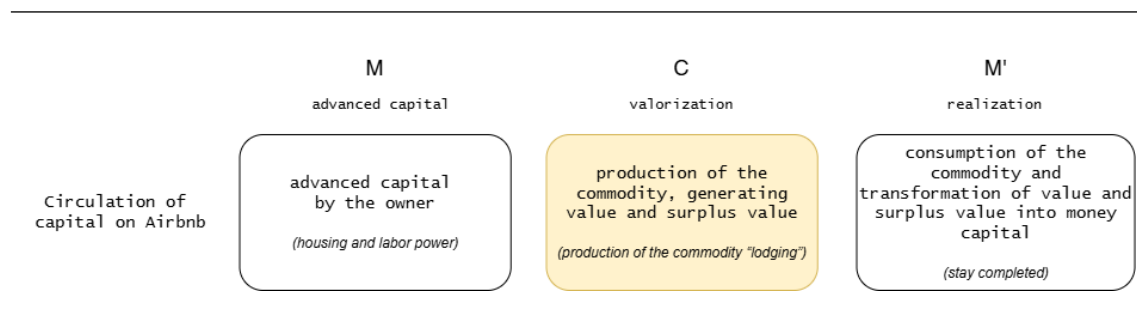
The supply of accommodations has encompassed the existing housing stock — notably studios and one-bedroom properties, but also a significant share of two- and three-bedroom properties — while simultaneously incorporating the housing production currently underway in the city, especially in the central region. These dynamics accompany the progressive linkage between short-term rentals and the local real estate market, which currently directs the production of the housing commodity, under the advertising of the *investment home*, toward the production of the lodging commodity. It can be observed that Airbnb's spatial distribution patterns reveal the current degrees of the platform's territorial penetration in the city of Rio de Janeiro, thereby signaling the degrees of integration and subordination of the local economy to the global economy. In this sense, Airbnb's territorial penetration in the city of Rio de Janeiro reflects the process of deepening economic dependency in cities on the periphery of capitalism through platformization. Finally, this process is understood to tend toward intensification as barriers to the realization of capital are progressively overcome.

Having characterized the supply of accommodations advanced by local property owners, we next analyze how the production of lodging has been organized in the city of Rio de Janeiro through the formation of networks of hosts, co-hosts, and listings.

3.2. Organizing production: networks of hosts, co-hosts, and listings

Once capital has been advanced by the property owner through one of the means of production — housing, which then becomes configured as fixed capital — the production of the *lodging commodity* comes to depend on the availability of labor power to meet guest demand. When demand exists — that is, when a reservation is made by a guest — the commodity is produced, thus following a *just-in-time* model based on production on demand. It is in the stage of commodity production (C) that value and surplus value are produced through the labor of hosts, co-hosts, and other workers involved in the process (Figure 26). Based on this stage, and considering the interdependent processes that constitute the circulation of capital on Airbnb, this section is dedicated to understanding the networks formed by hosts, co-hosts, and listings on the platform in the city of Rio de Janeiro. These networks are understood as revealing the way in which the stage of commodity production (C) has been organized by the platform through the city's two economic circuits, by means of their essential and additional actors, and as representing, on a smaller scale, dynamics that are common to Airbnb's global network of hosts, co-hosts, and listings.

Figure 26 – Circulation of capital on Airbnb: study of the C stage



Source: Prepared by the author.

At this stage, hosts and co-hosts are considered the *forms* most in evidence, exercising the *function* of organizing, at the local scale, the production of the commodity. Through them, it becomes possible to understand processes such as the intensification or reduction of Airbnb's use as a source of labor and income, as well as the consolidation of increasingly complex productive networks that op-

erate as a *structure* territorialized through tourist accommodations. As argued by Santos (1978), such categories are adopted as resources for understanding the dialectics of the capitalist system across different spatial scales. Thus, although this section emphasizes local aspects, the connections identified in Rio de Janeiro are understood as composing a broader network that projects onto the territory the penetration of the global economy into local activities, varying from one place to another. This global network is itself the result of the unification of capital on a global scale, a process studied by Santos as early as the 1970s and which has intensified with platformization. It is no coincidence that cities around the world, despite their specificities, share similarities in the ways they are affected by Airbnb's activities. Understanding these similarities becomes easier when internal and interscalar connections become more evident. Space, in this sense, reveals itself as evidence of this process.

Before identifying some of these connections at the local scale, the first step was to measure the labor involved in the production of lodging. After all, how many hosts and co-hosts are available on Airbnb for on-demand production? To address this question, the number of hosts (Figure 27) and co-hosts (Figure 28) with listings in Rio de Janeiro was calculated, identifying their evolution over time. According to Inside Airbnb data collections⁷, in September 2015 there were 9,456 hosts with listings registered on the platform in the city of Rio de Janeiro. Currently, according to the May 2025 collection, there are 25,016 hosts in the city, representing an increase of 164.6% since 2015. As the data demonstrate, this increase was not constant; on the contrary, it presented fluctuations that follow a variety of factors. This can be observed, for example, through the sharp increase in the number of hosts between June and August 2016 — from 14,688 to 27,965 hosts — during the Olympic Games held in the city, highlighting the role of mega-events as catalysts for the platform's activities. Between July and October 2020, in turn, there was a sharp decline in the number of hosts, reflecting the impacts of the COVID-19 pandemic on tourism and the short-term rental market. As will be discussed in greater detail in Chapter 4, fluctuations in the number of hosts accompany fluctuations in the number of listings.

⁷ For the preparation of the graphs, the unique identifiers of hosts and co-hosts were considered, as well as data collections with valid results. For the city of Rio de Janeiro, Inside Airbnb has host data available since 2015, while co-host data began to be collected in 2023, following the implementation and expansion of Airbnb's co-host network.

Figure 27 – Rio de Janeiro: number of hosts by data collection (2015–2025)



Source: Prepared by the author, based on different data scrapes conducted by Inside Airbnb.

It should be noted that the set of hosts — and also the set of listings — is marked by a dynamic of composition, decomposition, and recomposition: in certain periods, there is a more pronounced entry of new hosts and an expansion of supply, while in others there is a contraction, with the departure of hosts and a reduction in listings. This scenario demonstrates that, even within an expansion process characterized by a general tendency toward growth, Airbnb's activities are shaped by economic dynamics operating at different scales, though responding essentially to the global economy. Furthermore, a large part of these fluctuations occurs because, although a portion of hosts has become professionalized — through *professional hosts* and *property management companies*, which tend to remain active on the platform — there is another portion composed of *occasional hosts* who also form part of the total set of hosts and are interested in temporary demands without turning short-term rentals into a permanent professional activity.

It should be emphasized, however, that Airbnb's capital accumulation occurs through the listings of both groups, although the platform benefits greatly from the professionalization of hosts, since this not only contributes to the improvement of the commodity being offered and to the acceleration of capital turnover, but also intensifies the relationship of dependency between the lower circuit and the platform, as short-term rentals become the main source of labor and income for professional hosts. Furthermore, as the management of tourist accommodations shifts from the lower circuit to the upper circuit, the platform benefits from the capital, technology, and new levels of organization introduced by property management companies, while still maintaining its interaction with the lower circuit, which continues to provide the labor-intensive work necessary for platform activities: guest reception, cleaning, technical repairs, among other tasks. In this sense, fluctuations should not be viewed as an isolated phenomenon, but rather as the expression of dynamics inserted within a broader totality. They are particularly useful for analyzing stimuli to production and consumption — such as events and urban renewal projects — as well as strategies adopted by Airbnb and the real estate market to overcome periods of declining demand, resulting in further stimuli to production and consumption — more events and more urban renewal projects.

Alongside hosts are co-hosts, who currently total 6,144 profiles registered on the platform (Figure 28). In July 2023, when Inside Airbnb conducted its first data collection including co-host information for the city of Rio de Janeiro, there were 3,214 profiles. The growth in the number of co-hosts reflects the process

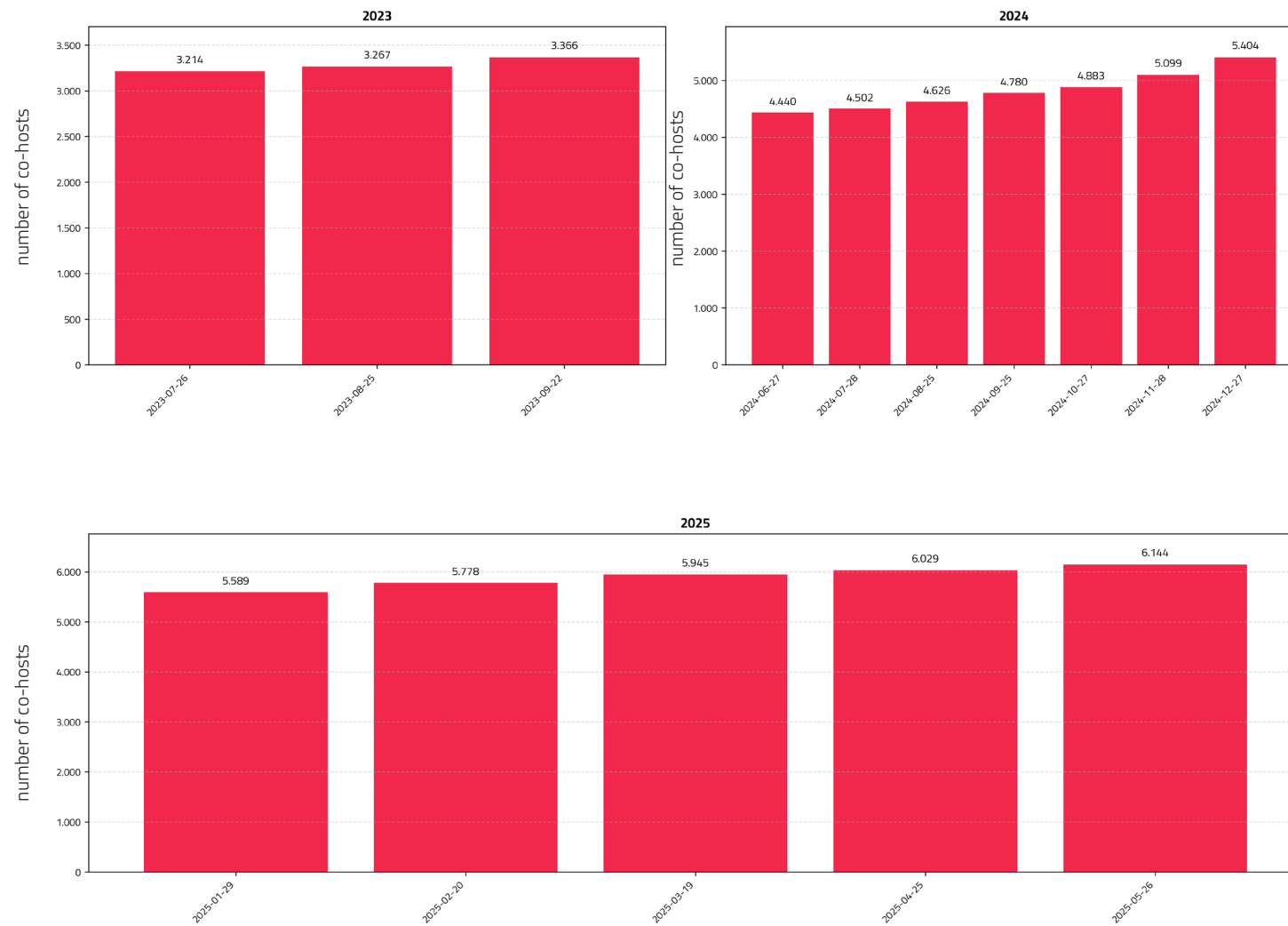
of incorporating *co-hosts* into the platform's network of actors, more recently including facilitated payment mechanisms for the different claimants to capital, so that co-host remuneration is now carried out through the platform itself, without mediation by the host. In this scenario, it is expected that this number will progressively increase. Finally, it should be noted that the co-host of one listing may also be the host of another listing, as verified in Rio de Janeiro.

There are also *top hosts* and *top co-hosts*, terms used to refer to the hosts and co-hosts with the largest number of listings in a given area. Although it is possible to quantify the main hosts and co-hosts through their identifiers on the platform, it is important to consider that hosts increasingly adopt strategies — in some cases to organize production, in others to hinder oversight — that camouflage their activities and conceal the real number of properties they manage. Thus, in practice, it is possible that the stock of tourist accommodations managed by a single company is divided among different host and co-host profiles, with or without direct identification of the commercial activity and the company itself⁸. To identify the 20 hosts and 20 co-hosts with the largest number of listings in Rio de Janeiro, this analysis was based essentially on the number of listings associated with each identifier.

Based on these data, the main property management companies identified in Rio de Janeiro are: Omar do Rio, with 228 listings; ViannaHost, with 166; Suhcasa, with 147; Estadia Carioca, with 124; Special Places Consultoria Imobiliária, with 87; MZapartments, with 85; Tabas, with 70; Further, with 58; BestStay, with 56; Unhotel, with 53; and Smartbnb, with 52 (Table 5). In addition, there are several profiles with generic names and without company identification in their descriptions, such as Daniel, with 146 listings; Rodrigo, with 78; Giovanni, with 69; among others. In some cases, these hosts identify themselves as professional hosts. The 20 main hosts in Rio de Janeiro manage predominantly entire home listings, with the oldest host profile registered in 2012 and the most recent in 2021.

⁸ One method for identifying different profiles linked to the same company consists of analyzing the *host_name* and *host_about* attributes, through which hosts may explicitly state their professional affiliation and the commercial nature of the profile. Applying this method to some companies operating in Rio de Janeiro, it was identified, for example, that the host Omar do Rio, in addition to its main profile with 229 listings, also maintains a secondary profile with 37 listings.

Figure 28 – Rio de Janeiro: number of co-hosts by data collection (2023–2025)



Source: Prepared by the author, based on different data scrapes conducted by Inside Airbnb.

Table 5 – Rio de Janeiro: Hosts with the largest number of listings

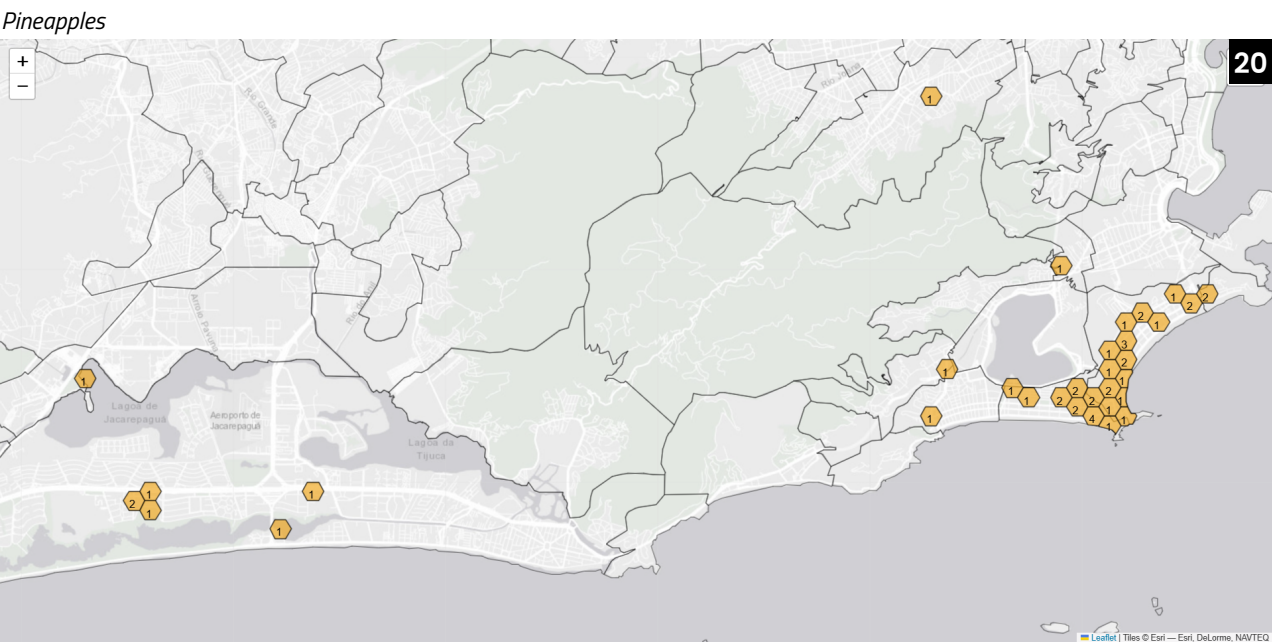
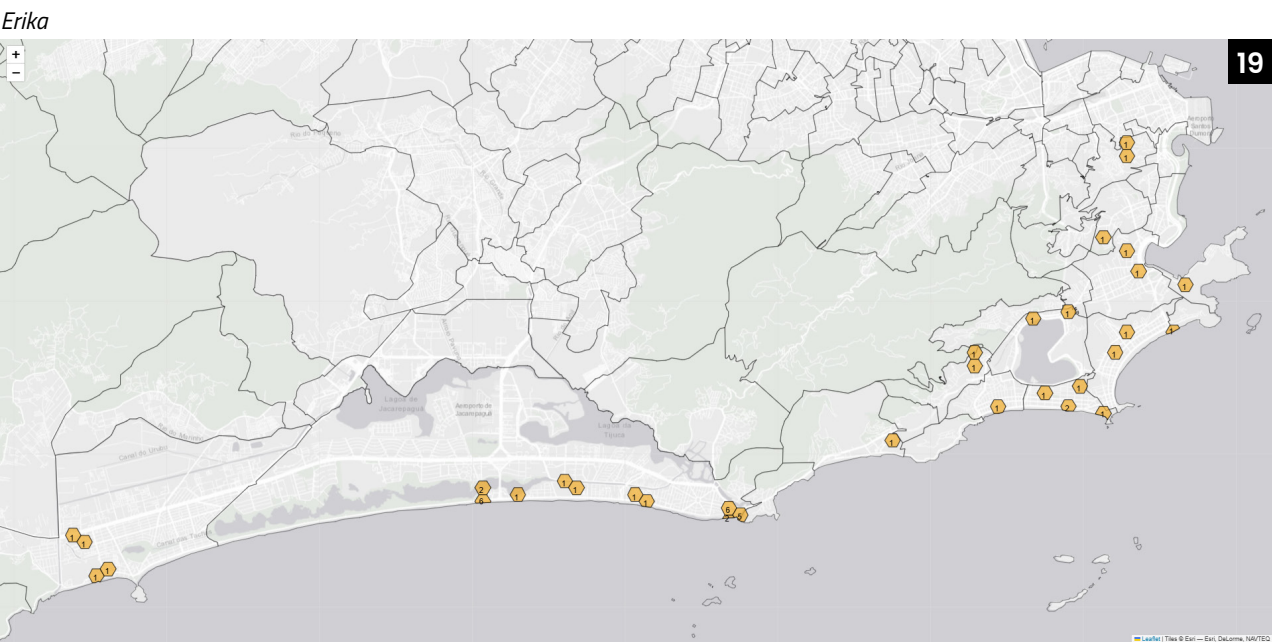
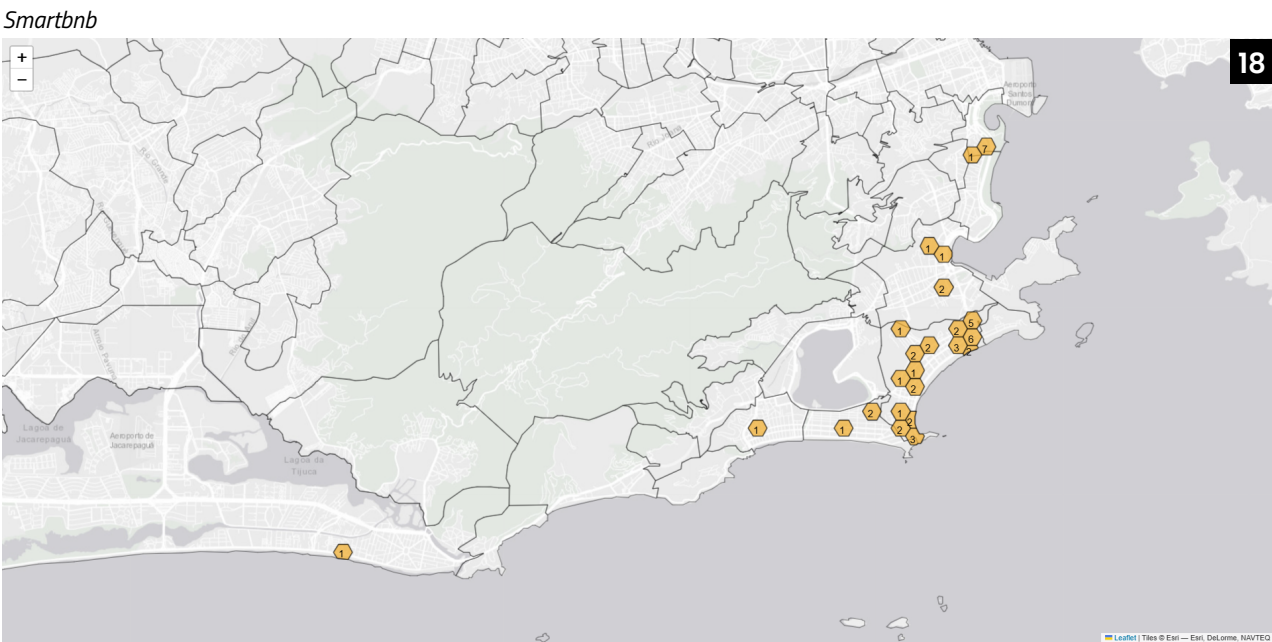
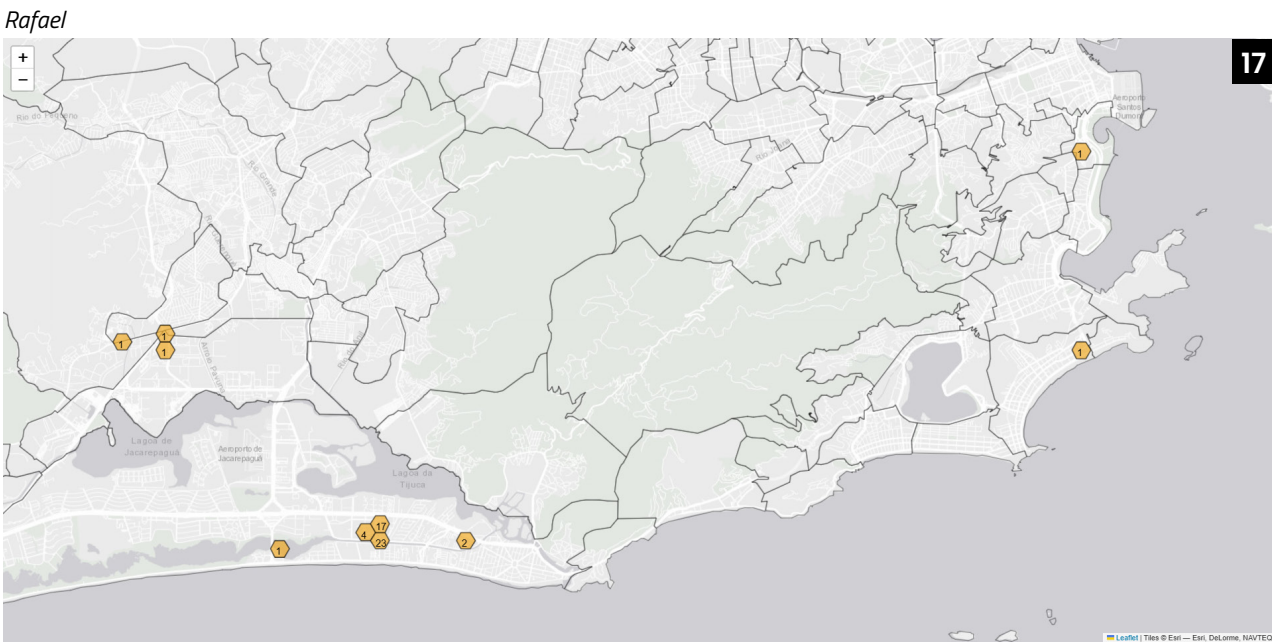
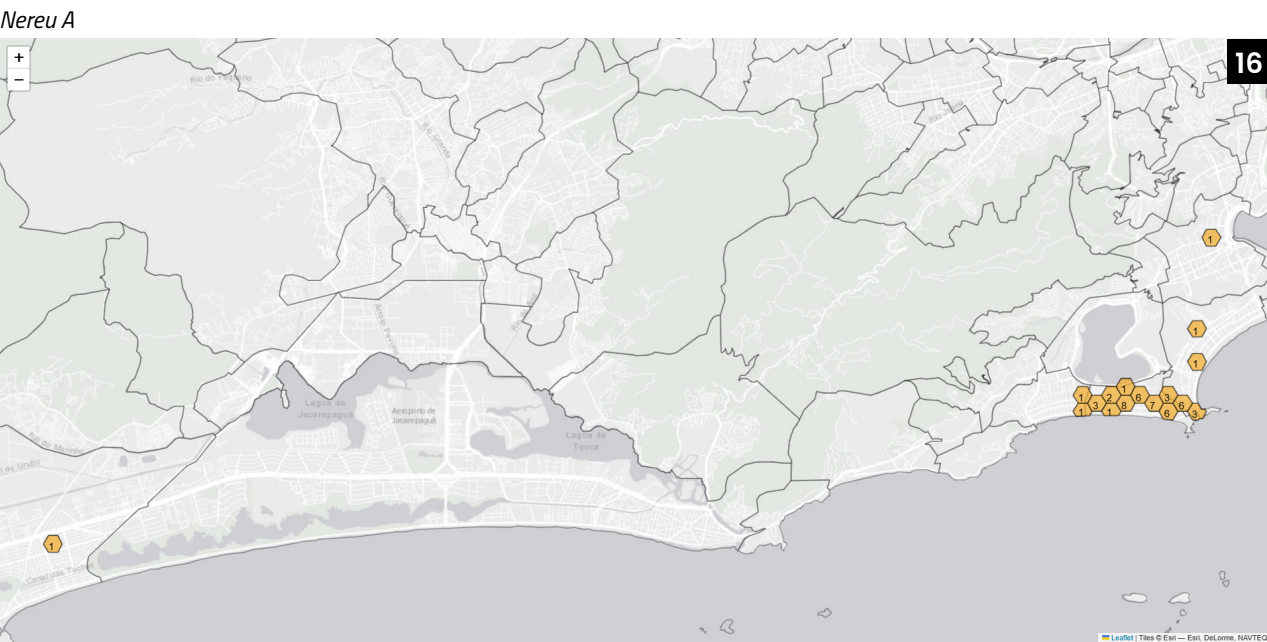
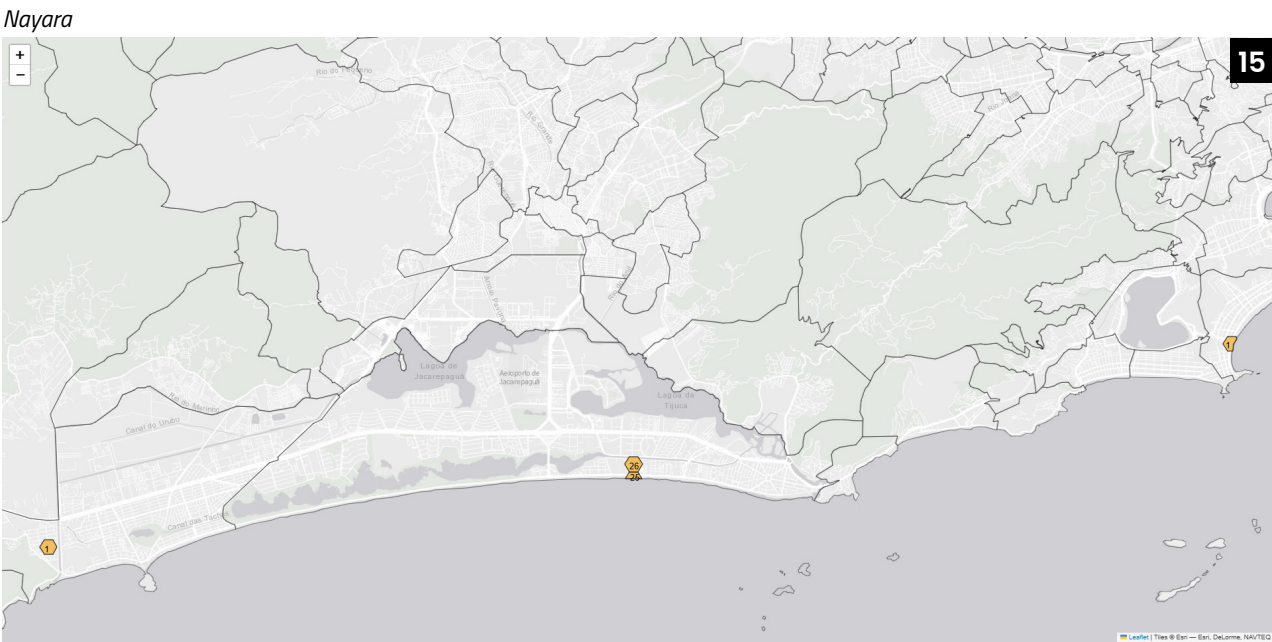
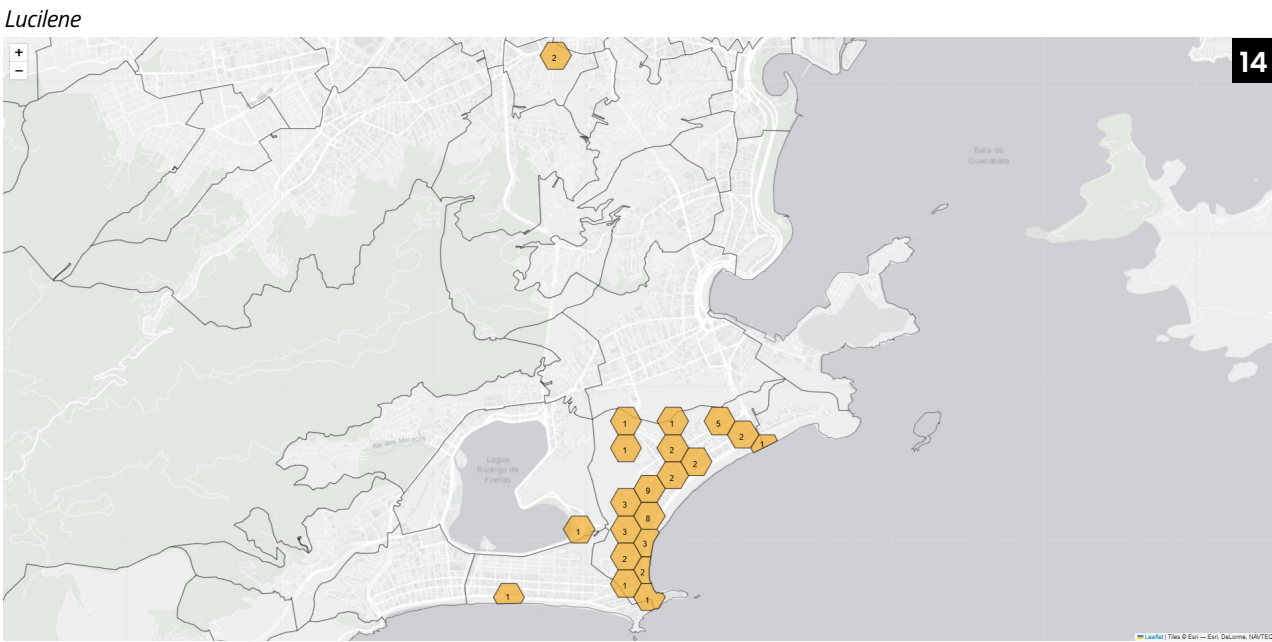
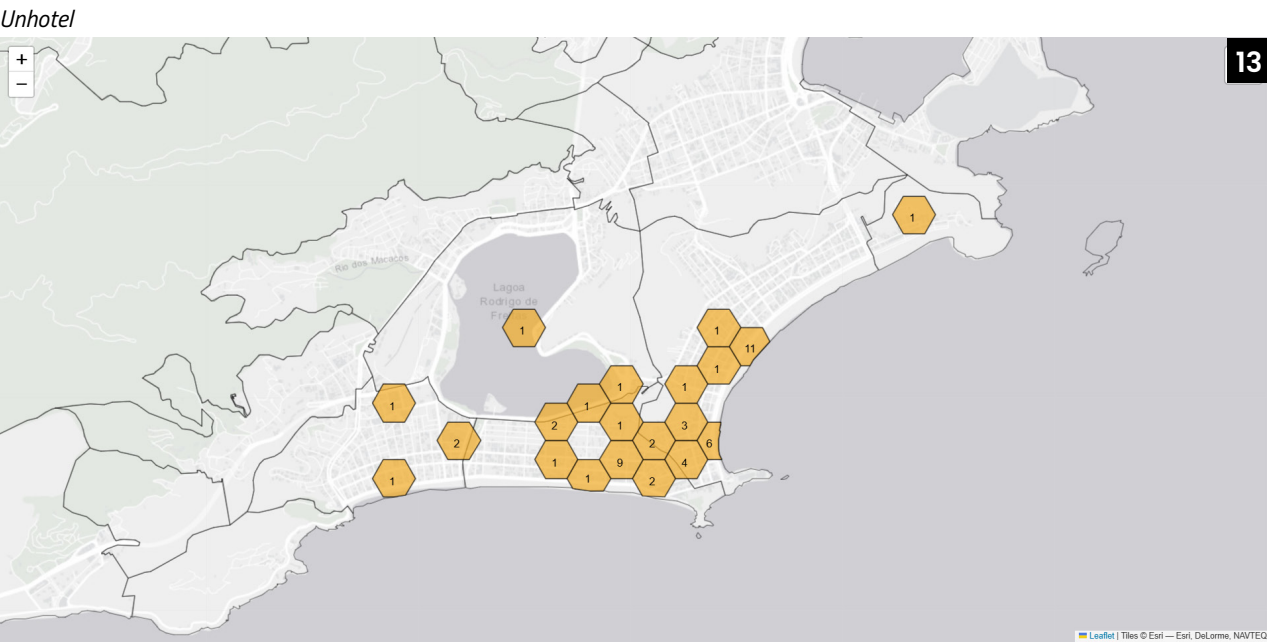
Ranking	Host name	Airbnb join date	Total number of listings	Number of entire home listings	Number of private room listings	Number of co-hosts	Company associated with the profile
1	Omar Do Rio	19/04/2013	229	229	0	0	Omar Do Rio
2	Renato	27/10/2015	166	166	0	0	ViannaHost
3	Suellen	17/11/2019	147	147	0	0	Suhcasa
4	Daniel	24/08/2016	146	142	4	0	Unidentified company
5	Estadia	21/03/2012	124	115	9	1	Estadia Carioca
6	Aroldo	15/04/2014	87	86	1	1	Special Places Consultoria Imobiliária
7	Mozart	28/05/2016	85	85	0	0	MZapartments
8	Rodrigo	24/05/2020	78	78	0	1	Unidentified company
9	Tabas	17/03/2020	70	70	0	0	Tabas
10	Giovanni	07/03/2014	69	68	1	7	Unidentified company
11	Newton	31/05/2012	58	56	2	12	Further
12	BestStay	28/08/2016	56	56	0	0	BestStay
13	Unhotel	15/09/2014	53	53	0	1	Unhotel
14	Lucilene	31/03/2021	53	53	0	0	Unidentified company
15	Nayana	16/05/2021	53	53	0	1	Unidentified company
16	Nereu A	02/12/2012	52	44	8	0	Unidentified company
17	Smartbnb	30/01/2015	52	52	0	0	Smartbnb
18	Rafael	15/10/2015	52	52	0	0	Unidentified company
19	Erika	29/10/2012	49	48	1	2	Unidentified company
20	Marcio	26/03/2014	48	47	0	0	Unidentified company

Source: Prepared by the author, based on data collected by Inside Airbnb on 26-05-2025.

It should be emphasized that managing a large number of listings does not necessarily mean having more connections with co-hosts: among the 20 hosts analyzed, 12 are not connected to any co-host. In this sense, there are cases in which a company or host centralizes production within a single profile — or divides it among different profiles without connections between them — just as there are cases in which connections through co-hosts are more extensively utilized, as will be examined later. In any case, these arrangements demonstrate strategies adopted by hosts and co-hosts to organize the workflow demanded by the platform's activities.

Next, the listings of the 20 main hosts in Rio de Janeiro were mapped in order to indicate the distribution of their accommodation stock (Figure 30). In general, it can be observed that these groups are concentrated in the areas with the highest supply of listings in the city, such as Copacabana, Ipanema, Leblon, Barra da Tijuca, Olympic Barra, and some central neighborhoods. In addition, the formation of small activity clusters can also be identified: for example, the company Omar Do Rio (no. 1), similarly to other hosts, manages listings primarily in Copacabana; Renato (no. 2) manages a considerable set of properties in Olympic Barra; Aroldo (no. 6) has a cluster of listings in Joá and Barra da Tijuca; Nayara (no. 15) and Rafael (no. 17) operate in a concentrated manner within condominiums in Barra da Tijuca; Nereu A (no. 16) operates essentially in Ipanema; and Erika (no. 19) manages a more spatially dispersed supply, with listings distributed across different areas of the South Zone, West Zone, and central region.





Source: Prepared by the author, based on data collected by Inside Airbnb on 26-05-2025. The full map can be accessed at: <https://alinecruvinel.com/thesis/>

The city's main co-hosts were also analyzed, considering the number of listings they manage (Table 6). Additionally, the main connections between hosts and co-hosts were identified, considering the number of listings shared in common (Figure 30). The listings managed by the 20 main co-hosts were also mapped (Figure 31) in order to indicate their spatial distribution. In general terms, the accommodation supply managed by co-hosts is composed mainly of entire home listings. Of the 20 co-hosts analyzed, 12 operate exclusively as co-hosts, while the remaining 8 are also hosts of other tourist accommodations in the city. Among this group, the main co-hosts who also act as hosts are: Morada, with 33 listings as co-host and 16 as host; Juliana, with 36 listings as co-host and 13 as host; and Lucas, with 35 listings as co-host and 12 as host. There are also situations in which a co-host connects with numerous hosts, as is the case of Nômade Adm Imóveis, possibly in direct interaction with the owners of the accommodations. In general, these characteristics are understood as reflecting specific arrangements of labor organization rather than fixed functions. Thus, a host or co-host may operate as a service provider, a property management company, or a property owner.

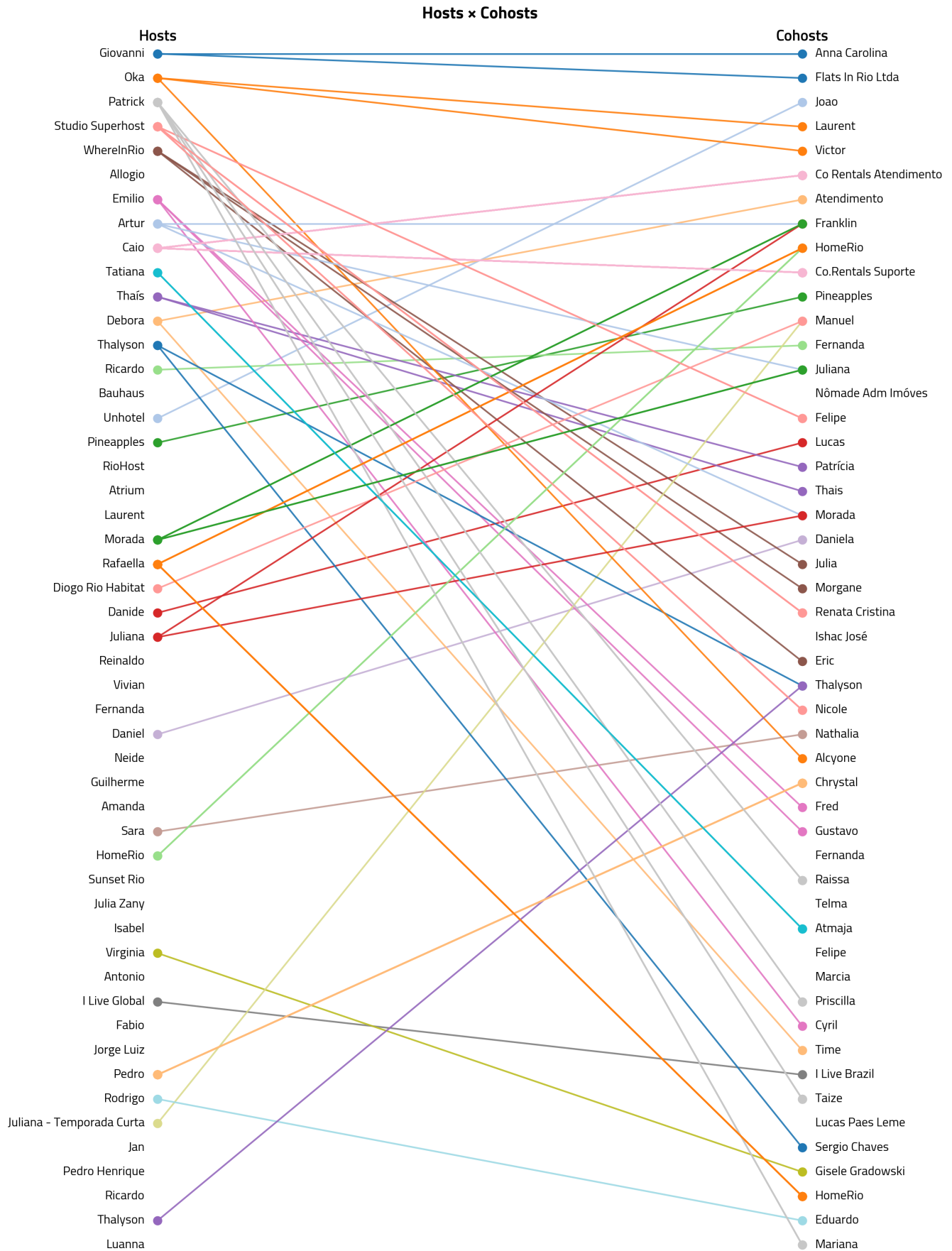
The main connections between co-hosts and hosts reveal aspects of this dynamic (Figure 30). Based on the data, it was found that Anna Carolina and Flats In Rio Ltda are the co-hosts with the largest number of listings, each managing 67 listings located mainly in Copacabana. This corresponds to the same set of listings — that is, both manage the same properties — as can be verified through the approximate location of the properties associated with co-hosts no. 1 and 2 (Figure 31). They operate exclusively as co-hosts and work with the host Giovanni. Laurent and Victor, in turn, are the main co-hosts associated with the host Oka. The host Patrick is connected primarily with four co-hosts: Raissa, Priscila, Taize, and Mariana. The host WhereinRio is connected with the co-hosts Julia, Morgane, and Eric. The host Emilio is connected mainly with the co-hosts Fred, Gustavo, and Cyril. And so on. Different profiles belonging to the same companies were also identified, as is the case of the property management companies Pineapples and HomeRio, which maintain more than one profile on the platform. The main connections between hosts and co-hosts thus reflect relations of production of the *lodging commodity*, as argued in Chapter 1, as well as the increasing complexity of labor organization through Airbnb's digital infrastructure, by incorporating the co-host as a *new additional actor*.

Table 6 – Rio de Janeiro: Co-hosts with the largest number of listings

Ranking	Co-host name	Total number of listings asco-host	Number of entire home listings as co-host	Number of private room listings as co-host	Number of hosts	Also a host?	Number of listings as host
1	Anna Carolina	67	66	1	2	No	0
2	Flats In Rio Ltda	67	66	1	2	No	0
3	Joao	54	54	0	2	No	0
4	Laurent	53	53	0	6	Yes	7
5	Victor	46	46	0	5	No	0
6	Atendimento	42	42	0	1	No	0
7	Co Rentals Atendimento	42	42	0	1	No	0
8	HomeRio	41	41	0	5	Yes	1
9	Franklin	41	41	0	4	No	0
10	Co.Rentals Suporte	40	40	0	1	No	0
11	Pineapples	39	34	5	1	Yes	8
12	Manuel	38	36	2	3	No	0
13	Fernanda	37	37	0	1	Yes	1
14	Nômade Adm Imóves	36	35	1	34	Yes	1
15	Juliana	36	36	0	3	Yes	13
16	Lucas	35	35	0	1	Yes	12
17	Felipe	35	35	0	1	No	0
18	Thais	34	34	0	1	No	0
19	Patrícia	34	34	0	1	No	0
20	Morada	33	33	0	3	Yes	16

Source: Prepared by the author, based on data collected by Inside Airbnb on 26-05-2025.

Figure 30 – Rio de Janeiro: Main connections between hosts and co-hosts



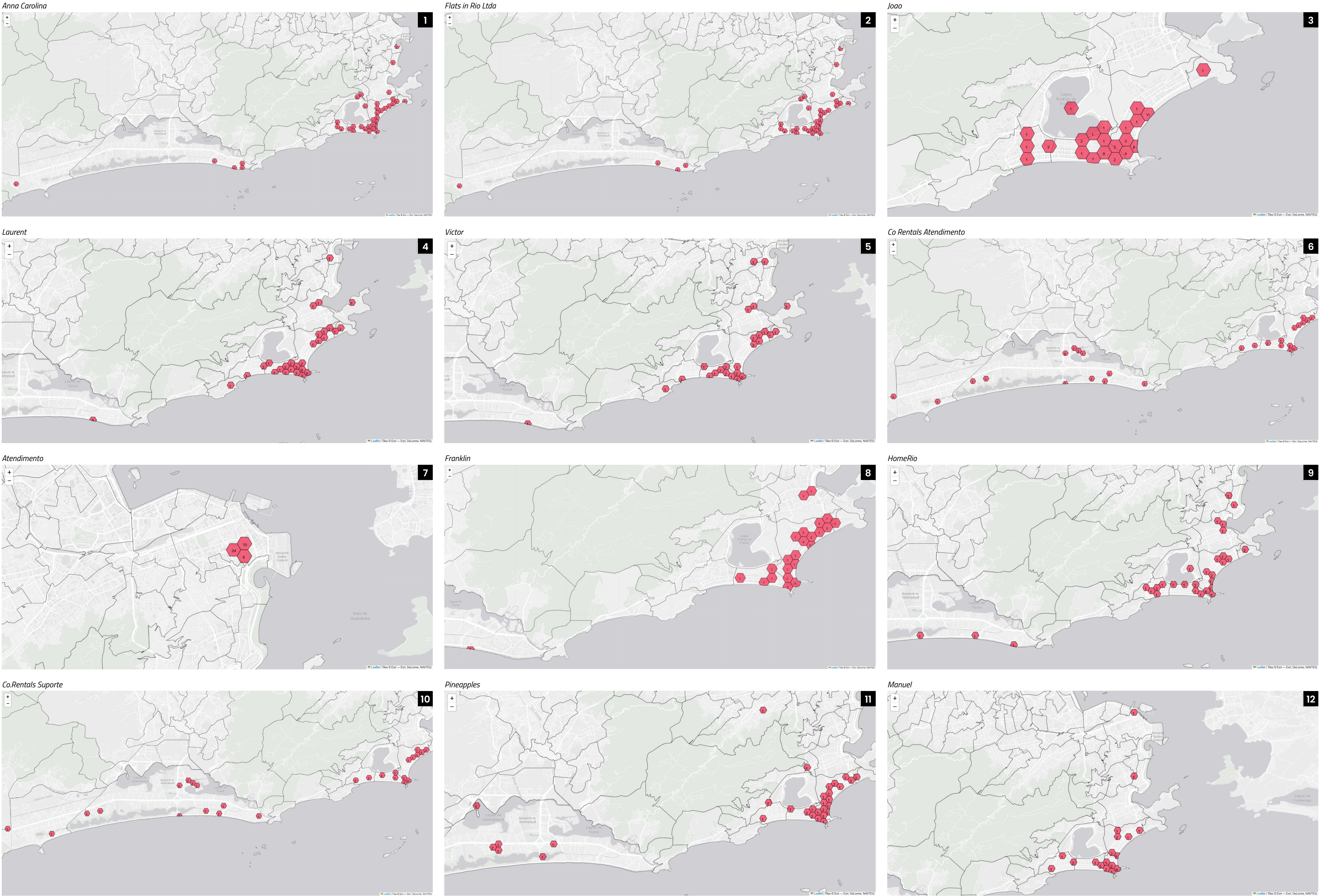
Source: Prepared by the author, based on data collected by Inside Airbnb on 26-05-2025.

Regarding the spatial distribution of co-host listings, patterns similar to those observed among hosts can be identified — that is, with properties located mainly in Copacabana, Ipanema, Leblon, Barra da Tijuca, Olympic Barra, and some central neighborhoods. This is the case for the accommodation supply managed by co-hosts such as Anna Carolina, Flats In Rio Ltda, Joao, Laurent, Victor, among others. It is important to highlight, however, the localized activity of co-hosts such as Atendimento (no. 7), which consists of a profile dedicated to managing listings located specifically around the Cinelândia and Carioca metro stations. The same can be observed in the case of the co-host Nômade Adm Imóveis, with accommodations managed near Praça Mauá.

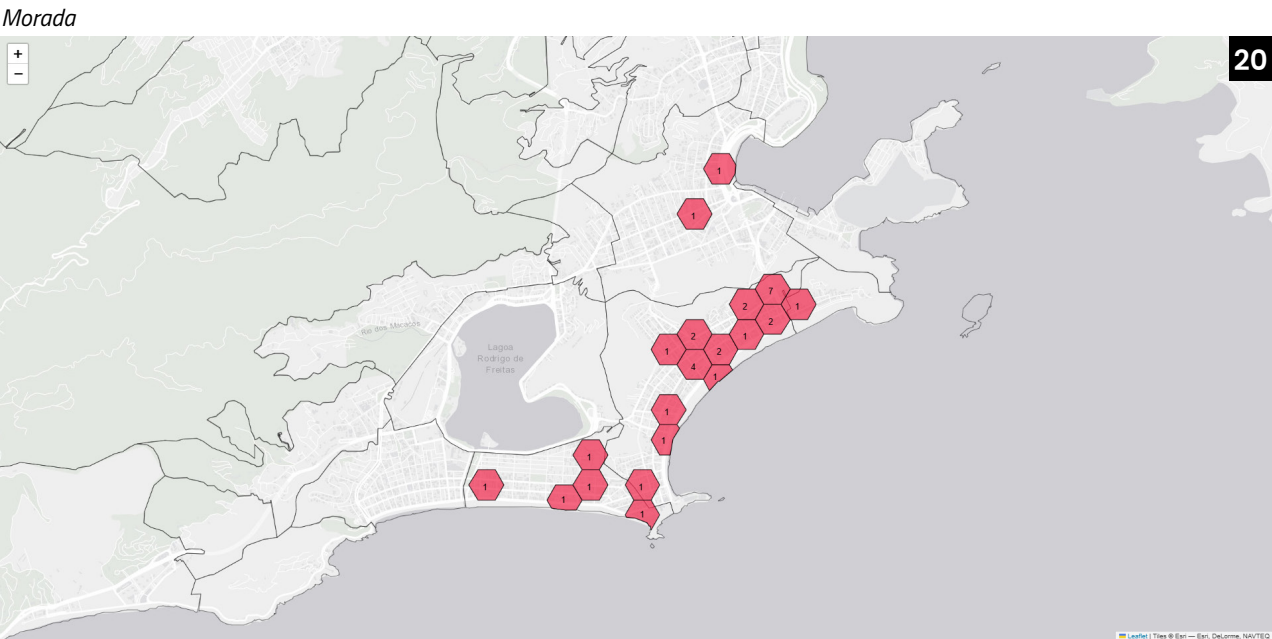
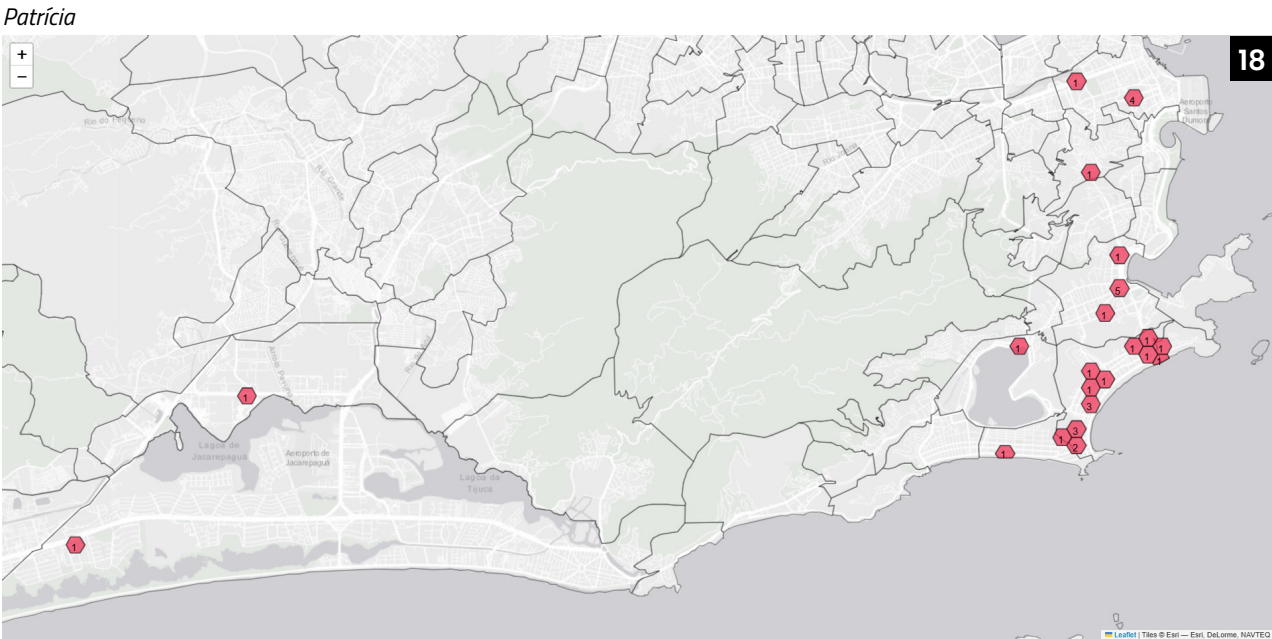
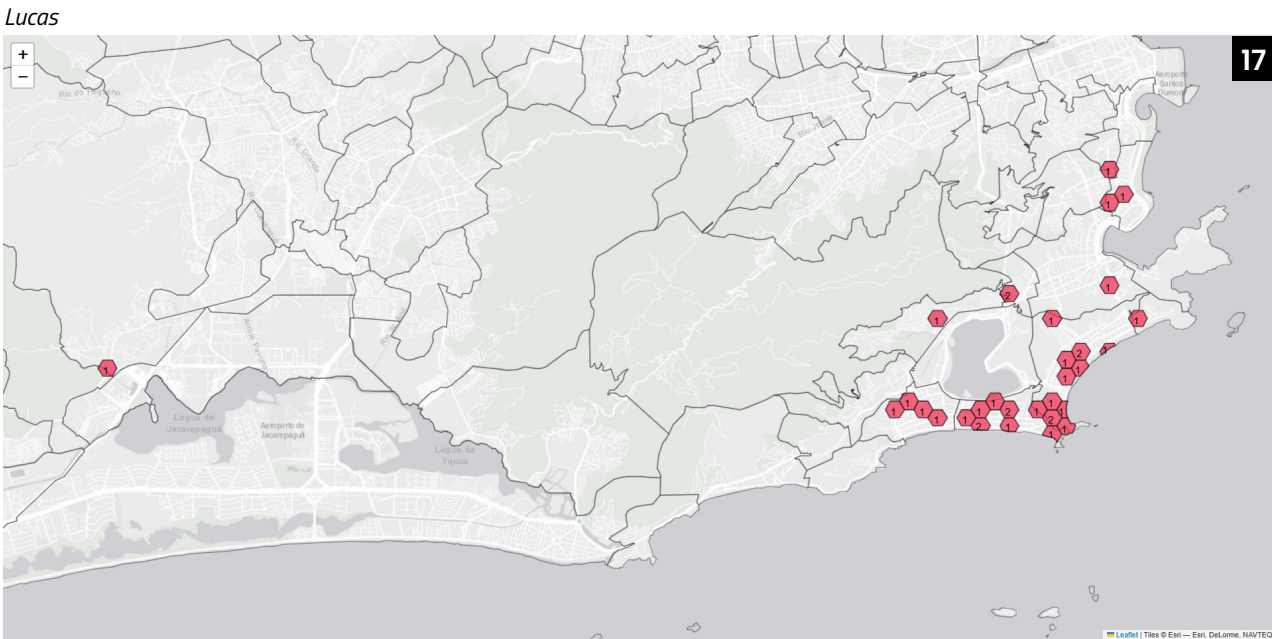
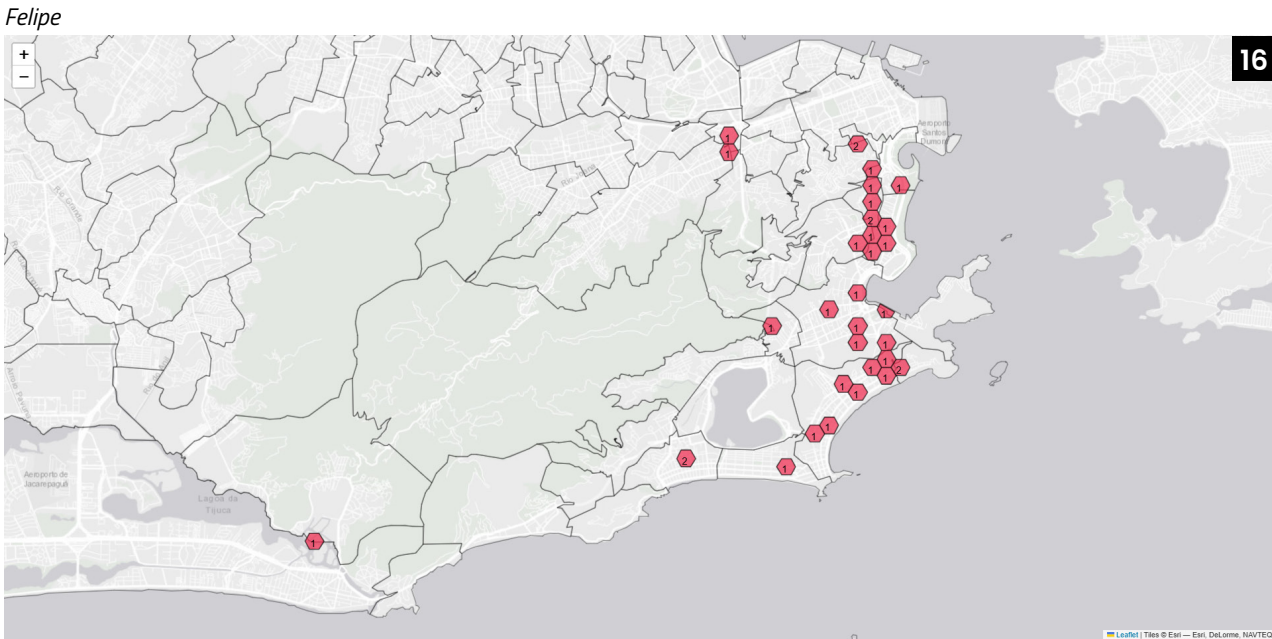
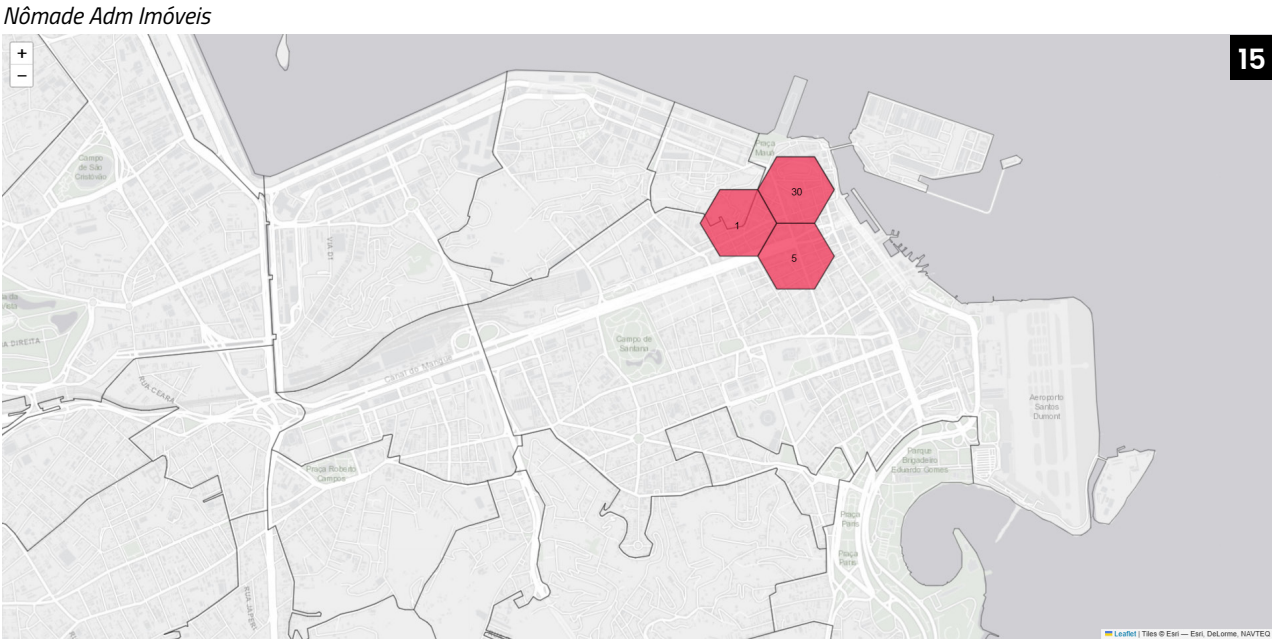
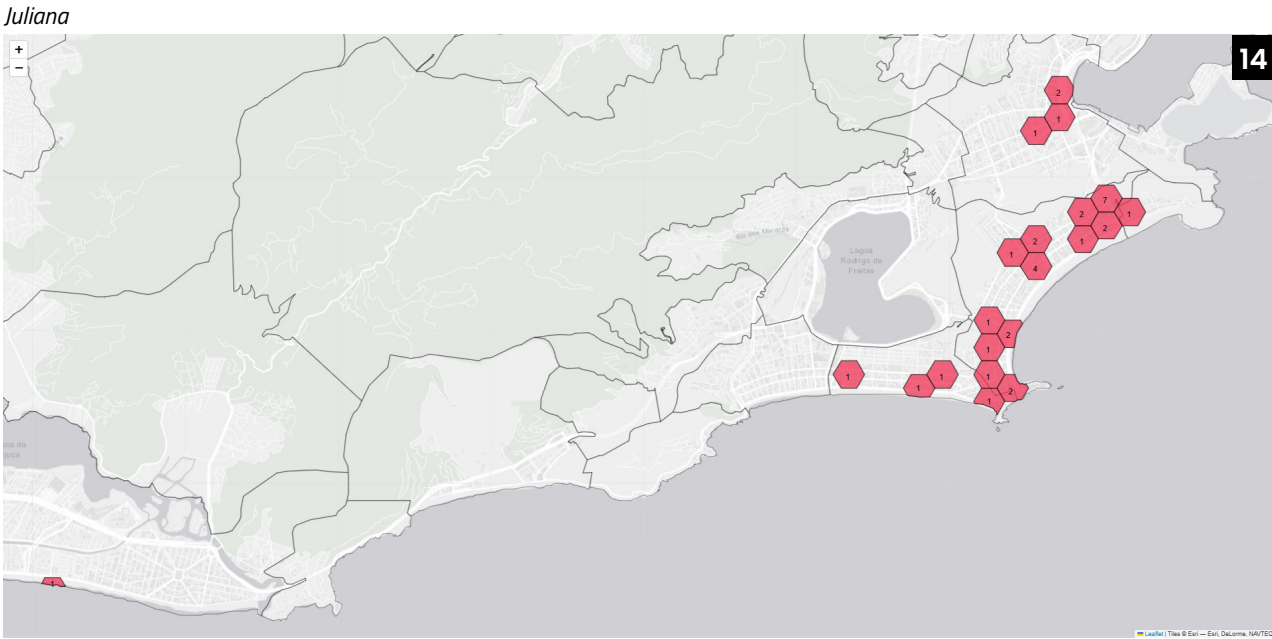
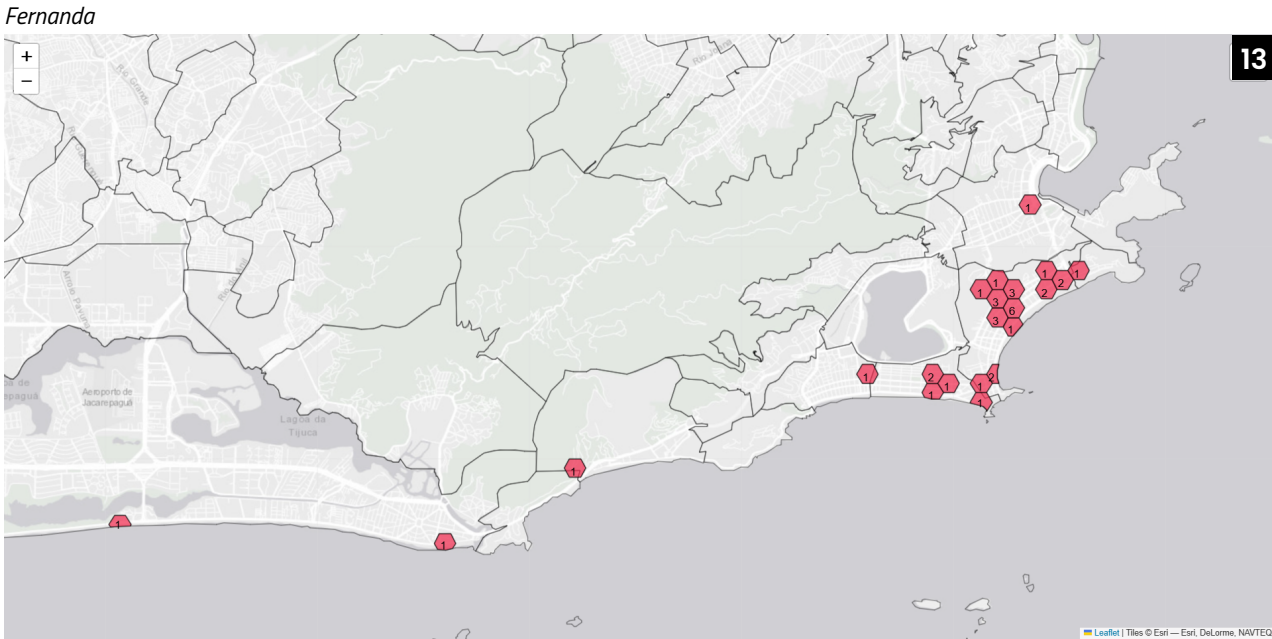
Finally, examples of arrangements between hosts, co-hosts, and listings are presented through images provided by Inside Airbnb for this research and referring to the data collection conducted on 19-03-2025 for the city of Rio de Janeiro (Figure 32). In general terms, as previously discussed, different arrangements are possible. In **situation 1**, three hosts and co-hosts (Oka, Laurent, and Victor) interact with one another and manage multiple listings, connecting with secondary hosts and co-hosts, possibly property owners who wish to monitor negotiations conducted through the platform. In **situation 2**, a classic Airbnb arrangement can be observed: a single host (Renato) manages multiple listings and is not connected with any other host. In this case, it is understood that interaction with property owners occurs outside the platform. In **situation 3**, it can be observed that a single property management company (Pineapples) maintains three distinct profiles through which it distributes and manages its stock of accommodations.

In **situation 4**, a main host (Newton) manages several tourist accommodations and connects with other hosts and co-hosts, who may function either as service providers — especially when the connections are more numerous — or as owners of the accommodations. Finally, **situation 5** presents the articulation of three distinct nuclei through three hosts and co-hosts (Nayana, Marcolini, and Gabriel), each possessing their own sets of listings but connected through some of these listings. Additionally, interaction can be observed with secondary hosts, who may be property owners or even property management companies that hire professional hosts. The five examples presented are illustrative of possible arrangements between hosts, co-hosts, and listings, although they do not exhaust the full range of combinations identifiable on the platform.

Figure 31 – Rio de Janeiro: Accommodation stock of the 20 co-hosts with the largest number of listings

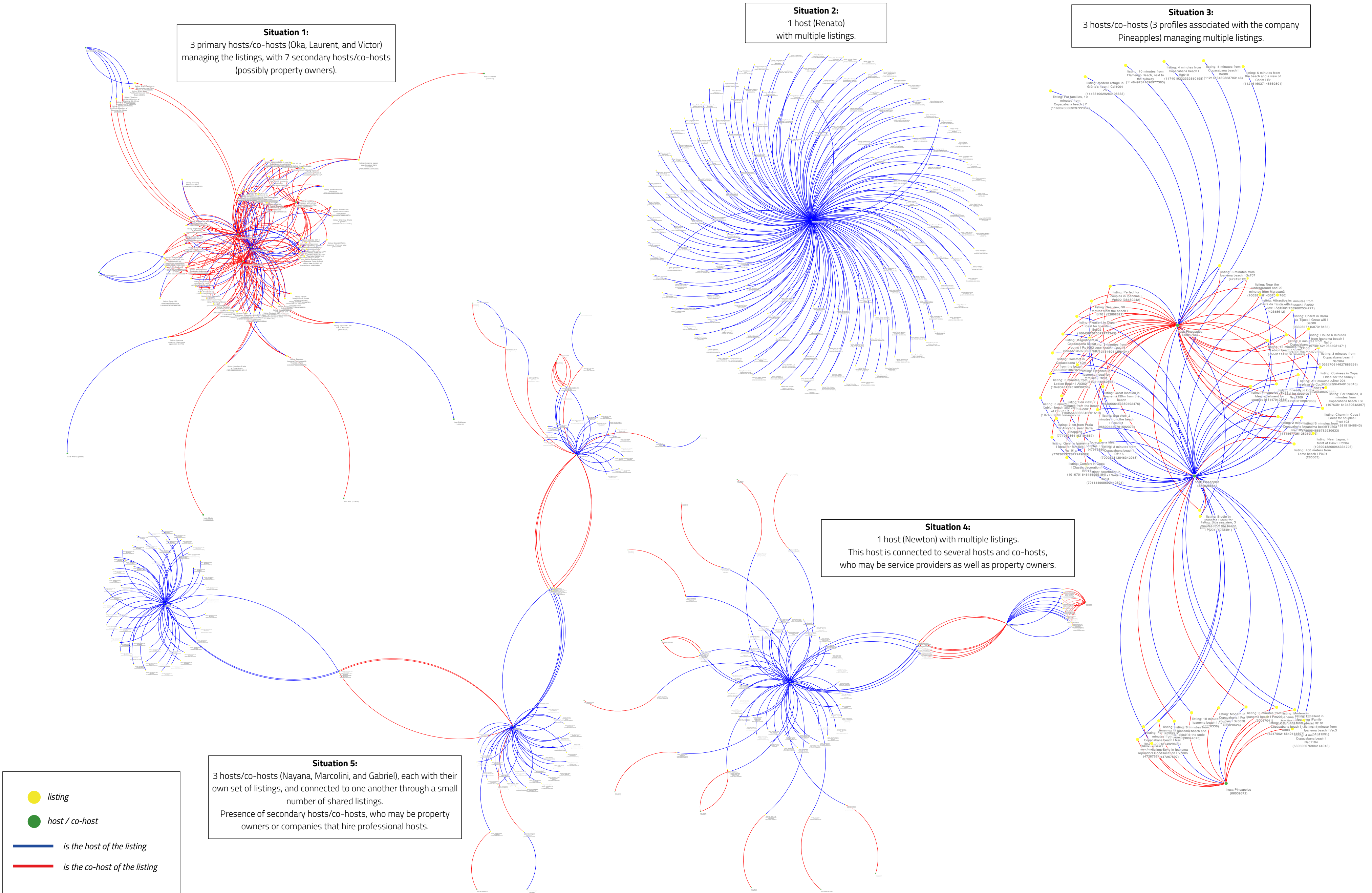


Source: Prepared by the author, based on data collected by Inside Airbnb on 26-05-2025. The full map can be accessed at: <https://alinecruvinel.com/thesis/>



Source: Prepared by the author, based on data collected by Inside Airbnb on 26-05-2025. The full map can be accessed at: <https://alinecruvinel.com/thesis/>

Figure 32 – Rio de Janeiro: Examples of arrangements between hosts, co-hosts, and listings



Source: Images provided by Inside Airbnb and related to the data collection conducted on 19-03-2025 for the city of Rio de Janeiro. Edited by the author.

As developed in Chapter 1, one of the interdependent processes that enables the circulation of capital consists of *valorization*, the moment in which production is carried out and, consequently, value and surplus value are generated through labor power. At the global scale, Airbnb's monopolistic expansion has been enabled through the platform's connection with processes of production and consumption taking place in different cities around the world. For the production of the commodity offered through Airbnb to become possible, however, it must first be organized, bringing together the necessary resources — that is, the means of production and labor power. In this section, the way in which the production of the *lodging commodity* has been organized in the city of Rio de Janeiro was presented through networks of hosts, co-hosts, and listings formed through Airbnb's digital infrastructure. This organization is understood as being essentially grounded in labor relations necessary for the production and circulation of capital, thereby reproducing class relations. In cities on the periphery of capitalism, this organization benefits from labor-intensive work originating from the lower circuit of the urban economy, while simultaneously moving increasingly toward the upper circuit, as demonstrated by the arrangements formed by the main hosts, co-hosts, and their stocks of tourist accommodations. The productive relations described through the example of Airbnb are, in turn, illustrative of the dynamics of different digital monopolies operating in peripheral cities.

In light of the data presented, the general tendency is toward an increasing complexity in the organization currently conducted by property management companies and professional hosts, whether in the sense of consolidating local monopolies or replacing such actors with more competitive companies, not necessarily originating from Rio de Janeiro. At the same time, it is important to emphasize the significance of the accommodation stock currently supplied and managed by the lower circuit for the circulation of capital on the platform, even in cases where host professionalization is not identified. Considering the progressive organization of production, Airbnb is interpreted as tending to become increasingly interested in the labor of the different actors involved in this process, including outsourced workers, such that the lower circuit will continue to constitute the foundation of the platform's productive activities. In practical terms, this interest has already been demonstrated, for example, through the possibility of payment for additional services through the platform, such as technical repairs resulting from damages caused during a stay. In this sense, it would not be surprising if, in the coming years, Airbnb

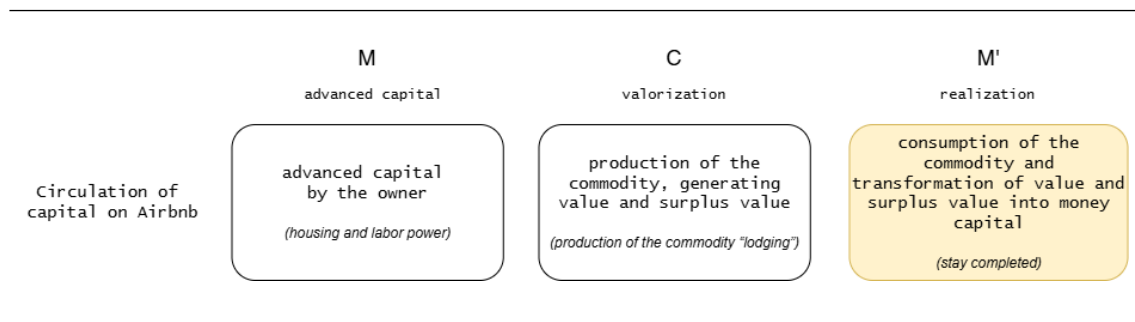
develops more sophisticated strategies for capturing capital through the inclusion of new actors within its digital infrastructure, thereby reducing labor negotiations conducted outside the platform.

Having presented the organization of production through networks of hosts, co-hosts, and listings, we now turn to understanding how the consumption of lodging has been realized in the city of Rio de Janeiro.

3.3. Realizing consumption: listing occupancy and revenue estimates

We arrive, then, at the final stage of the circulation of capital, as indicated by the formula $M-C-M'$ (Figure 33). At this stage, the realization of value occurs through the consumption of the *lodging commodity* by the guest, thereby enabling the distribution and capture of capital by Airbnb through fees. Up to this point, it has been identified that: (1) capital has been advanced by property owners through housing and labor power (M), commodities that constitute the fixed capital and variable capital necessary for the production of lodging; and (2) that this labor power may belong to the property owner or may be acquired through different arrangements involving hosts, co-hosts, and outsourced workers engaged in the production process. After capital has been advanced, production organized, and considering that this production follows a *just-in-time* model based on production on demand, the question arises: is consumption actually realized? This is an important question, since there would be little purpose in advancing capital and structuring production if this did not ultimately convert into consumption.

Figure 33 – Circulation of capital on Airbnb: study of the M' stage



Source: Prepared by the author.

Let us now examine how this process takes place in the city of Rio de Janeiro. To begin with, it is important to emphasize that the public Airbnb data made available through the Inside Airbnb project do not include information about guests, only about hosts. Thus, consumption must be verified indirectly, through activities related to the production process. One way to do this is by using information related to listing occupancy, which corresponds to the total number of nights effectively rented during a given period. Occupancy helps us understand whether listings are

actually rented and how often this occurs during the analyzed period, thereby also indicating how capital turnover takes place in practice through each listing. In this research, the occupancy model adopted by Inside Airbnb⁹ is used to estimate the frequency with which a listing is rented and the revenue generated by it. Through this model, Inside Airbnb¹⁰ estimates the number of nights rented over the previous twelve months for each listing and then multiplies this number by the advertised price in order to present a revenue estimate.

Thus, in practical and simplified terms, the revenue generated by a single accommodation is determined by occupancy and the nightly price: for example, an accommodation rented for 10 days at a nightly price of R\$ 150.00 generates a revenue of R\$ 1,500.00 from the stay. In the same sense, the total revenue generated by a neighborhood or by a city results from the sum of the revenues generated by each accommodation, such that the revenue of an area is conditioned by occupancy, price, and the number of accommodations. The number of listings by neighborhood was already examined in greater detail in section 3.1., so we now turn to analyzing it in relation to revenue composition. Let us begin with prices.

To analyze the prices practiced on the platform, it is necessary to consider the types of rent presented in Chapter 1 — *absolute rent*, *monopoly rent*, *differential rent I*, and *differential rent II* — understanding that prices incorporate the possibilities for expanding land rent due to unique characteristics, privileged location, and internal improvements, such as the acquisition of appliances, renovations, thematic decorations, among others. Prices also reflect the number of guests that an accommodation can receive, which is generally conditioned by the size of the property and the number of bedrooms. When considering listing types, prices are also conditioned by the degree of privacy offered to the guest. These general aspects demonstrate the existence of a complex set of variables that determine the

⁹ More information at: <https://insideairbnb.com/data-assumptions/#the-occupancy-model>

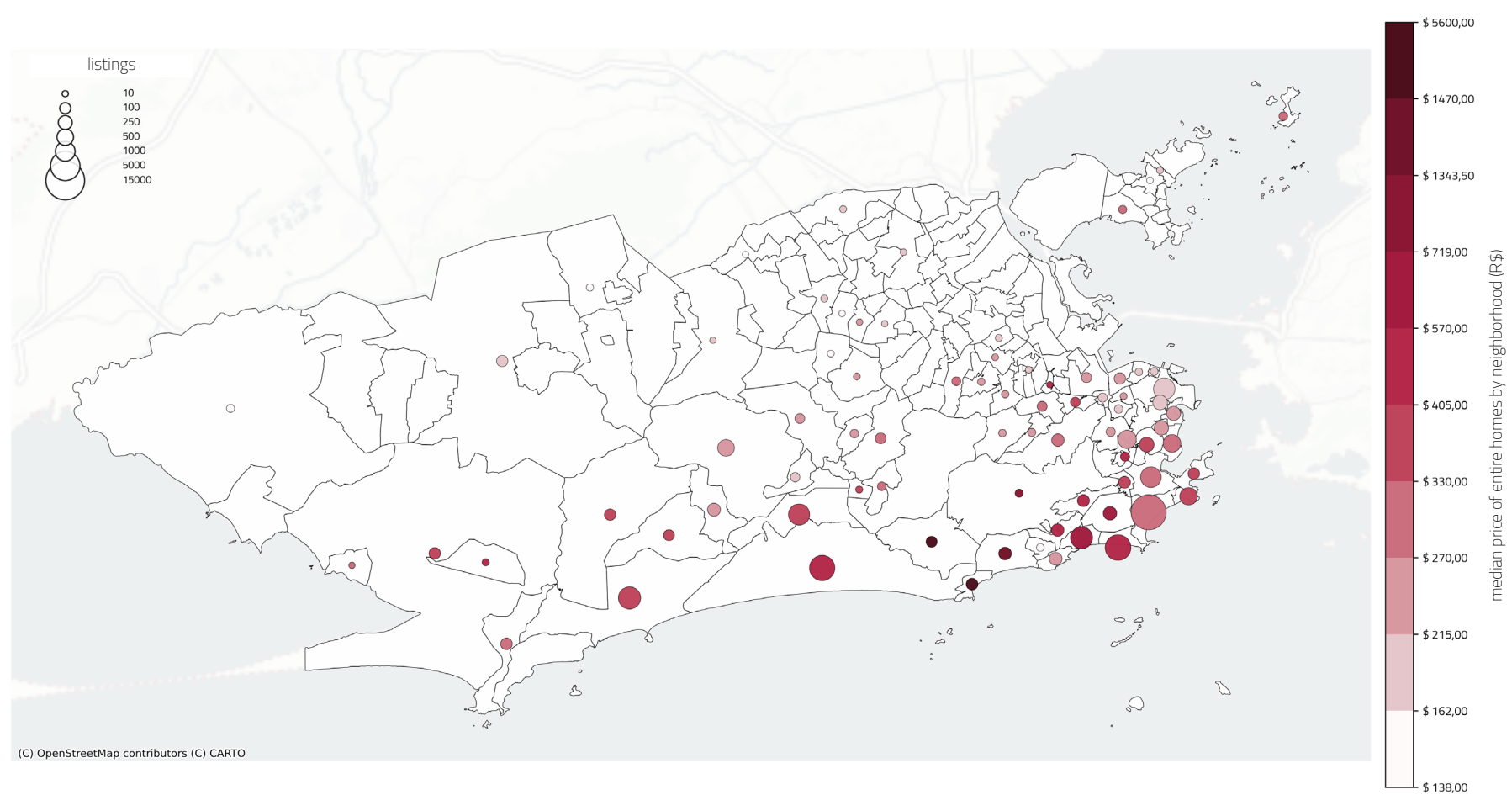
¹⁰ Inside Airbnb is based on the *San Francisco Model*, which refers to models created to quantify Airbnb's impact in that city. The Inside Airbnb occupancy model thus derives from two models developed by Alex Marqusee for governmental agencies in San Francisco, incorporating adaptations of the methods originally used. In the Inside Airbnb model, an estimate of the number of reservations made over the previous twelve months is first calculated for each listing, assuming that 50% of reservations generate a review. Thus, the number of reservations estimated by Inside Airbnb for the previous twelve months corresponds to twice the number of reviews during the same period. This estimate is then used to calculate the number of nights booked — after all, a single reservation may consist of several overnight stays. In this case, the following criteria are adopted for the calculation: in most cities, three nights per reservation are considered (except in cases where there is public information regarding average lengths of stay); if the listing establishes a minimum number of nights and this minimum exceeds three, the minimum value is considered; finally, occupancy is capped at a total of 255 nights per year, corresponding to 70% occupancy, compatible with highly occupied hotels (Inside Airbnb, 2025). Occupancy is then multiplied by the nightly price in order to estimate the revenue generated by the listing.

pricing of a tourist accommodation by a host. Based on this understanding, the median prices of entire homes (Figure 34) and private rooms (Figure 35) by neighborhood are initially analyzed, combined with the number of listings, in order to present the possibilities for revenue composition by neighborhood, still without considering effective occupancy. The data for each neighborhood can be consulted in greater detail in Table 7.

In general terms, median prices in Rio de Janeiro are R\$ 350.00 for entire homes and R\$ 204.00 for private rooms. In Copacabana, the neighborhood that concentrates the largest supply of accommodations (11,173 entire homes and 1,914 private rooms), median prices are close to these values, registering R\$ 314.50 and R\$ 216.00, respectively, and are similar to those practiced in Leme (R\$ 370.00 and R\$ 200.00). Other neighborhoods surrounding Copacabana, however, such as Ipanema, Leblon, and Lagoa, register higher median prices — Ipanema with R\$ 543.00 and R\$ 250.00, Leblon with R\$ 570.00 and R\$ 315.00, and Lagoa with R\$ 665.00 and R\$ 324.50 — due, among other factors, to housing typologies and local construction and socioeconomic standards, following price differences characteristic of Rio de Janeiro's real estate market. These three neighborhoods together contain 5,161 entire homes and 591 private rooms.

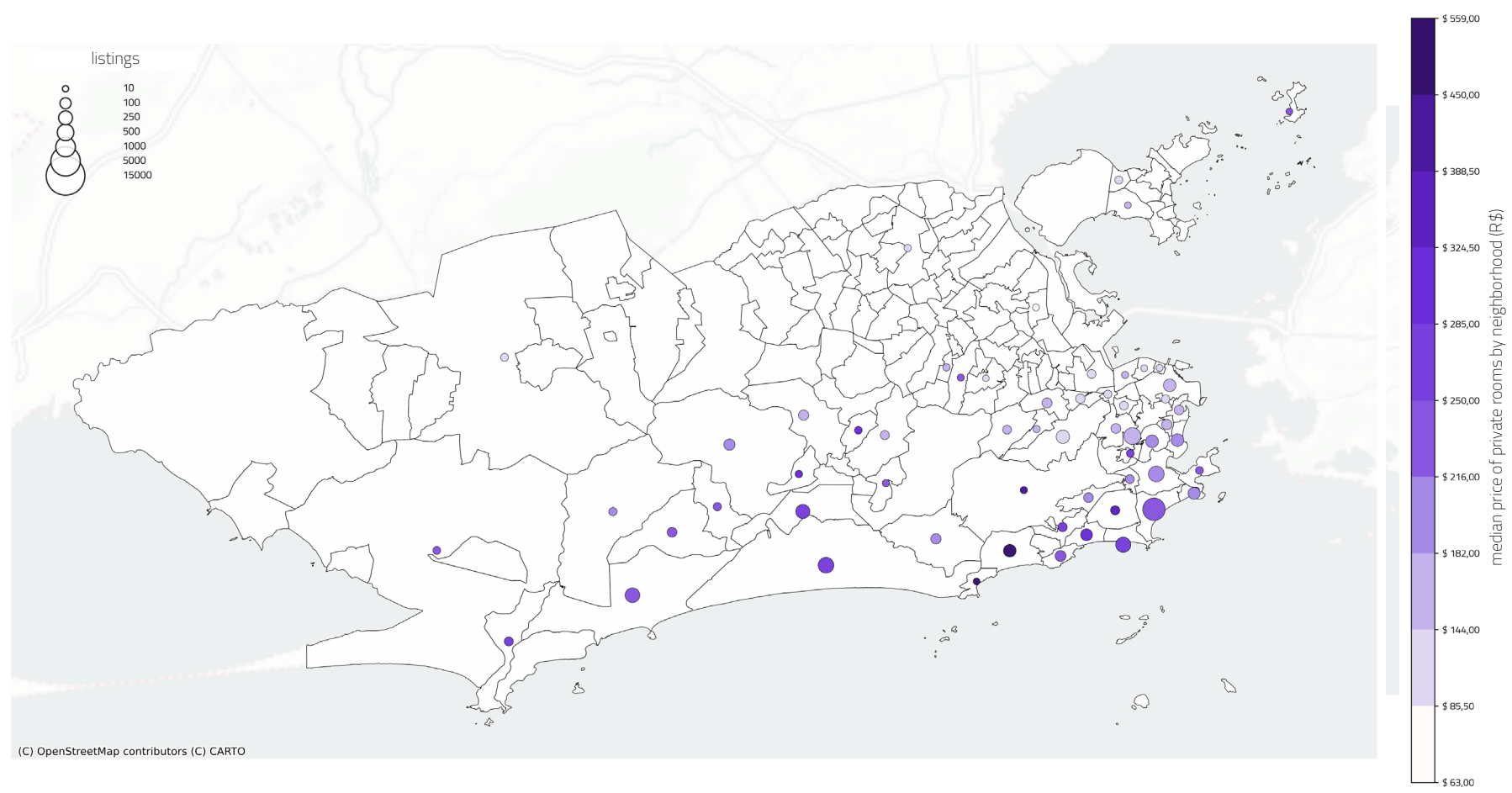
Prices decrease toward the city center: in Botafogo, for example, median prices are R\$ 292.00 for entire homes and R\$ 187.00 for private rooms; in Flamengo, R\$ 285.00 and R\$ 186.00; in Lapa, R\$ 191.50 and R\$ 143.00; and in Centro, R\$ 180.00 and R\$ 144.00, among other examples that compose a broad supply of accommodations (Table 7). The highest prices, in turn, are found in Joá (R\$ 5,600.00 and R\$ 450.00), Itanhangá (R\$ 1,470.00 and R\$ 196.50), São Conrado (R\$ 1,343.50 and R\$ 559.00), and Alto da Boa Vista (R\$ 719.00 and R\$ 388.50), also reflecting variations related to housing typologies and construction and socioeconomic standards, as well as activities linked to luxury tourism and nature tourism. These four neighborhoods together account for 487 entire homes and 401 private rooms. Finally, considering the neighborhoods with the greatest supply in the West Zone, median prices are R\$ 486.00 and R\$ 283.00 in Barra da Tijuca; R\$ 360.00 and R\$ 245.50 in Recreio dos Bandeirantes; R\$ 379.00 and R\$ 270.00 in Olympic Barra; and R\$ 264.00 and R\$ 209.00 in Jacarepaguá. These four neighborhoods together contain a total of 6,905 entire homes and 1,280 private rooms.

Figure 34 – Rio de Janeiro: median prices of entire homes by neighborhood



Source: Prepared by the author, based on the data scrape conducted by Inside Airbnb on 26-05-2025.

Figure 35 – Rio de Janeiro: median prices of private rooms by neighborhood



Source: Prepared by the author, based on the data scrape conducted by Inside Airbnb on 26-05-2025.

Table 7 – Rio de Janeiro: Prices, occupancy, and estimated annual revenue by neighborhood

Neighborhood	Number of listings		Median price per night		Estimated occupancy for the last 12 months		Estimated nights booked		Estimated average annual revenue by listing type		Estimated total revenue		
	Entire homes	Private rooms	Entire homes	Private rooms	Average in days	Average percentage	Total nights booked	Percentage relative to the total number of nights booked in the city	Entire homes	Private rooms	In the last 12 months	Percentage relative to the city's estimated total revenue	Captured by Airbnb (15%)
Copacabana	11173	1914	R\$ 314,50	R\$ 216,00	66	18%	867429	38,64%	R\$ 26.469,25	R\$ 9.037,68	R\$ 287.012.097,00	36,16%	R\$ 43.051.814,55
Ipanema	3191	403	R\$ 543,00	R\$ 250,00	70	19,3%	253646	11,30%	R\$ 44.972,75	R\$ 9.790,91	R\$ 136.314.013,00	17,17%	R\$ 20.447.101,95
Leblon	1723	140	R\$ 570,00	R\$ 315,00	66	18%	122662	5,46%	R\$ 48.465,13	R\$ 11.878,03	R\$ 79.537.387,00	10,02%	R\$ 11.930.608,05
Barra da Tijuca	3056	499	R\$ 486,00	R\$ 283,00	46	12,7%	165217	7,36%	R\$ 24.939,53	R\$ 6.881,98	R\$ 71.737.244,00	9,04%	R\$ 10.760.586,60
Botafogo	1366	489	R\$ 292,00	R\$ 187,00	54	14,9%	101994	4,54%	R\$ 19.078,29	R\$ 6.062,13	R\$ 26.238.222,00	3,31%	R\$ 3.935.733,30
Recreio dos Bandeirantes	1779	341	R\$ 360,00	R\$ 245,50	36	9,8%	76030	3,39%	R\$ 14.019,18	R\$ 3.937,09	R\$ 24.601.696,00	3,10%	R\$ 3.690.254,40
Centro	1542	177	R\$ 180,00	R\$ 144,00	66	18%	114124	5,08%	R\$ 12.415,54	R\$ 5.289,74	R\$ 18.816.435,00	2,37%	R\$ 2.822.465,25
Barra Olímpica	1479	319	R\$ 379,00	R\$ 270,00	38	10,4%	68484	3,05%	R\$ 12.034,68	R\$ 5.388,40	R\$ 17.886.807,00	2,25%	R\$ 2.683.021,05
Leme	692	165	R\$ 370,00	R\$ 200,00	54	14,8%	46801	2,08%	R\$ 24.071,65	R\$ 8.006,86	R\$ 16.728.921,00	2,11%	R\$ 2.509.338,15
Santa Teresa	833	593	R\$ 253,50	R\$ 180,00	36	9,9%	53465	2,38%	R\$ 15.020,61	R\$ 4.184,51	R\$ 13.979.356,00	1,76%	R\$ 2.096.903,40
Flamengo	782	187	R\$ 285,00	R\$ 186,00	53	14,5%	51239	2,28%	R\$ 18.097,62	R\$ 5.715,23	R\$ 12.922.468,00	1,63%	R\$ 1.938.370,20
Laranjeiras	400	185	R\$ 330,00	R\$ 182,00	37	10,2%	21831	0,97%	R\$ 14.717,92	R\$ 4.466,80	R\$ 5.649.151,00	0,71%	R\$ 847.372,65
Jacarepaguá	591	121	R\$ 264,00	R\$ 209,00	35	9,7%	25928	1,16%	R\$ 9.794,09	R\$ 2.961,45	R\$ 5.514.359,00	0,69%	R\$ 827.153,85
Lagoa	247	48	R\$ 665,00	R\$ 324,50	31	8,4%	9024	0,40%	R\$ 22.853,44	R\$ 3.539,75	R\$ 5.311.932,00	0,67%	R\$ 796.789,80
Vidigal	199	135	R\$ 262,00	R\$ 238,50	34	9,3%	12156	0,54%	R\$ 25.581,71	R\$ 3.592,57	R\$ 5.115.510,00	0,64%	R\$ 767.326,50
São Conrado	201	288	R\$ 1.343,50	R\$ 559,00	9	2,4%	4378	0,20%	R\$ 25.861,17	R\$ 2.786,41	R\$ 5.079.764,00	0,64%	R\$ 761.964,60
Catete	333	78	R\$ 226,00	R\$ 180,00	50	13,7%	21029	0,94%	R\$ 15.462,99	R\$ 5.442,96	R\$ 4.837.463,00	0,61%	R\$ 725.619,45
Glória	288	72	R\$ 250,00	R\$ 161,00	55	15,1%	19800	0,88%	R\$ 14.474,52	R\$ 7.450,40	R\$ 4.238.921,00	0,53%	R\$ 635.838,15
Lapa	349	34	R\$ 191,50	R\$ 143,00	60	16,3%	23252	1,04%	R\$ 12.348,67	R\$ 4.728,00	R\$ 3.985.011,00	0,50%	R\$ 597.751,65
Joá	141	20	R\$ 5.600,00	R\$ 450,00	17	4,7%	2736	0,12%	R\$ 29.016,91	R\$ 3.814,93	R\$ 3.800.406,00	0,48%	R\$ 570.060,90
Gávea	186	50	R\$ 495,00	R\$ 276,00	30	8,3%	7159	0,32%	R\$ 17.423,44	R\$ 4.425,80	R\$ 3.178.848,00	0,40%	R\$ 476.827,20
Camorim	215	33	R\$ 240,00	R\$ 227,00	55	15,1%	13682	0,61%	R\$ 14.089,86	R\$ 7.898,32	R\$ 2.921.922,00	0,37%	R\$ 438.288,30
Barra de Guaratiba	135	45	R\$ 302,00	R\$ 283,00	38	10,3%	6792	0,30%	R\$ 21.219,06	R\$ 2.748,58	R\$ 2.839.726,00	0,36%	R\$ 425.958,90
Urca	133	39	R\$ 354,50	R\$ 245,00	50	13,8%	8675	0,39%	R\$ 21.117,52	R\$ 6.436,69	R\$ 2.701.457,00	0,34%	R\$ 405.218,55
Tijuca	175	250	R\$ 280,00	R\$ 134,00	35	9,5%	15241	0,68%	R\$ 9.982,44	R\$ 3.782,30	R\$ 2.451.817,00	0,31%	R\$ 367.772,55
Jardim Botânico	158	65	R\$ 506,00	R\$ 191,00	32	8,7%	7086	0,32%	R\$ 13.588,64	R\$ 5.240,64	R\$ 2.252.373,00	0,28%	R\$ 337.855,95
Vargem Grande	118	32	R\$ 390,00	R\$ 200,00	25	6,9%	3788	0,17%	R\$ 18.935,72	R\$ 516,19	R\$ 2.193.610,00	0,28%	R\$ 329.041,50
Itanhangá	111	75	R\$ 1.470,00	R\$ 196,50	22	6%	4126	0,18%	R\$ 17.800,15	R\$ 4.440,04	R\$ 2.144.178,00	0,27%	R\$ 321.626,70
Humaitá	151	50	R\$ 388,00	R\$ 194,00	33	9,1%	6674	0,30%	R\$ 12.659,21	R\$ 5.241,14	R\$ 1.954.440,00	0,25%	R\$ 293.166,00
Guaratiba	128	25	R\$ 354,00	R\$ 224,00	31	8,6%	4852	0,22%	R\$ 13.125,66	R\$ 3.952,32	R\$ 1.660.761,00	0,21%	R\$ 249.114,15
São Cristóvão	81	42	R\$ 250,00	R\$ 85,50	64	17,4%	8022	0,36%	R\$ 14.508,00	R\$ 5.466,68	R\$ 1.267.707,00	0,16%	R\$ 190.156,05
Campo Grande	124	27	R\$ 182,00	R\$ 134,50	42	11,4%	6390	0,28%	R\$ 10.069,19	R\$ 1.000,62	R\$ 1.165.635,00	0,15%	R\$ 174.845,25
Santo Cristo	127	19	R\$ 229,00	R\$ 160,00	39	10,7%	5831	0,26%	R\$ 9.111,03	R\$ 1.306,94	R\$ 1.070.617,00	0,13%	R\$ 160.592,55
Cosme Velho	55	26	R\$ 513,50	R\$ 284,00	30	8,2%	2593	0,12%	R\$ 16.627,94	R\$ 4.017,42	R\$ 919.789,00	0,12%	R\$ 137.968,35
Maracanã	68	59	R\$ 400,00	R\$ 140,00	37	10%	5025	0,22%	R\$ 9.382,67	R\$ 5.528,13	R\$ 888.875,00	0,11%	R\$ 133.331,25
Freguesia (Jacarepaguá)	97	44	R\$ 318,00	R\$ 170,00	25	6,7%	3481	0,16%	R\$ 8.303,17	R\$ 2.490,33	R\$ 879.279,00	0,11%	R\$ 131.891,85
Paquetá	44	14	R\$ 292,50	R\$ 248,00	44	12,2%	2577	0,11%	R\$ 20.744,32	R\$ 762,86	R\$ 840.453,00	0,11%	R\$ 126.067,95
Vargem Pequena	103	64	R\$ 358,00	R\$ 220,00	16	4,4%	2694	0,12%	R\$ 7.810,76	R\$ 777,11	R\$ 830.544,00	0,10%	R\$ 124.581,60
Vila Isabel	74	72	R\$ 277,00	R\$ 173,50	36	9,9%	5328	0,24%	R\$ 9.002,94	R\$ 2.783,27	R\$ 788.813,00	0,10%	R\$ 118.321,95
Jardim Guanabara	33	16	R\$ 282,00	R\$ 158,00	51	13,9%	2484	0,11%	R\$ 19.246,37	R\$ 3.229,38	R\$ 619.373,00	0,08%	R\$ 92.905,95
Alto da Boa Vista	34	18	R\$ 719,00	R\$ 388,50	22	5,9%	1128	0,05%	R\$ 17.610,00	R\$ 768,00	R\$ 506.904,00	0,06%	R\$ 76.035,60
Ilha de Guaratiba	18	4	R\$ 472,50	R\$ 172,00	32	8,7%	702	0,03%	R\$ 26.105,11	R\$ 0,00	R\$ 469.892,00	0,06%	R\$ 70.483,80
Engenho de Dentro	44	28	R\$ 314,00	R\$ 238,00	29	7,8%	2062	0,09%	R\$ 7.752,33	R\$ 8.319,53	R\$ 467.030,00	0,06%	R\$ 70.054,50
Rio Comprido	51	70	R\$ 267,00	R\$ 171,00	17	4,5%	2328	0,10%	R\$ 6.727,88	R\$ 1.835,41	R\$ 463.098,00	0,06%	R\$ 69.464,70
Praça da Bandeira	50	36	R\$ 203,00	R\$ 119,50	35	9,5%	3151	0,14%	R\$ 7.826,00	R\$ 3.045,29	R\$ 460.050,00	0,06%	R\$ 69.007,50
Andaraí	31	22	R\$ 244,00	R\$ 171,00	38	10,3%	2076	0,09%	R\$ 13.077,14	R\$ 2.290,11	R\$ 425.629,00	0,05%	R\$ 63.844,35
Portuguesa	8	27	R\$ 264,50	R\$ 142,00	67	18,2%	2394	0,11%	R\$ 16.567,50	R\$ 9.668,67	R\$ 420.624,00	0,05%	R\$ 63.093,60
Curicica	63	24	R\$ 190,00	R\$ 301,00	26	7,2%	2296	0,10%	R\$ 6.599,43	R\$ 3.472,57	R\$ 409.495,00	0,05%	R\$ 61.424,25
Taquara	83	79	R\$ 225,00	R\$ 180,00	12	3,2%	1966	0,09%	R\$ 5.005,72	R\$ 795,97	R\$ 384.274,00	0,05%	R\$ 57.641,10
Grajaú	23	42	R\$ 250,00	R\$ 171,00	21	5,6%	1457	0,06%	R\$ 12.111,39	R\$ 1.236,50	R\$ 335.312,00	0,04%	R\$ 50.296,80

Source: Prepared by the author, based on data collected by Inside Airbnb on 26-05-2025.
Methodological note: The last 12 months refer to the period between 26-05-2024 and 26-05-2025.

Having carried out a general analysis of the prices practiced in Rio de Janeiro, we now turn to the analysis of listing occupancy, as well as estimated nights and revenues (Table 7). Such information is important for verifying whether the *lodging commodity* has in fact been consumed in Rio de Janeiro — that is, whether the *realization of value* occurs, corresponding to the M' stage of the circulation of capital — and how this consumption is spatially distributed. It also makes it possible to understand how this consumption has generated revenues from the value, surplus value, and rent produced, transferred, and appropriated by the different actors involved in the circulation of capital through Airbnb — hosts, co-hosts, guests, outsourced workers, and the company itself.

Based on the Inside Airbnb occupancy model, it is estimated that, over the last 12 months, 2,244,762 overnight stays were realized throughout the city of Rio de Janeiro, totaling R\$ 793.7 million circulated through the platform. Considering a 15%¹¹ fee on revenues circulated through its digital infrastructure, Airbnb captured approximately R\$ 119.05 million through Rio de Janeiro's tourist accommodations over the last 12 months. Of the total number of overnight stays, 867,429 occurred in Copacabana (38.64%) — that is, the vast majority of *lodging consumption* has been realized in this neighborhood. Listings in Copacabana presented an average occupancy of 66 days over the year (18% of the 365 days), and an entire home in this neighborhood generated an average annual revenue¹² of R\$ 26,469.25, while a private room generated R\$ 9,037.68. The total revenue generated by the neighborhood of Copacabana is approximately R\$ 287.01 million (36.16% of the city total), of which R\$ 43.05 million was captured by Airbnb.

After Copacabana, the three neighborhoods with the greatest share of Rio de Janeiro's total revenue are Ipanema (R\$ 136.31 million, or 17.17%), Leblon (R\$ 79.53 million, or 10.02%), and Barra da Tijuca (R\$ 71.73 million, or 9.04%). The total amount captured by Airbnb in these three neighborhoods was R\$ 43.13 million. Over the last year, 253,646 overnight stays were realized in Ipanema. Listings in this neighborhood presented an average occupancy of 70 days throughout the year (19.18% of the 365 days, making it the neighborhood with the highest occupancy),

¹¹ The fee reported by Airbnb is considered, which may be divided between guests and hosts. More information at: <https://www.airbnb.com.br/help/article/1857>

¹² To estimate the average annual revenues of entire homes and private rooms, the total annual revenue of listings within each group was divided by the total number of listings. It is important to emphasize that, as with any average, the resulting value indicates that some hosts obtained revenues above this level, while others obtained revenues below it.

and an entire home generated an average annual revenue of R\$ 44,972.75, while a private room generated R\$ 9,790.91. In Leblon, 122,662 overnight stays were realized, with listings averaging 66 occupied days throughout the year. An entire home in Leblon generated an average annual revenue of R\$ 48,465.13, while a private room generated R\$ 11,878.03. Finally, Barra da Tijuca totaled 165,217 overnight stays, with listings averaging 46 occupied days. An entire home in Barra da Tijuca generated an average annual revenue of R\$ 24,939.53, while a private room generated R\$ 6,881.98.

Neighborhoods in the central region and at the beginning of the South Zone stand out because of their high occupancy rates, considering the standards of the city: in Centro, listings present an occupancy of 66 days per year; in Botafogo and Leme, 54; in Flamengo, 53; in Catete, 50; in Glória, 55; and in Lapa, 60. Also noteworthy are São Cristóvão, with 64 days; Camorim, with 55; and Portuguesa, near Galeão Airport, with 67 days per year. Occupancy is interpreted as tending to increase as new stimuli to national and international tourism are introduced into the city, thereby expanding effective consumer demand. It is also observed that neighborhoods in the West Zone, even with less expressive listing densities — because they are neighborhoods with larger territorial extensions — contributed significantly to the composition of the city's total revenue over the last year, as is the case of Barra da Tijuca, Olympic Barra, and Recreio dos Bandeirantes. This occurs because, even with occupancy levels not as high as those observed in neighborhoods of the South Zone and central region, these neighborhoods contain a large number of tourist accommodations, as previously demonstrated.

Finally, as the last analytical stage, a combined analysis of the number of overnight stays (Figure 36) and estimated revenues (Figure 37) within neighborhoods is proposed. As already established, Copacabana concentrates the largest share of overnight stays realized in Rio de Janeiro over the last year. The main areas where these stays were booked are the surroundings of Praça do Lido (83,734 overnight stays), Pedra do Arpoador (72,407), and Avenida Nossa Senhora de Copacabana near Rua Figueiredo Magalhães (68,527) (Figure 36a). It is estimated that these three hexagons generated R\$ 75.76 million in revenue over the last year, concentrating 26.39% of all revenue generated in the neighborhood of Copacabana during this period. Regarding the surrounding area, overnight stays are also highly concentrated in Ipanema, near Arpoador, where two hexagons totaled 87,370 overnight stays and generated R\$ 48.63 million in revenue (35.68% of Ip-

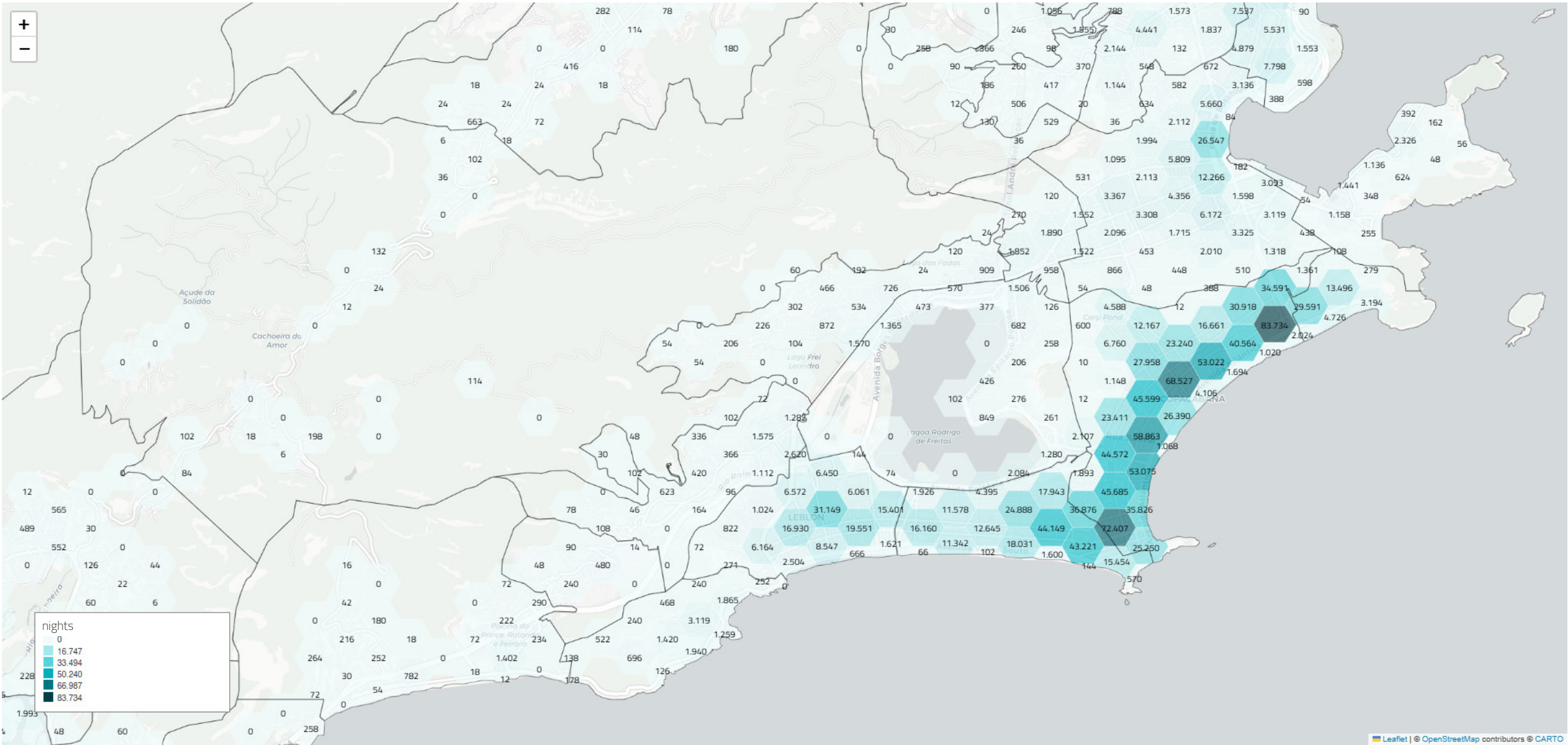
anema's revenue). In Leblon, significant revenue can also be observed, particularly in three hexagons located in the center of the neighborhood, which together totaled 67,630 overnight stays and generated R\$ 45.35 million in revenue.

Other areas of high revenue include the Botafogo waterfront, with hexagons generating up to R\$ 5.92 million, as well as the entire area encompassing neighborhoods such as Lapa, Catete, Glória, Flamengo, and Santa Teresa, with hexagons generating up to R\$ 2.1 million. In Centro, the surroundings of Avenida Rio Branco near the Museum of Tomorrow stand out (with one hexagon generating 15,769 overnight stays and R\$ 2.93 million), as well as the surroundings of the Carioca and Cinelândia stations (with two hexagons totaling 34,363 overnight stays and R\$ 5.69 million). In the West Zone, Barra da Tijuca generated significant revenue extending along the waterfront, especially between Jardim Oceânico and Terminal Alvorada, with hexagons generating up to R\$ 4.23 million. In Recreio dos Bandeirantes, revenue was concentrated around Pedra do Pontal, where two hexagons totaled 22,926 overnight stays and R\$ 6.65 million in revenue. In Olympic Barra, the highest revenues were generated around the Olympic Park, Riocentro, and Estrada dos Bandeirantes, with hexagons generating up to R\$ 5.57 million. Finally, it can also be observed that consumption is realized in other areas of the city, even if less intensely, thereby contributing to the composition of all revenue generated by Rio de Janeiro's accommodations and partially captured by Airbnb.

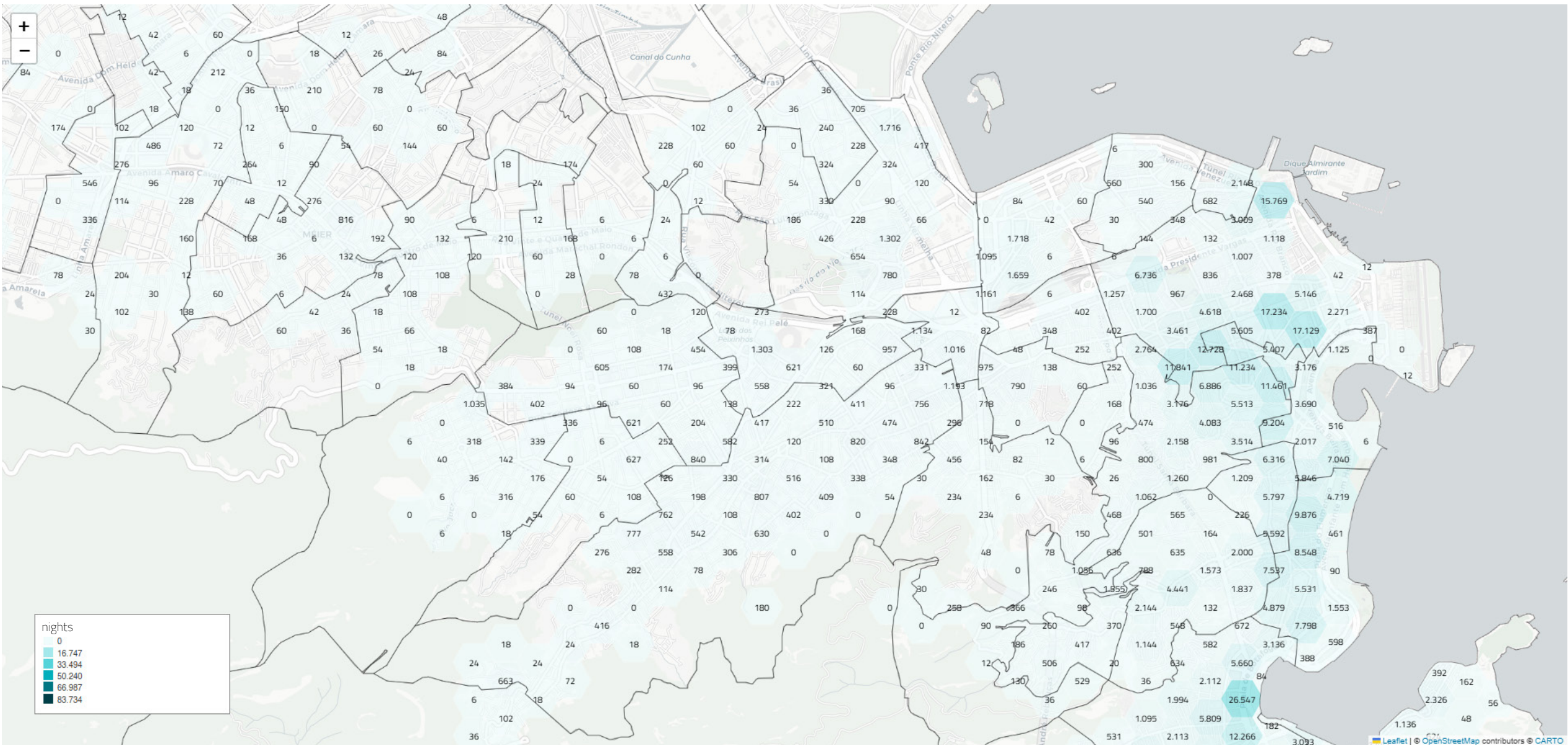
Figure 36 – Rio de Janeiro: Estimated nights booked in the last 12 months



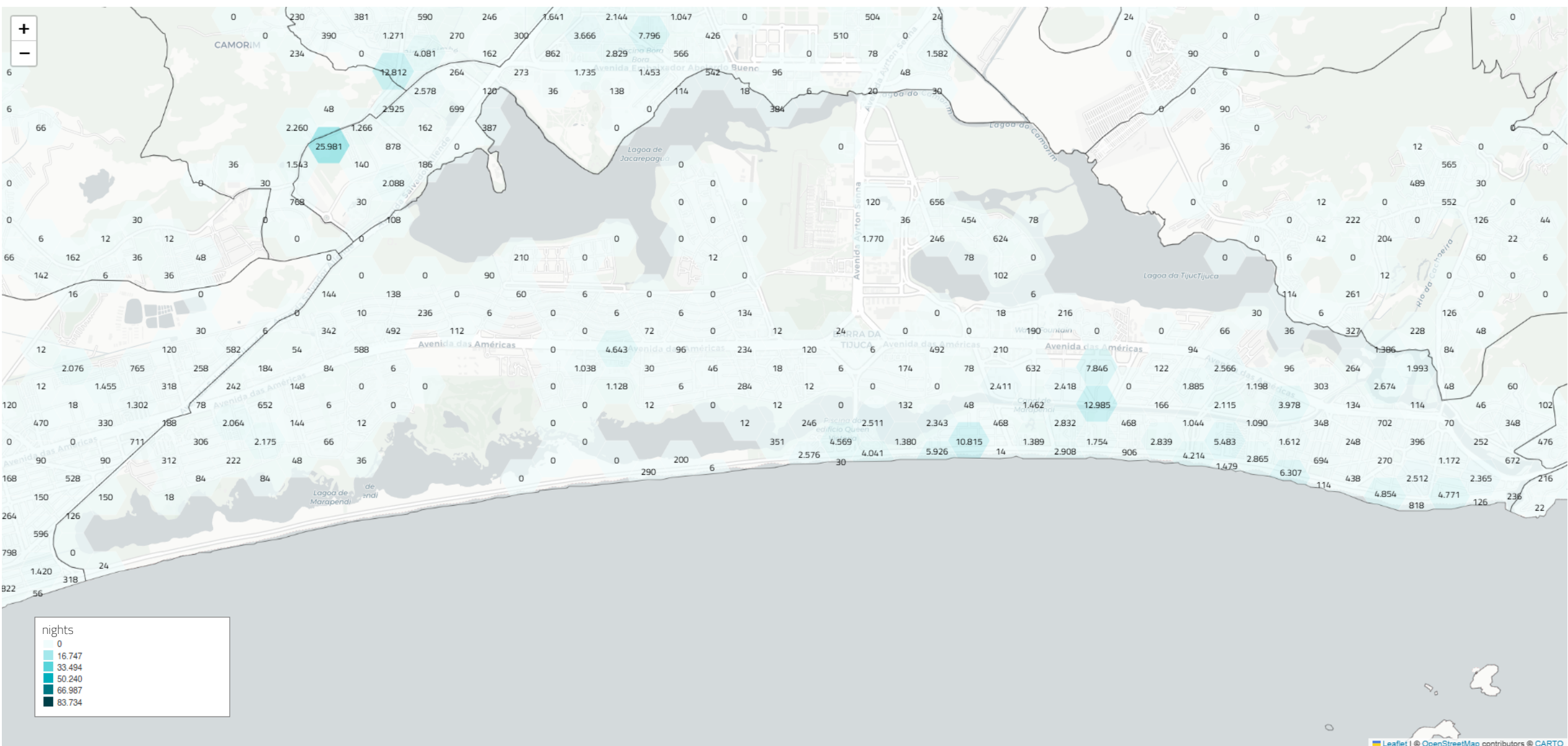
a. Estimated nights booked in the last twelve months in Copacabana and surrounding areas (26-05-2025)



b. Estimated nights booked in the last twelve months in central and North Zone neighborhoods (26-05-2025)

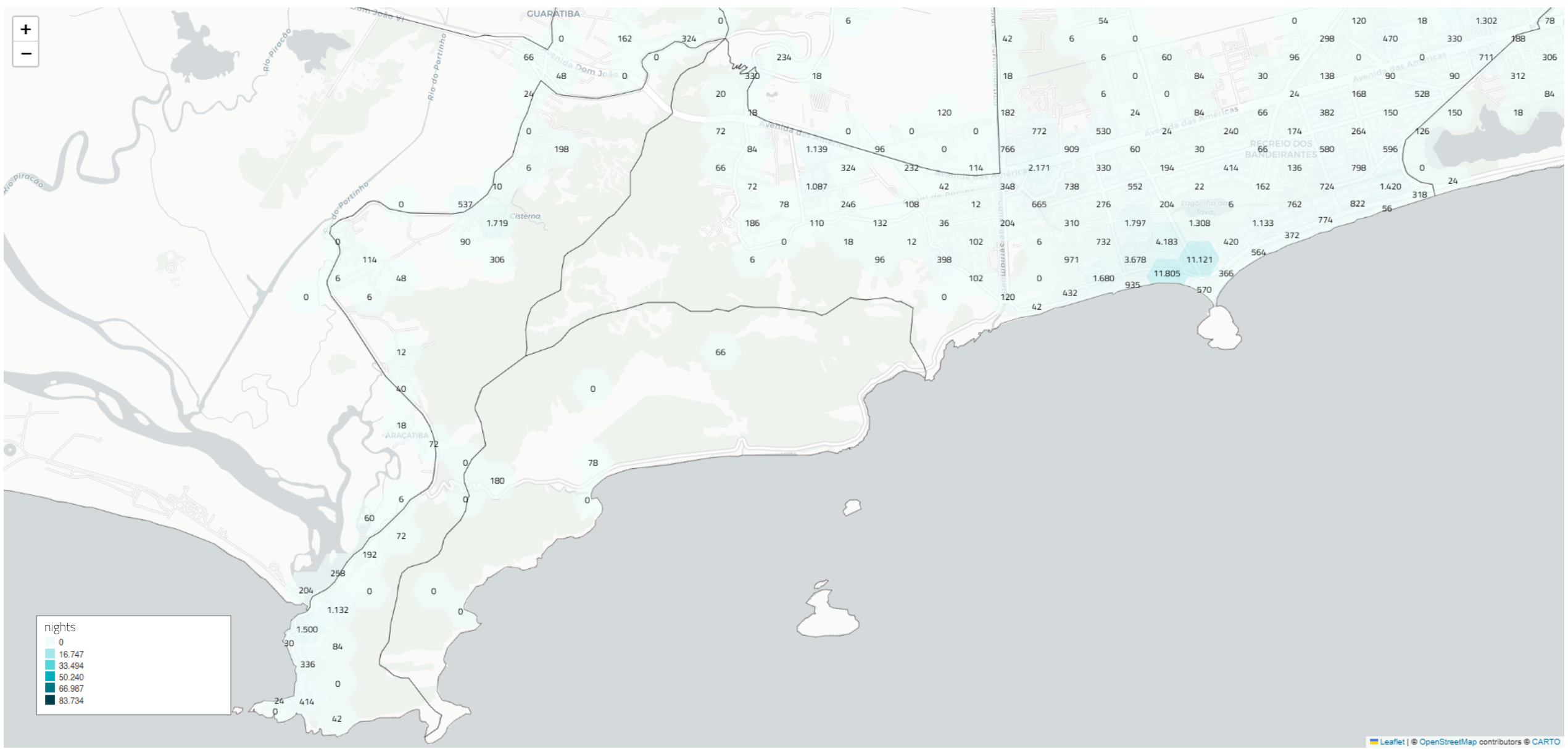


c. Estimated nights booked in the last twelve months in Barra da Tijuca (26-05-2025)

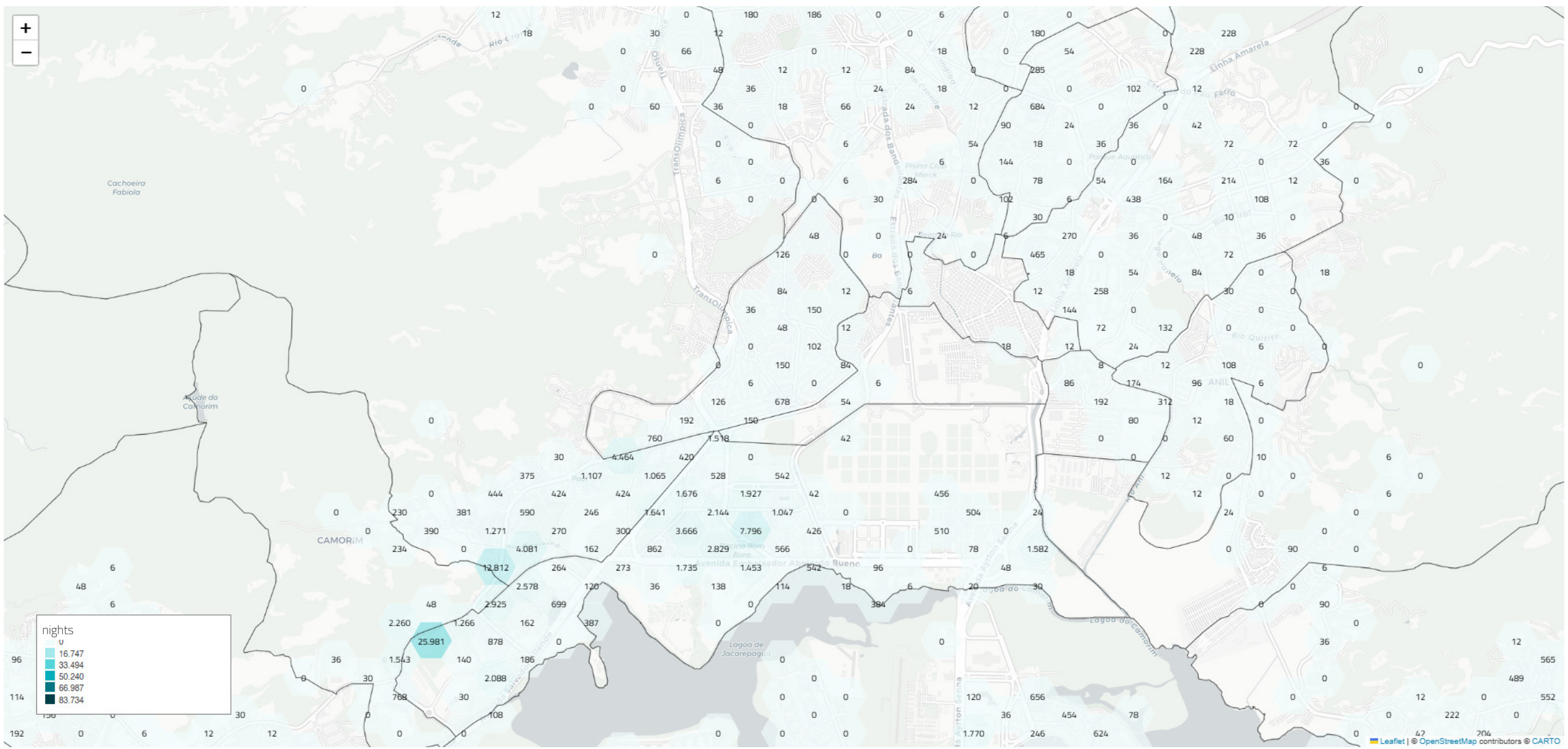


Source: Prepared by the author, based on data collected by Inside Airbnb on 26-05-2025. The full map can be accessed at: <https://alinecruvinel.com/thesis/>

d. Estimated nights booked in the last twelve months in Recreio dos Bandeirantes and Barra de Guaratiba (26-05-2025)



e. Estimated nights booked in the last twelve months in the Olympic Barra, Camorim, Jacarepaguá, and surrounding areas (26-05-2025)



f. Estimated nights booked in the last twelve months in West Zone neighborhoods (26-05-2025)

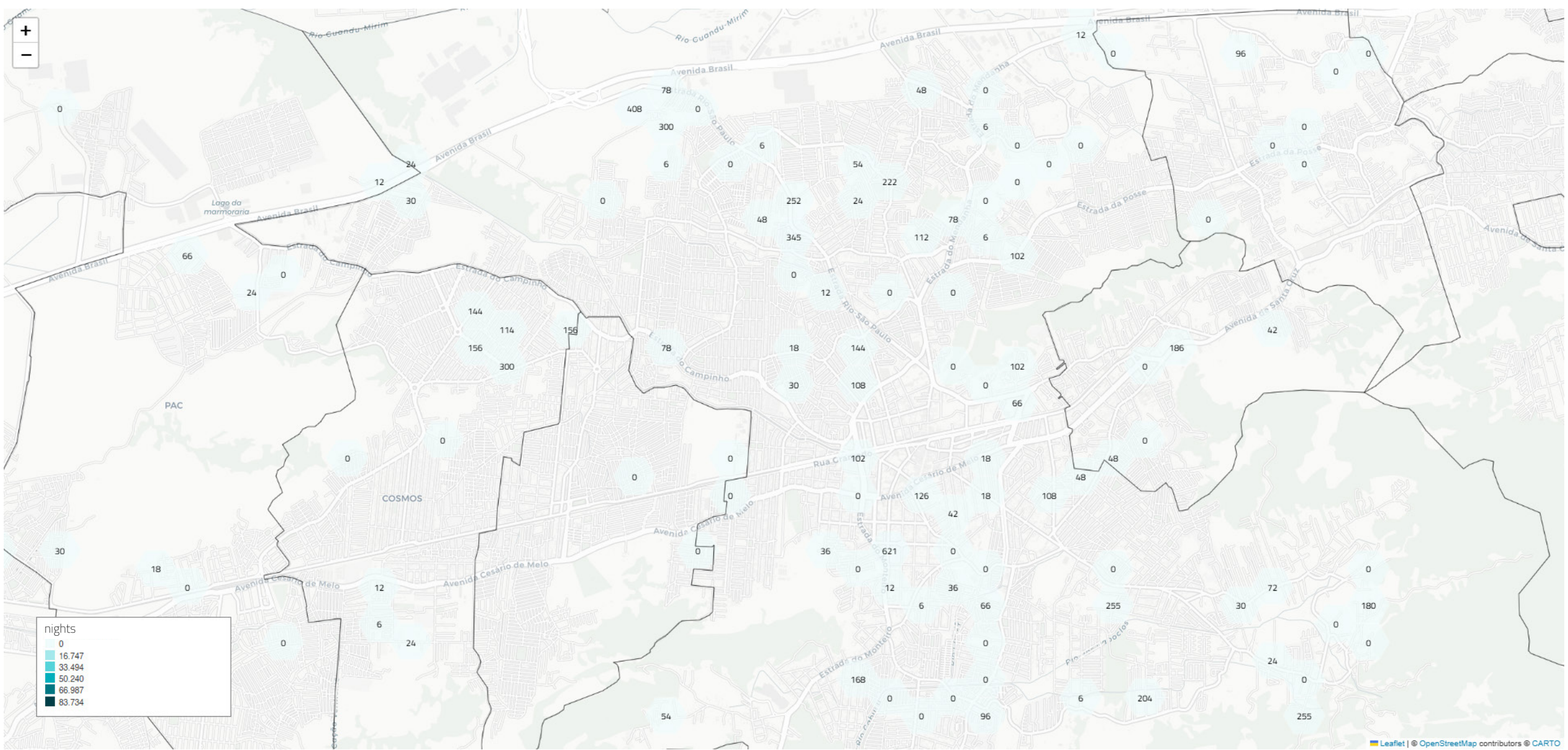
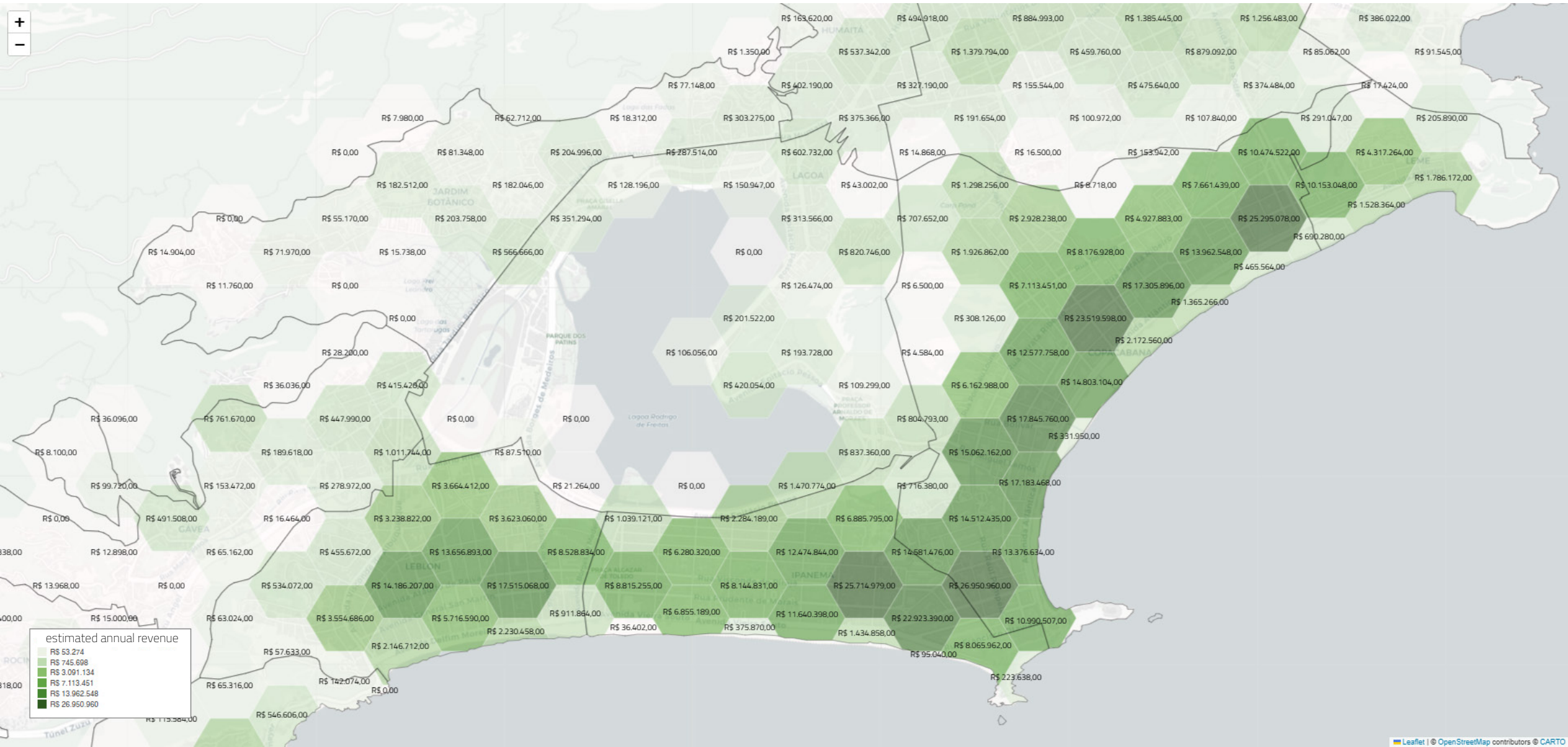


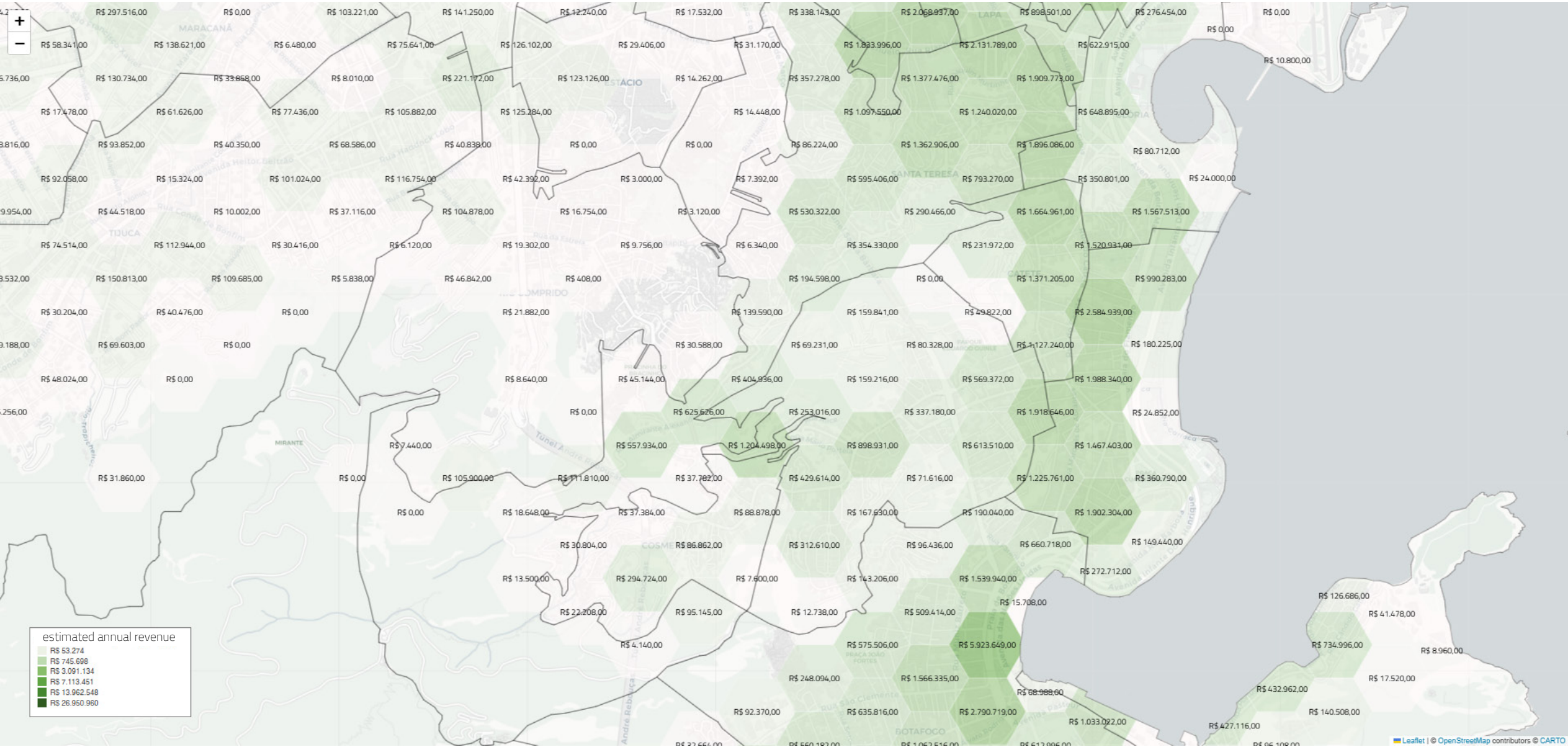
Figure 37 – Rio de Janeiro: Estimated revenue in the last 12 months



a. Estimated total revenue in the last twelve months in Copacabana and surrounding areas (26-05-2025)



b. Estimated total revenue in the last twelve months in Catete, Flamengo, Santa Teresa, and surrounding areas (26-05-2025)

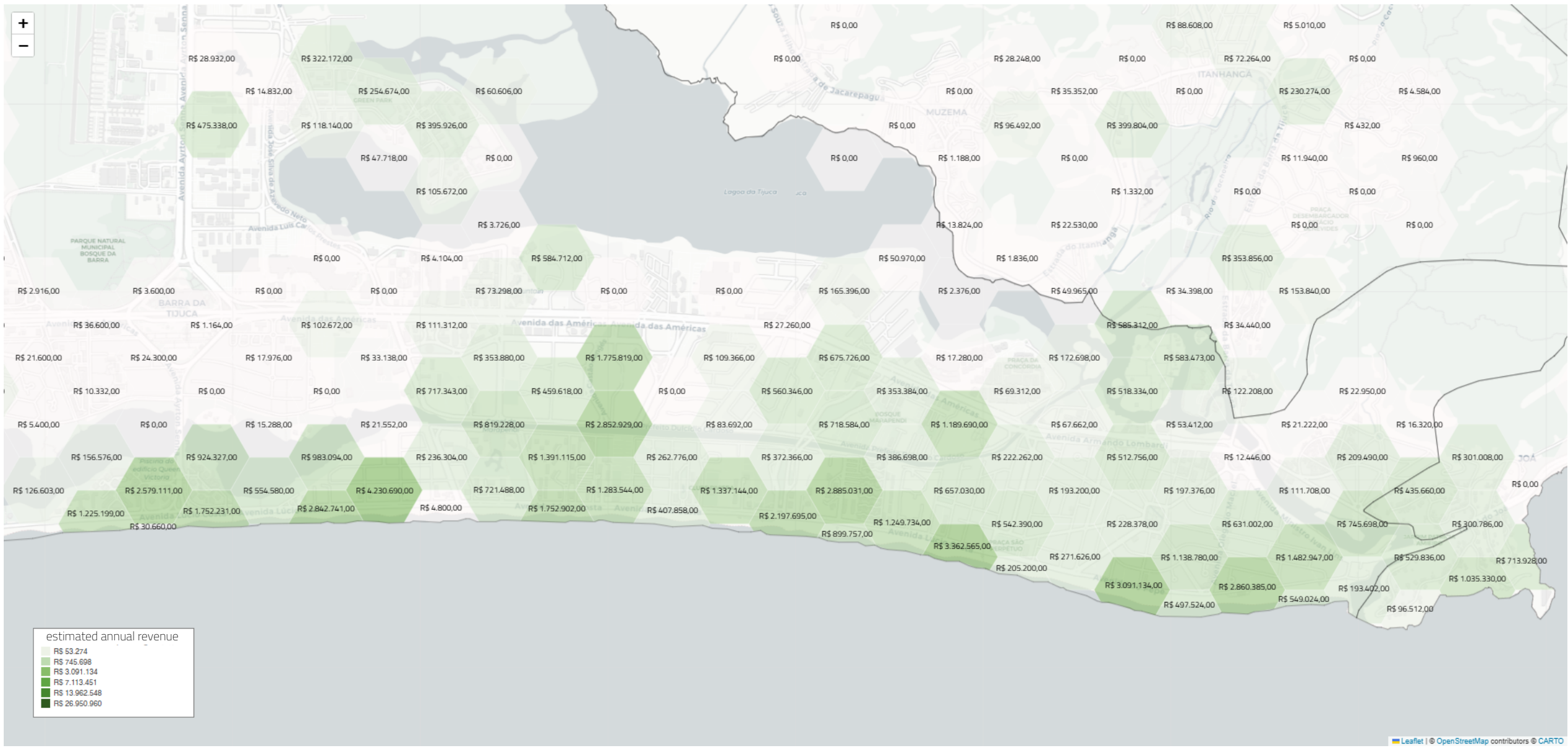


c. Estimated total revenue in the last twelve months in the central region and in North Zone neighborhoods (26-05-2025)

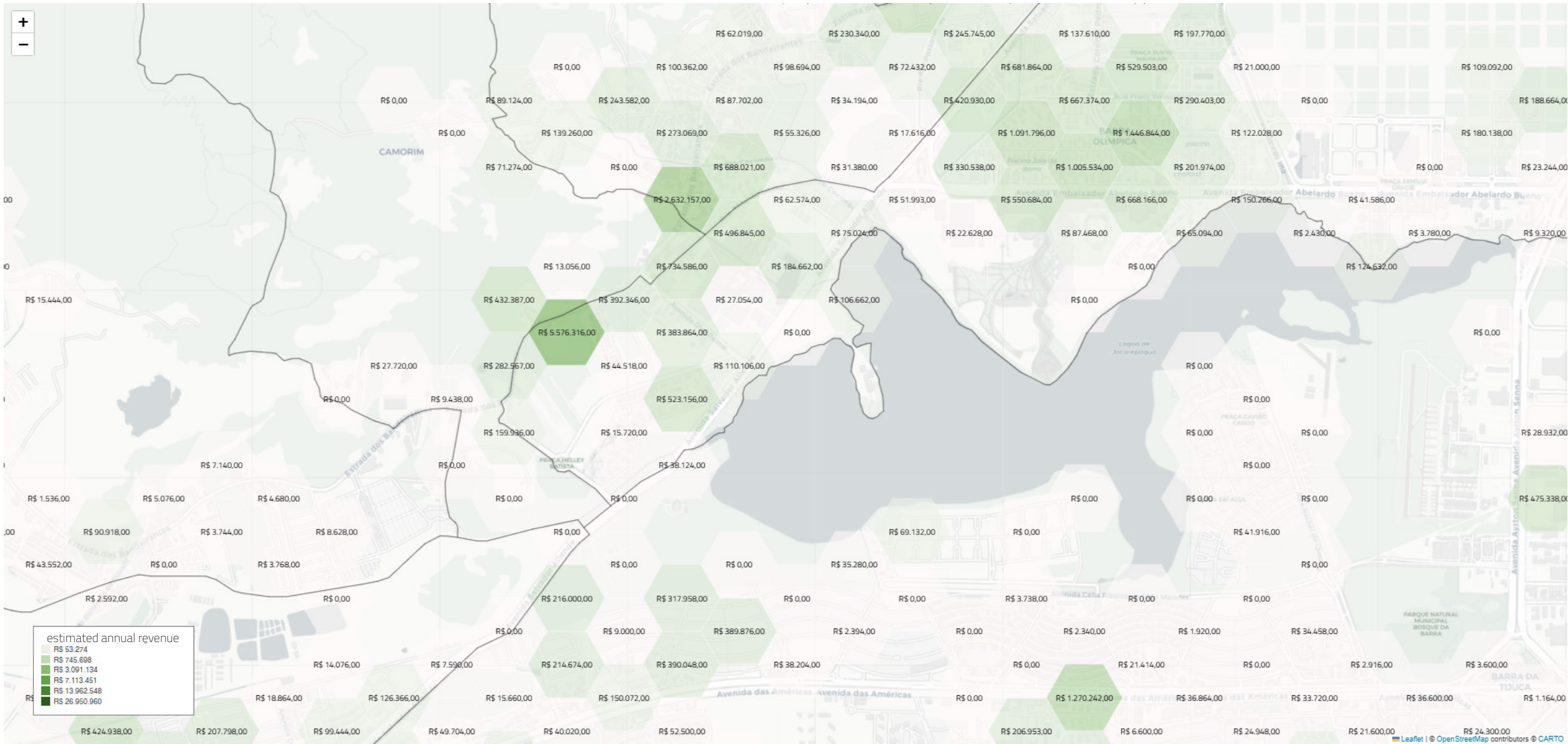


Source: Prepared by the author, based on data collected by Inside Airbnb on 26-05-2025. The full map can be accessed at: <https://alinecruvinel.com/thesis/>

d. Estimated total revenue in the last twelve months in Jardim Oceânico, in Barra da Tijuca (26-05-2025)



e. Estimated total revenue in the last twelve months in parts of Barra da Tijuca, the Olympic Barra, Camorim, and Jacarepaguá (26-05-2025)



f. Estimated total revenue in the last twelve months in Recreio dos Bandeirantes (26-05-2025)



With this section, we conclude the cycle of capital movement through the final stage of circulation (M'), where capital is realized through the consumption of lodging by the guest and subsequently distributed and captured by Airbnb. As demonstrated, capital is not only advanced in the form of housing by property owners in Rio de Janeiro, but value and surplus value are also produced through the platform's activities, culminating in consumption. As developed in Chapter 1, Airbnb controls the processes of production and consumption of the *lodging commodity* in different cities around the world through its digital infrastructure. This consumption, in turn, varies according to effective consumer demand — that is, society's purchasing power. For the realization of capital through Airbnb's activities, this demand has been stimulated in different ways, with the State acting as an important agent in this process through tourism incentive policies — aimed at the consumption of *lodging* by guests — and also through access to real estate credit — aimed at the consumption of *housing*, later incorporated into the platform as tourist accommodation.

In general terms, information related to listing occupancy helps identify the areas of the city where this demand is most intense, enabling the realization of capital as well as its more accelerated turnover. In Rio de Janeiro, the data demonstrate that this has occurred in the South Zone and in the city center, especially in Copacabana, Ipanema, Centro, and Lapa. In the South Zone, this high demand is combined with a large supply of tourist accommodations, thereby composing the largest share of the revenue generated through Airbnb in the city of Rio de Janeiro. The central region, by presenting high occupancy rates, tends to contribute increasingly to Airbnb's accumulation as its housing stock expands, as has already occurred through urban renewal projects. The West Zone, although not presenting occupancy levels as expressive as those of the other two regions, contributes significantly to the city's total revenue because it contains a large supply of accommodations.

This process contributes not only to Airbnb's accumulation, but also to the accumulation of local property managers and property owners, which tends to concentrate in areas with greater accumulation potential, through which different claimants to capital benefit not only from high occupancy rates but also from spatial singularities and existing urban infrastructure in order to access transfers of expanded land rent. At the same time, different areas of the city — even where the demand for accommodations has not traditionally been intense — have gen-

erated revenue through Airbnb, thereby presenting themselves as areas with the potential for intensified realization of capital, depending on concrete measures adopted to make this possible. In this scenario, initiatives surrounding short-term rental activities in the city of Rio de Janeiro tend to involve stimuli both to the expansion of accommodation supply and to effective consumer demand.

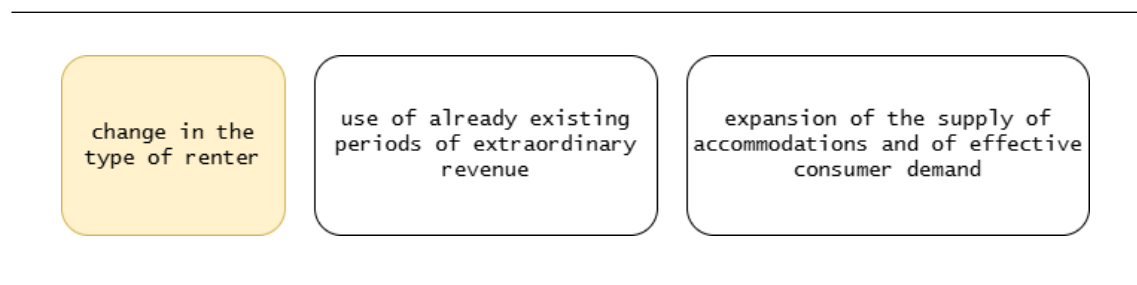
Based on this, after analyzing the processes of capital circulation, Chapter 4 turns to understanding the strategies that enable expanded accumulation by Airbnb and by other claimants to the capital circulated through the activities of this platform.

4. Strategies for expanded accumulation

4.1. Satisfying a new consumer: from residential rental to short-term rental

In Chapter 3, the analysis of the processes that configure the circulation of capital according to the formula $M-C-M'$ demonstrated how Airbnb's activities in Rio de Janeiro enable capital accumulation both for the platform itself and for other claimants to this capital, within a logic reproduced across different cities around the world. Chapter 4 is now dedicated to analyzing the conditions that enable expanded accumulation, in order to further explore, through Inside Airbnb data, the argument developed in Chapter 1. To do so, the analysis considers the strategies that allow the main claimants to capital to benefit from the expansion of land rent, dividing the discussion into three topics for explanatory purposes, concerning: (1) the change in the type of renter, from local resident to visitor; (2) the use of already existing periods of extraordinary revenue; and (3) the expansion of the supply of tourist accommodations and of effective consumer demand. In this context, the present section analyzes the change in the type of renter (Figure 38) in the city of Rio de Janeiro based on two processes: (a) the conversion of housing stock into tourist accommodation stock and (b) price variations between residential rental and short-term rental. It is argued that this conversion has been stimulated by the possibilities for expanding land rent provided by short-term rental activities.

Figure 38 – Expanded accumulation: strategy 1



Fonte: Elaboração própria.

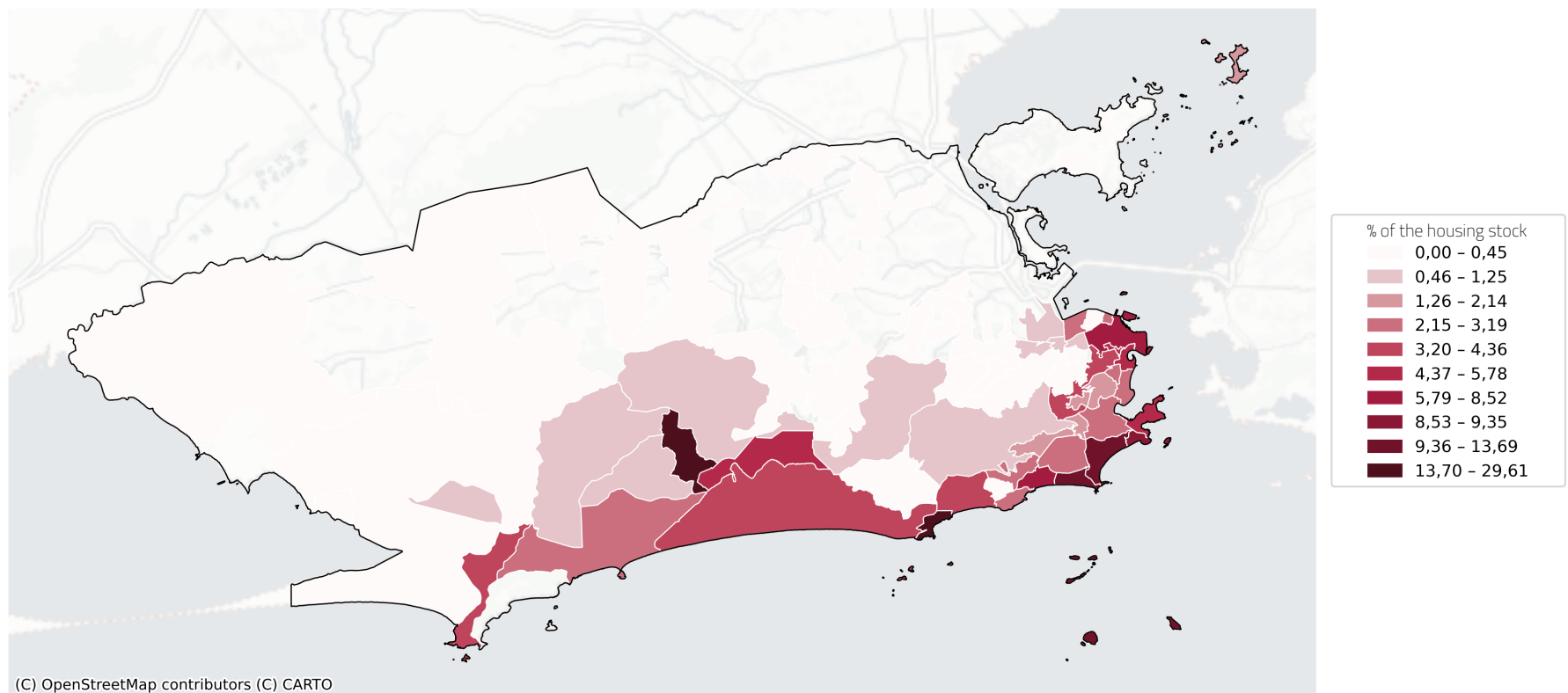
In general terms, the conversion of housing into tourist accommodation enables the offering of a new commodity to a new consumer — the visitor, whether domestic or international — who is, in turn, shaped through the creation of new desires and the reinvention of old ones, largely associated with the tourist experience.

As presented in Chapter 1, the change in the type of renter constitutes a condition for the expansion of land rent oriented toward demands external to the city, since it presents a greater speculative potential than residential rental, which is linked to long-term contracts and to the transfer of land rent through portions of the wages of the local population. From this perspective, the case of Rio de Janeiro is analyzed based on three central variables — number of dwellings, vacant dwellings, and inhabitants¹. These variables are emphasized in the scientific literature because of their relationship with the expansion of short-term rentals, in processes such as the replacement of housing by tourist accommodations, the use of vacant properties, and population displacement, making them useful for understanding how this expansion occurs in Rio de Janeiro. Following Santos (1985), the analysis proposed here is contextual rather than causal.

Based on these data, it can be observed that the housing stock currently occupied by Airbnb in Rio de Janeiro's neighborhoods ranges from 0.02% to 29.61%, considering entire home listings (Figure 39; Table 8). The neighborhoods with the highest percentages of dwellings advertised as tourist accommodations are: Joá, with 29.61%; Camorim, with 29.21%; Ipanema, with 13.70%; Copacabana, with 13.70%; Leme, with 9.36%; Centro, with 8.53%; Leblon, with 7.76%; Glória, with 5.79%; Olympic Barra, with 5.25%; and Lapa, with 5.14%. These data indicate a high conversion of housing into tourist accommodations in neighborhoods with elevated rates of vacant dwellings, such as Camorim, where 48.23% of dwellings are vacant, and Joá, with 47.27%. In Camorim, the number of entire home listings represents 60.56% of the number of vacant dwellings and, in Joá, 62.67% (Figure 40; Table 8). These data are particularly relevant when considering that Camorim's real estate market was stimulated by the infrastructure works associated with the 2016 Olympic Games and has since expanded its stock of vacant dwellings, thereby becoming an area of progressive expansion in the supply of tourist accommodations. The same applies to Olympic Barra, which currently contains 19,866 vacant dwellings, corresponding to 70.52% of its entire housing stock. In this sense, public policies and the strategies adopted by the real estate market in the coming years will be decisive in determining the use of this housing stock, combined with the general tendency toward stimulating tourism and the consequent intensification of Airbnb's territorial penetration.

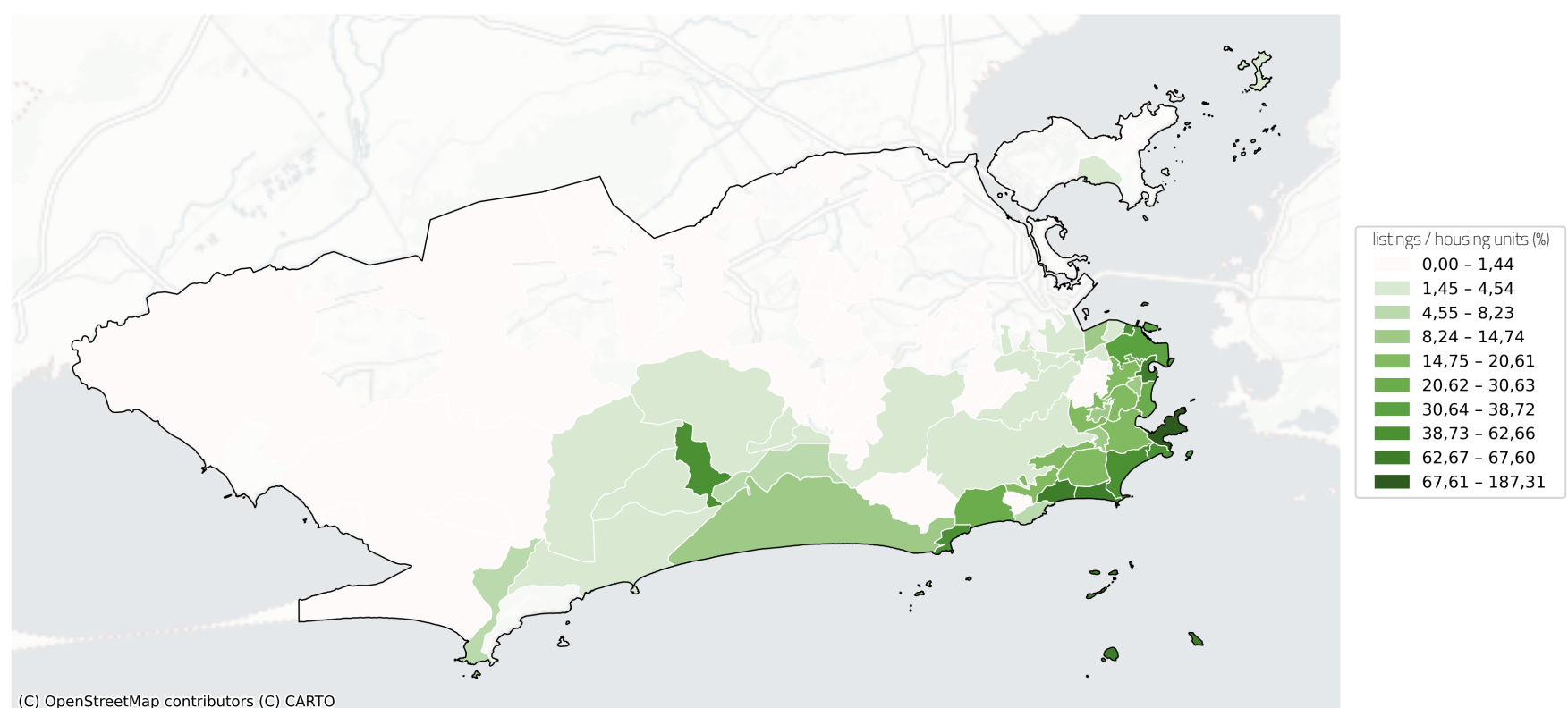
¹ The data are derived from the 2022 Demographic Census (IBGE) and were aggregated by neighborhood by DATA. Rio (2025).

Figure 39 – Rio de Janeiro: Housing stock used by entire home listings on Airbnb



Source: Prepared by the author, based on data collected by Inside Airbnb on 26-05-2025 and on 2022 Census data from IBGE aggregated by DATA.Rio.
Methodological note: Only neighborhoods with more than 10 entire home listings on Airbnb were considered.

Figure 40 – Rio de Janeiro: Percentage of entire home Airbnb listings relative to vacant housing units



Source: Prepared by the author, based on data collected by Inside Airbnb on 26-05-2025 and on 2022 Census data from IBGE aggregated by DATA.Rio.
Methodological note: Only neighborhoods with more than 10 entire home listings on Airbnb were considered.

Table 8 – Rio de Janeiro: Housing stock occupied by Airbnb and the relationship between entire home listings and vacant housing units

Neighborhood	Number of entire home listings	Number of inhabitants	Number of housing units	Number of vacant housing units	Percentage of vacant housing units (%)	Housing stock occupied by Airbnb (%)	Entire home listings / vacant housing units (%)	Population change from 2010 to 2022
Joã	141	818	476	225	47,27%	29,61%	62,67%	+20,17%
Camorim	215	1196	736	355	48,23%	29,21%	60,56%	+15,64%
Ipanema	3191	42743	23296	4839	20,77%	13,70%	65,94%	-12,52%
Copacabana	11173	146392	84715	18567	21,92%	13,19%	60,18%	-11,94%
Leme	692	14799	7391	1153	15,60%	9,36%	60,02%	-15,68%
Centro	1542	29555	18078	3981	22,02%	8,53%	38,73%	-20,01%
Leblon	1723	46044	22205	2606	11,74%	7,76%	66,12%	-18,10%
Glória	288	9661	4970	426	8,57%	5,79%	67,61%	-26,30%
Barra Olímpica	1479	23425	28172	19866	70,52%	5,25%	7,44%	+141,40%
Lapa	349	11587	6789	1139	16,78%	5,14%	30,64%	-21,33%
Urca	133	7061	2627	71	2,70%	5,06%	187,32%	-26,14%
Barra de Guaratiba	135	3577	3091	1910	61,79%	4,37%	7,07%	+32,93%
Barra da Tijuca	3056	127159	70223	22072	31,43%	4,35%	13,85%	+11,88%
São Conrado	201	10980	4645	789	16,99%	4,33%	25,48%	-11,30%
Santa Teresa	833	40926	19716	4341	22,02%	4,22%	19,19%	-11,42%
Botafogo	1366	82890	42692	7621	17,85%	3,20%	17,92%	-7,08%
Flamengo	782	50043	26160	2993	11,44%	2,99%	26,13%	-13,88%
Vidigal	199	12797	6729	2415	35,89%	2,96%	8,24%	+18,09%
Recreio dos Bandeirantes	1779	82240	67472	39110	57,96%	2,64%	4,55%	+71,83%
Catete	333	24057	12832	2398	18,69%	2,60%	13,89%	-7,32%
Saúde	26	2749	1001	42	4,20%	2,60%	61,9%	-31,76%
Lagoa	247	21198	9526	1198	12,58%	2,59%	20,62%	-11,90%
Santo Cristo	127	12330	4987	898	18,01%	2,55%	14,14%	-19,42%
Gávea	186	16003	7502	1079	14,38%	2,48%	17,24%	-11,42%
Humaitã	151	13285	7020	1202	17,12%	2,15%	12,56%	-1,81%
Cosme Velho	55	7178	2735	373	13,64%	2,01%	14,75%	-10,73%
Jardim Botânico	158	18009	7933	948	11,95%	1,99%	16,67%	-11,87%
Laranjeiras	400	45554	20890	2115	10,12%	1,91%	18,91%	-12,87%
Paquetã	44	3361	2641	1383	52,37%	1,67%	3,18%	+3,72%
Vargem Grande	118	14039	9329	4856	52,05%	1,26%	2,43%	+47,18%
Praça da Bandeira	50	8662	4193	753	17,96%	1,19%	6,64%	-16,71%
Cidade Nova	20	5466	2392	450	18,81%	0,84%	4,44%	-13,19%
Alto da Boa Vista	34	9343	4422	1440	32,56%	0,77%	2,36%	+5,22%
Vargem Pequena	103	27250	14075	5640	40,07%	0,73%	1,83%	+14,18%
Jacarepaguá	591	143440	81608	33684	41,28%	0,72%	1,75%	+22,66%
Ilha de Guaratiba	18	3580	2615	1508	57,67%	0,69%	1,19%	+70,36%
São Cristóvão	81	26510	12417	3804	30,64%	0,65%	2,13%	+5,28%
Maracanã	68	25256	11983	2123	17,72%	0,57%	3,20%	-6,96%

Curicica	63	31189	13664	3565	26,09%	0,46%	1,77%	-6,67%
Gamboa	25	13108	5551	1269	22,86%	0,45%	1,97%	-12,91%
Estácio	38	17189	8894	3036	34,14%	0,43%	1,25%	+35,32%
São Francisco Xavier	12	8343	3237	399	12,33%	0,37%	3,01%	-24,01%
Itanhangá	111	38415	30838	18042	58,51%	0,36%	0,62%	+76,93%
Riachuelo	17	12653	5520	981	17,77%	0,31%	1,73%	-16,91%
Anil	42	24172	13976	5905	42,25%	0,30%	0,71%	+31,95%
Freguesia (Jacarepaguá)	97	70511	33923	9779	28,83%	0,29%	0,99%	+6,09%
Bancários	15	12512	5121	1032	20,15%	0,29%	1,45%	-11,59%
Rio Comprido	51	43764	18148	3772	20,78%	0,28%	1,35%	-8,85%
Jardim Guanabara	33	32213	12650	1341	10,60%	0,26%	2,46%	-15,92%
Tijuca	175	163805	70928	8954	12,62%	0,25%	1,95%	-13,11%
Gardênia Azul	24	17715	9860	3833	38,87%	0,24%	0,63%	+15,66%
Vila Isabel	74	86018	33043	1918	5,80%	0,22%	3,86%	-23,52%
Pechincha	39	34709	18508	5985	32,34%	0,21%	0,65%	+12,56%
Encantado	13	15021	6203	986	15,90%	0,21%	1,32%	-17,42%
Engenho de Dentro	44	45540	21608	5828	26,97%	0,20%	0,75%	-5,19%
Guaratiba	128	107369	72260	39964	55,31%	0,18%	0,32%	+43,55%
Andaraí	31	39365	17283	2589	14,98%	0,18%	1,20%	-12,17%
Pedra de Guaratiba	11	9488	6623	3535	53,37%	0,17%	0,31%	+25,95%
Taquara	83	102126	49985	16115	32,24%	0,17%	0,52%	+4,96%
Del Castilho	16	15610	9505	4315	45,40%	0,17%	0,37%	+31,95%
Grajaú	23	38671	16258	2034	12,51%	0,14%	1,13%	-15,14%
Tauá	14	29567	11648	1817	15,60%	0,12%	0,77%	-10,43%
Parque Anchieta	11	26212	10084	1603	15,90%	0,11%	0,69%	-16,71%
Engenho Novo	21	42172	18748	4488	23,94%	0,11%	0,47%	-6,52%
Marechal Hermes	18	48061	19311	3318	17,18%	0,09%	0,54%	-13,64%
Vila Valqueire	15	32279	16033	5349	33,36%	0,09%	0,28%	+5,41%
Méier	20	49828	21707	2937	13,53%	0,09%	0,68%	-20,33%
Campo Grande	124	328370	161930	57005	35,20%	0,08%	0,22%	+7,41%
Rocinha	26	69356	32330	8925	27,61%	0,08%	0,29%	+2,22%
Cachambi	16	42415	19609	4490	22,90%	0,08%	0,36%	-8,82%
Osvaldo Cruz	12	34040	14207	2436	17,15%	0,08%	0,49%	-11,88%
Bento Ribeiro	13	43707	17937	3042	16,96%	0,07%	0,43%	-14,65%
Madureira	11	50106	19948	3052	15,30%	0,06%	0,36%	-20,74%
Brás de Pina	14	59222	22369	3264	14,59%	0,06%	0,43%	-23,93%
Praça Seca	15	64147	30162	9246	30,65%	0,05%	0,16%	-1,35%
Pavuna	16	97350	40928	9852	24,07%	0,04%	0,16%	-2,07%
Irajã	15	96382	40582	7350	18,11%	0,04%	0,20%	-10,87%
Santa Cruz	32	217333	112836	46617	41,31%	0,03%	0,07%	14,63%
Realengo	12	180123	72817	13542	18,60%	0,02%	0,09%	-7,91%
Bangu	20	218089	87466	18418	21,06%	0,02%	0,11%	-2,83%

Source: Prepared by the author, based on data collected by Inside Airbnb on 26-05-2025 and on 2022 Census data from IBGE aggregated by DATA.Rio. Only neighborhoods with more than 10 entire home listings on Airbnb were considered.

Furthermore, the three neighborhoods in question experienced population increases between 2010 and 2022: Joá, with +20.17%; Camorim, with +15.64%; and Olympic Barra, with +141.40%. Thus, these cases reflect a broader context of population growth that tends to stimulate short-term rental activities, since it marks the consolidation of neighborhoods that have recently undergone intense gentrification. In this sense, there is a process of population displacement and gentrification indirectly related to these activities, given that the ongoing real estate valorization in the West Zone was preceded by removals, as occurred in Vila Autódromo for the construction of the Olympic Park. From this perspective, Airbnb's territorial penetration into Olympic Barra, Camorim, and surrounding areas represents a new stage of this process. Other neighborhoods in the region that present potential for the expansion of tourist accommodations are Recreio dos Bandeirantes, with 39,110 vacant dwellings (57.96% of its housing stock), and Jacarepaguá (41.28%).

Even so, it is not possible to indicate a direct correlation between the occupation of vacant dwellings and the number of listings, making it necessary to interpret the data in relation to their context. Thus, there are cases such as Urca, where the number of listings represents 187.32% of the number of vacant dwellings — that is, there are more entire home listings on Airbnb than vacant dwellings in the neighborhood. In general terms, the data suggest that housing assumes flexible uses, making it possible for a dwelling to be occupied while simultaneously listed on Airbnb. Furthermore, in the case of Urca, the number of vacant dwellings is small in relation to its housing stock, representing only 2.70%. Other notable cases include Glória, where listings correspond to 67.61% of vacant dwellings; Leblon, 66.12%; Ipanema, 65.94%; Joá, 62.67%; and Saúde, 61.9%. However, unlike the neighborhoods analyzed in the West Zone, neighborhoods in the South Zone and central region generally experience a process of population decline that can also be observed in other areas of the city.

In light of this, considering the areas with the greatest supply in the city, at least three distinct scenarios can be identified that condition Airbnb's territorial penetration in Rio de Janeiro in the coming years through the conversion of housing into tourist accommodations:

1. In the West Zone, the scenario is marked by a large stock of vacant dwellings, accompanied by population growth and an already advanced process of gentrification, especially in Olympic Barra. This scenario facilitates the conversion of already available housing into tourist accommodations, al-

though new stimuli are still required to intensify demand for short-term rental activities in the region.

2. In the South Zone, there is an already consolidated housing stock located in areas of intense tourist activity, in some cases marked by a significant stock of vacant dwellings in absolute numbers (Copacabana, Ipanema, and Leblon, for example, together total 26,012 vacant dwellings) and accompanied by population decline. In general terms, Airbnb's territorial penetration in the South Zone benefits from the already intense demand for accommodations in the region. Thus, the general tendency is for the housing stock of the South Zone to continue being converted into tourist accommodations, intensifying the specialized use of housing as tourist accommodation.
3. In the central region, there is a scenario characterized by the expansion of the housing stock and an ongoing process of gentrification resulting from urban renewal policies recently implemented in the area. The tendency is that, similarly to what occurred in Olympic Barra, this process will stimulate removals in the region and consolidate a housing stock that, over the coming years, tends to be directed toward the short-term rental market. Finally, the central region benefits from high listing occupancy rates, as observed in section 3.3., which makes short-term rental activities especially profitable in this area due to the already existing tourist demand.

An analysis of the housing stock occupied by Airbnb within neighborhoods² (Figure 41), in turn, demonstrates that there are areas where the platform occupies up to 86.97% of the dwellings recorded in the 2022 Census, as occurs in Santo Cristo (Figure 41b). In recent years, several real estate developments have been launched and marketed as investment properties in this neighborhood (Manduca, 2025), such that the housing stock has been expanded and rapidly incorporat-

² The location of entire home listings and the number of listings by census tract (data aggregated to the polygon of each tract), according to the 2022 Census conducted by IBGE, were used. Thus, the analysis worked with estimates both of listing locations — since Airbnb does not publish exact locations — and of the spatial distribution of dwellings. To aggregate listing data to the hexagons, a point-in-polygon count was applied — that is, the number of listings within each hexagon was calculated. To aggregate housing data to the hexagons, an area-based interpolation was performed between two geometries — that is, the number of dwellings in each census tract was proportionally distributed according to the area overlapped by the hexagon. The analysis therefore assumed that the variable is uniformly distributed within each census tract. Given the wide variation in the size of census tracts — whose areas are defined, among other criteria, by population density — the interpolation method was applied only to tracts whose area did not exceed three times the size of a hexagon. This decision sought to minimize distortions resulting from very large and sparsely populated tracts, in which the internal distribution of dwellings may be more heterogeneous. Furthermore, the calculation of housing stock was restricted to hexagons containing more than ten listings and more than ten dwellings, thereby avoiding conclusions based on spatial units with limited representativeness.

ed into the short-term rental market, as demonstrated by Inside Airbnb data. Still within the central region, there are other areas where Airbnb occupies up to 50.31% of the housing stock, as observed around the Cinelândia station (Figure 4.1b). In Copacabana, the housing stock occupied by Airbnb ranges from 20% to 45% near the waterfront and from 8% to 20% in the interior of the neighborhood, along Avenida Nossa Senhora de Copacabana (Figure 4.1a). In Ipanema, near Pedra do Arpoador, where a high concentration of listings was previously identified, the housing stock occupied by Airbnb varies between 20% and 34%. Around the Antero de Quental / Leblon station, the occupied housing stock reaches 14.04%. In São Conrado, near Pepino Beach, entire home listings represent 35.16% of the housing stock.

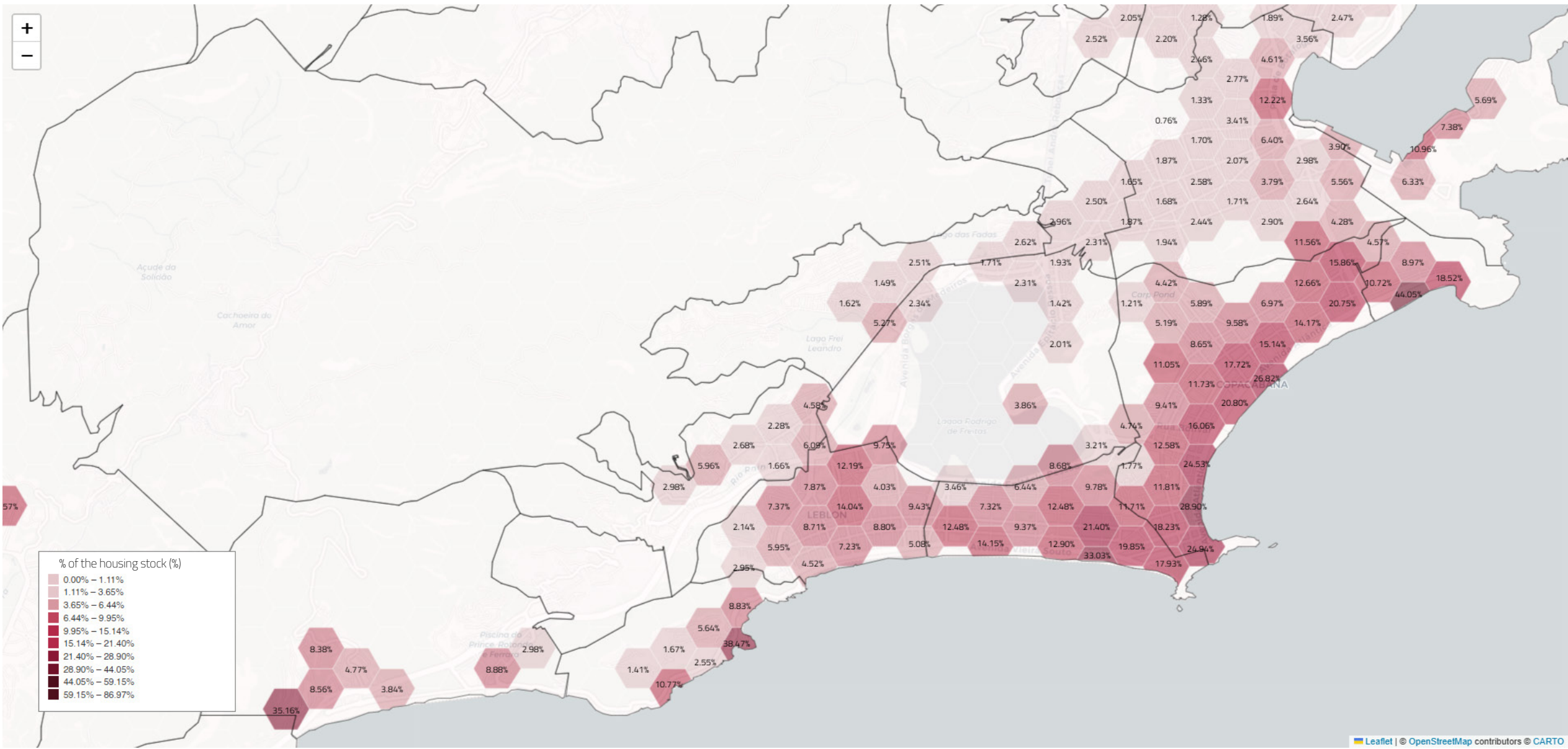
In Barra da Tijuca, along the waterfront and between Jardim Oceânico and Terminal Alvorada, the share of housing stock occupied by Airbnb ranges from 4% to 35% (Figure 4.1c). In the same neighborhood, around Rua Heloísa Alberto Tôrres, this figure reaches 59.15%. In Recreio dos Bandeirantes, near Pedra do Pontal, entire home listings occupy between 7% and 26% of the housing stock. Around Riocentro, on the border between Jacarepaguá, Olympic Barra, and Camorim, the occupied stock reaches 32.02%, 37.09%, and 84.14%, respectively (Figure 4.1e). In general terms, the data indicate that, in certain areas of the city of Rio de Janeiro, the housing stock has been significantly converted into tourist accommodations, configuring territories specialized in short-term rentals controlled by Airbnb. This specialization, in turn, redefines the function of these areas, shifting the use of housing from a social function oriented toward dwelling to a commodified function subordinated to the dynamics of tourism and the global circulation of capital.

Against this backdrop, this section also analyzes price variations between residential rental and short-term rental in order to demonstrate that this conversion becomes especially attractive to property owners because it allows them to explore the possibilities of higher profits resulting from the expansion of land rent. It is also considered that the risks associated with changing the rental type fall upon property owners themselves: if no profit is generated in the short-term rental market, the responsibility for the losses is theirs, while Airbnb benefits regardless of this outcome, since it controls a global network of accommodations that enables its accumulation across different parts of the world.

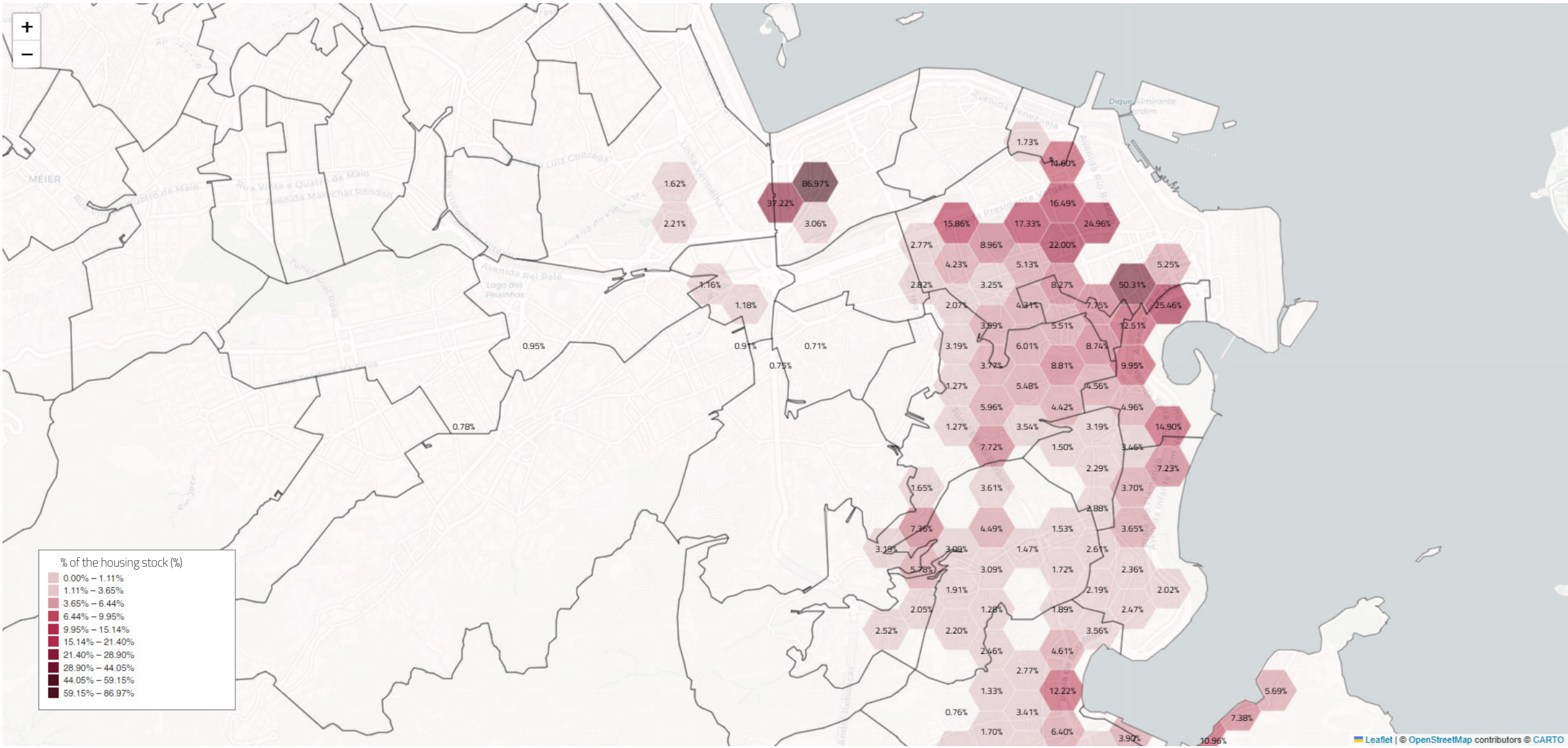
Figure 41 – Rio de Janeiro: Housing stock occupied by entire home Airbnb listings within neighborhoods



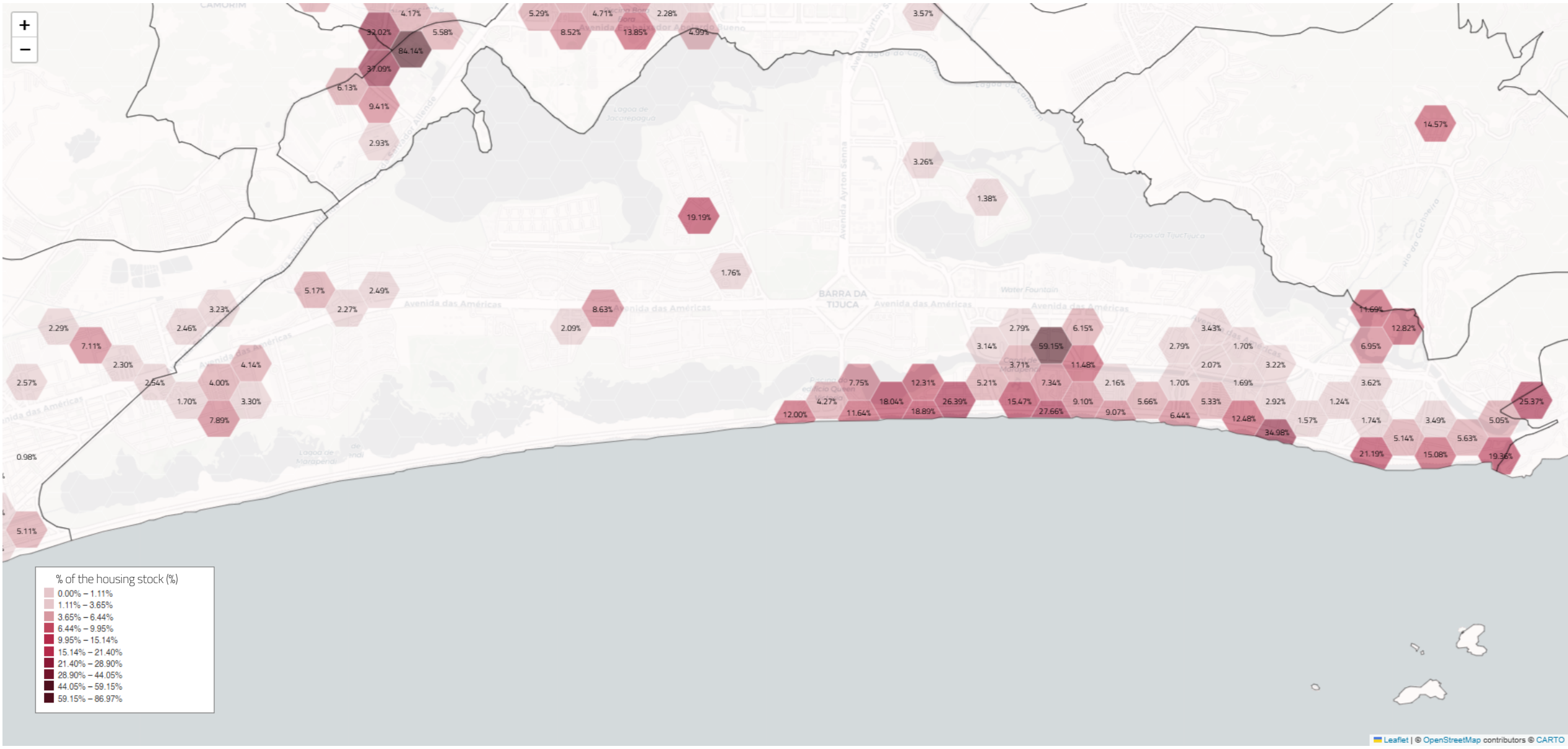
a. Housing stock occupied by entire home listings in Copacabana and surrounding neighborhoods (26-05-2025)



b. Housing stock occupied by entire home listings in the central region (26-05-2025)

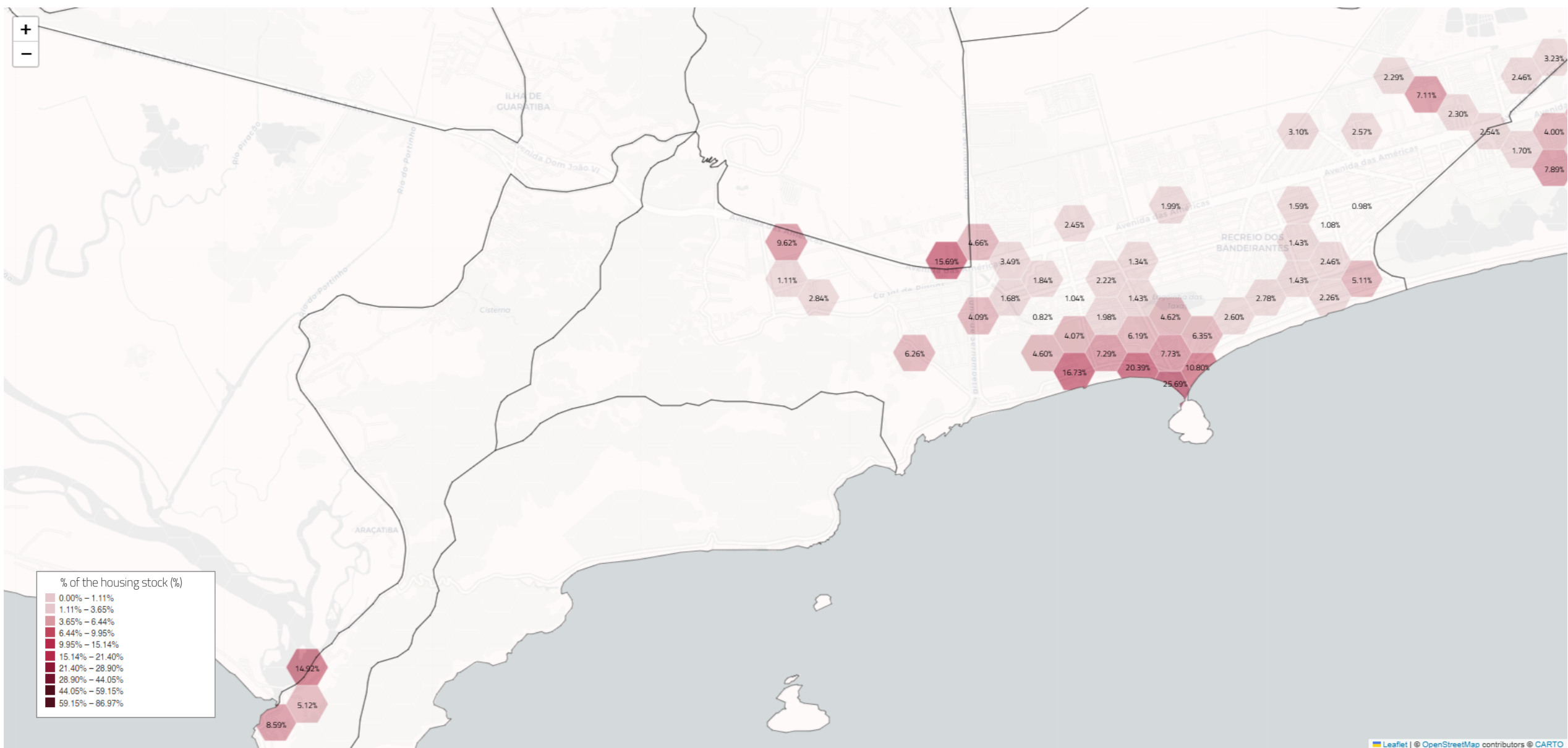


c. Housing stock occupied by entire home listings in Barra da Tijuca (26-05-2025)

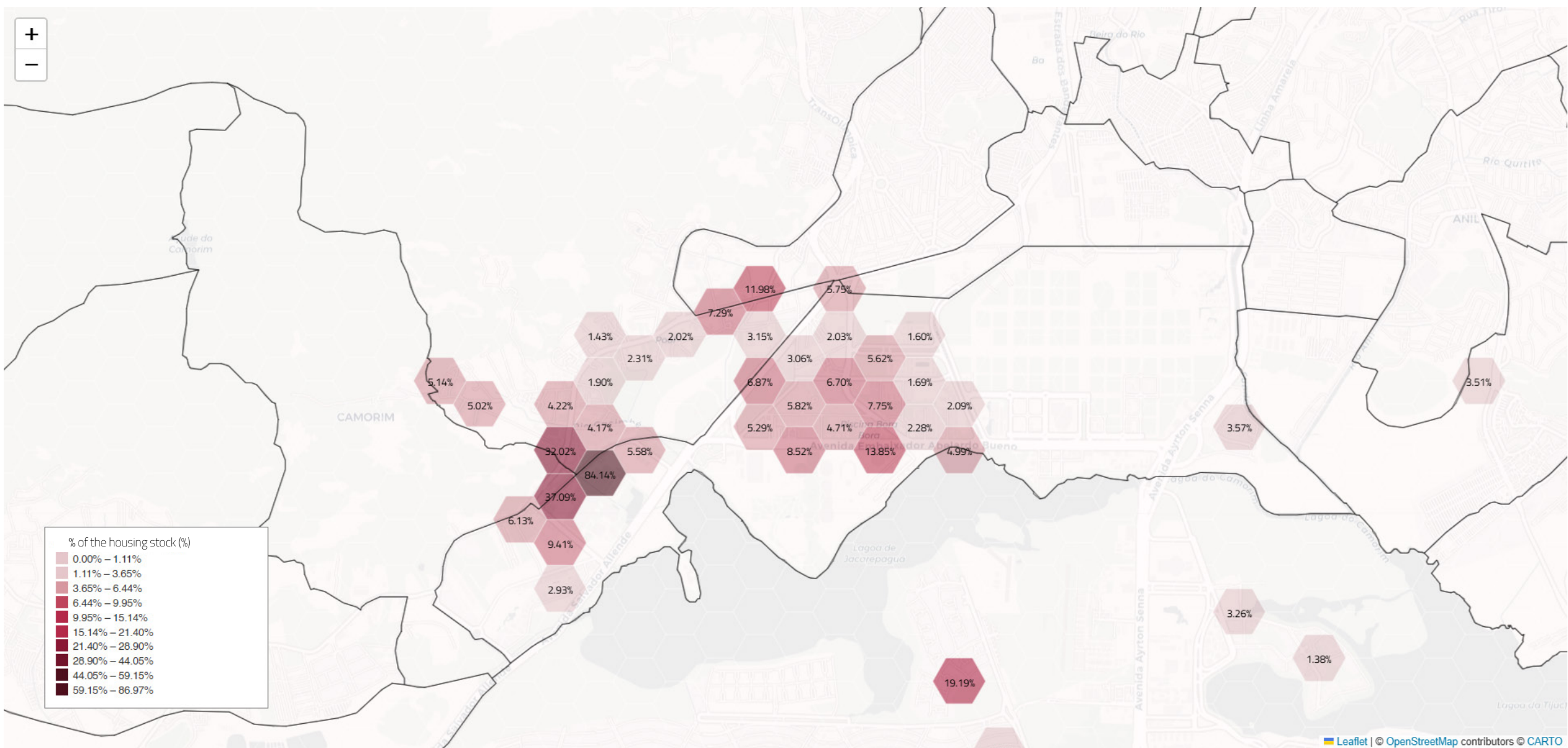


Source: Prepared by the author, based on data collected by Inside Airbnb on 26-05-2025 and on 2022 Census data from IBGE.
The full map can be accessed at: <https://alinecruvinel.com/thesis/>

d. Housing stock occupied by entire home listings in Recreio dos Bandeirantes and Barra de Guaratiba (26-05-2025)



e. Housing stock occupied by entire home listings in the Olympic Barra and surrounding neighborhoods (26-05-2025)



Source: Prepared by the author, based on data collected by Inside Airbnb on 26-05-2025 and on 2022 Census data from IBGE.
The full map can be accessed at: <https://alinecruvinel.com/thesis/>

To do so, the daily price per square meter of residential rental and short-term rental are compared using data from Inside Airbnb, the FipeZAP Index, and the QuintoAndar Imovelweb Index³. Before advancing this comparison, it is necessary to consider the differences in price composition between the two modalities. In residential rental, the advertised price generally refers only to the lease itself, to which administrative fees, condominium fees, deposits, insurance, and other charges may later be added during the formalization of the contract. In short-term rental, however, the price displayed on the Airbnb platform already incorporates in advance several operational costs — condominium fees, water, electricity, maintenance, listing management, insurance, among others — directly or indirectly related to the production of the *lodging commodity*. Since it is difficult to accurately estimate the additional value embedded in each listing, given the variability of these factors, the analysis assumes the existence of a structural margin between short-term and residential rental derived precisely from these differences in price composition, including the labor incorporated through service provision. It is also important to emphasize that short-term rental prices are based on monthly data collections conducted by Inside Airbnb, meaning that the data presented do not capture all fluctuations occurring during the period, since prices may be modified daily by hosts.

Based on this understanding, we can now analyze Figure 42 and Table 9, which indicate the prices per square meter of short-term and residential rentals between 2015 and 2025. The daily price per square meter of residential rental in Rio de Janeiro follows a predominantly upward trajectory, although marked by reductions between 2015 and 2020, followed by progressive growth after that year. The daily price per square meter of short-term rental, in turn, presents an essentially oscil-

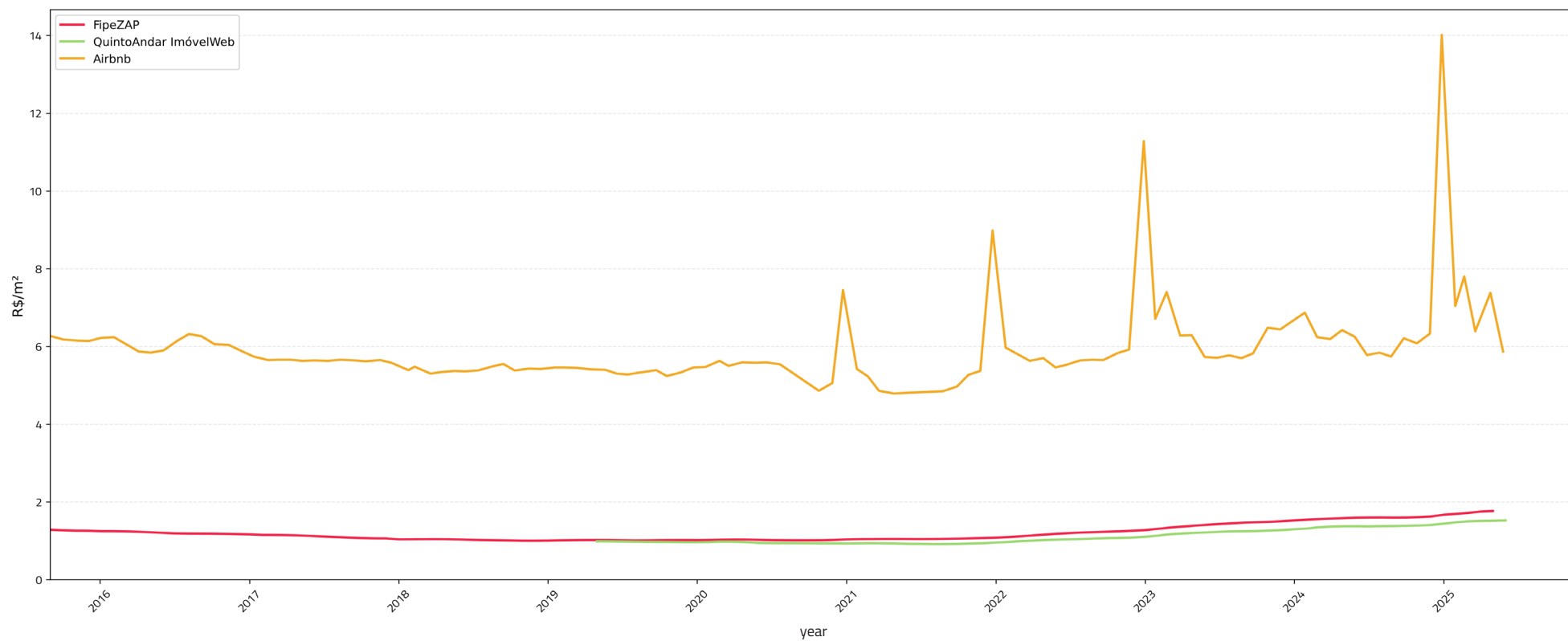
³ The daily price per square meter was used instead of the monthly price because short-term rentals are charged per overnight stay. The calculation of the daily price per square meter of short-term rental was based on procedures adopted in residential rental indices, drawing on the FipeZAP Index and the QuintoAndar Imovelweb Index, both produced by companies in the real estate sector and widely used as data sources in the Brazilian context, given the absence of governmental indicators regarding rental prices in the country. In general terms, the FipeZAP Index is based on property prices advertised by real estate agencies, brokers, or individuals on its platform. The QuintoAndar Imovelweb Index, in turn, is based on both listing prices and finalized contracts. In this context, the use of prices advertised on Airbnb is considered appropriate, similarly to the FipeZAP residential rental index. Three housing typologies were defined for the calculation, adopting the floor area (m²) used by the QuintoAndar Imovelweb Index: 45 m² for one-bedroom units; 80 m² for two-bedroom units; and 120 m² for three-bedroom units. First, the daily prices per square meter of each typology were calculated, based on the median listing price divided by the corresponding floor area. Subsequently, the city's average daily price per square meter was calculated, consisting of the average prices of the three typologies weighted according to the number of listings in each category. Inside Airbnb data were analyzed using the *bedrooms* attribute, which indicates the number of bedrooms available in each listing, considering all listings classified as entire homes (room_type = Entire home/apt). All data collections with valid *bedrooms* values were analyzed. Finally, to calculate the daily price per square meter of residential rental, the monthly prices from each index were divided by 30.

latory behavior characterized by peaks. As developed in Chapter 1, these patterns reveal distinct logics of rent appropriation: in residential rental, profit expansion depends on the slow movement of real estate valorization and on the duration of contracts; in short-term rental, gains derive from real estate valorization but also from the capacity to exploit seasonality and peaks in tourist demand, configuring a market that is more risky but, at the same time, capable of generating extraordinary revenues during specific periods. In the case of Rio de Janeiro, these peak periods are concentrated especially at the end of the year, when there is greater demand for tourist accommodations in the city. It is also important to note that the peaks observed during the New Year period likely existed before 2020, but only began to be registered by Inside Airbnb from that year onward, as will be developed in section 4.2., dedicated to a detailed study of prices during New Year's Eve⁴.

Other peaks, with smaller variations, can also be observed throughout the year. The differences between residential rental and short-term rental reach +940.80% in December (2022), +524.01% in January (2022), and +552.74% in February (2023), while the average variation considering the entire period is +447.91% (Imovelweb QuintoAndar Index), and the lowest variation observed is +287.05% (May 2025). The possibilities for exploiting this oscillatory characteristic of short-term rental prices will be addressed later. At this point, the important aspect is to identify the existence of this structural difference in the behavior of short-term rental and residential rental prices, which stimulates the conversion of housing into tourist accommodation by providing the possibility of greater profitability. In this context, the main challenge faced by property owners consists of reducing the risks associated with the activity, making it more stable and predictable. To achieve this, they rely both on mechanisms for forecasting periods of high demand — New Year's Eve, Carnival, holidays, *Todo Mundo no Rio* — and on strategies for property valorization — such as renovations, higher-quality furnishings, and additional services — that increase the attractiveness and competitiveness of listings, while also expanding the land rent transferred by guests, thereby compensating for periods when the tourist accommodation is not rented.

⁴ In the chart showing Airbnb's daily price per square meter (Table 9), the fluctuation observed in December 2023 was not indicated due to the unavailability of *bedrooms* data for that collection. Even so, as will be discussed in section 4.2, a price peak can also be identified in December 2023.

Figure 42 – Rio de Janeiro: evolution of the daily price per square meter of short-term rental and residential rental (2015–2025)



Source: Prepared by the author, based on data from Inside Airbnb, the FipeZAP Index, and the QuintoAndar Imovelweb Index.

Table 9 – Rio de Janeiro: variations in the daily price per square meter of short-term rental and residential rental (2015–2025)

date	Airbnb: daily price per m² (R\$/m²)	FipeZAP: daily price per m² (R\$/m²)	QuintoAndar Imovelweb: daily price per m² (R\$/m²)	variation (%) Airbnb x FipeZAP*	variation (%) Airbnb x QuintoAndar Imovelweb*
September/2015	6,26	1,286	-	+386,78%	-
October/2015	6,18	1,273	-	+385,47%	-
November/2015	6,15	1,262	-	+387,45%	-
December/2015	6,14	1,260	-	+387,43%	-
January/2016	6,22	1,248	-	+398,26%	-
February/2016	6,24	1,247	-	+400,27%	-
March/2016	-	1,243	-	-	-
April/2016	5,87	1,235	-	+375,43%	-
May/2016	5,84	1,222	-	+378,04%	-
June/2016	5,9	1,206	-	+389,09%	-
July/2016	6,15	1,193	-	+415,65%	-
August/2016	6,32	1,188	-	+431,99%	-
September/2016	6,26	1,187	-	+427,53%	-
October/2016	6,06	1,185	-	+411,25%	-
November/2016	6,04	1,180	-	+412,01%	-
December/2016	5,88	1,174	-	+400,99%	-
January/2017	5,74	1,167	-	+392,00%	-
February/2017	5,65	1,151	-	+390,74%	-
March/2017	5,66	1,150	-	+392,17%	-
April/2017	5,66	1,146	-	+393,89%	-
May/2017	5,63	1,139	-	+394,29%	-
June/2017	5,64	1,126	-	+400,74%	-
July/2017	5,63	1,113	-	+405,99%	-
August/2017	5,66	1,097	-	+415,80%	-
September/2017	5,64	1,083	-	+420,78%	-
October/2017	5,62	1,071	-	+424,58%	-
November/2017	5,65	1,064	-	+431,02%	-
December/2017	5,58	1,062	-	+425,26%	-
January/2018	5,39	1,038	-	+419,10%	-
February/2018	5,48	1,040	-	+426,75%	-
March/2018	5,3	1,042	-	+408,64%	-
April/2018	5,34	1,044	-	+411,66%	-
May/2018	5,37	1,041	-	+415,69%	-
June/2018	5,36	1,034	-	+418,21%	-
July/2018	5,38	1,026	-	+424,20%	-
August/2018	5,48	1,020	-	+437,25%	-
September/2018	5,55	1,015	-	+446,98%	-
October/2018	5,38	1,010	-	+432,50%	-
November/2018	5,43	1,004	-	+441,02%	-
December/2018	5,42	1,003	-	+440,20%	-
January/2019	5,46	1,007	-	+442,20%	-
February/2019	5,46	1,014	-	+438,64%	-
March/2019	5,45	1,018	-	+435,36%	-
April/2019	5,41	1,022	-	+429,53%	-
May/2019	5,4	1,022	0,987	+428,20%	+447,30%
June/2019	5,3	1,021	0,984	+418,93%	+438,56%
July/2019	5,28	1,015	0,980	+420,03%	+438,70%
August/2019	5,33	1,010	0,976	+427,55%	+446,31%
September/2019	5,39	1,012	0,972	+432,43%	+454,58%
October/2019	5,24	1,018	0,970	+414,73%	+439,93%
November/2019	5,33	1,021	0,968	+422,21%	+450,85%
December/2019	5,46	1,022	0,964	+434,42%	+466,12%
January/2020	5,47	1,019	0,964	+436,63%	+467,71%
February/2020	5,63	1,023	0,968	+450,16%	+481,86%
March/2020	5,5	1,030	0,979	+433,81%	+461,92%
April/2020	5,59	1,034	0,976	+440,44%	+472,65%
May/2020	5,58	1,033	0,965	+440,35%	+478,30%

June/2020	5,59	1,026	0,947	+444,83%	+490,22%
July/2020	5,54	1,019	0,943	+443,49%	+487,26%
August/2020	-	1,016	0,944	-	-
September/2020	-	1,014	0,941	-	-
October/2020	4,86	1,015	0,940	+378,82%	+417,11%
November/2020	5,06	1,016	0,936	+398,03%	+440,52%
December/2020	7,45	1,025	0,935	+627,07%	+696,61%
January/2021	5,42	1,037	0,933	+422,66%	+480,70%
February/2021	5,23	1,044	0,937	+401,12%	+458,13%
March/2021	4,86	1,045	0,942	+364,92%	+415,74%
April/2021	4,79	1,048	0,938	+357,21%	+410,51%
May/2021	-	1,049	0,934	-	-
June/2021	-	1,047	0,924	-	-
July/2021	4,83	1,045	0,923	+362,05%	+423,53%
August/2021	4,85	1,048	0,917	+362,93%	+428,82%
September/2021	4,97	1,052	0,919	+372,43%	+440,88%
October/2021	5,27	1,057	0,922	+398,58%	+471,73%
November/2021	5,37	1,064	0,932	+404,70%	+475,90%
December/2021	8,98	1,072	0,941	+737,69%	+854,20%
January/2022	5,97	1,081	0,957	+452,44%	+524,01%
February/2022	-	1,097	0,971	-	-
March/2022	5,63	1,117	0,991	+403,88%	+468,23%
April/2022	5,7	1,139	1,007	+400,59%	+466,21%
May/2022	5,46	1,160	1,024	+370,55%	+433,44%
June/2022	5,52	1,183	1,032	+366,48%	+435,10%
July/2022	5,64	1,200	1,039	+369,87%	+442,94%
August/2022	5,66	1,215	1,047	+365,97%	+440,48%
September/2022	5,65	1,225	1,061	+361,35%	+432,62%
October/2022	5,83	1,235	1,068	+371,94%	+445,66%
November/2022	5,92	1,245	1,075	+375,50%	+450,80%
December/2022	11,28	1,259	1,084	+795,71%	+940,80%
January/2023	6,71	1,277	1,105	+425,45%	+507,32%
February/2023	7,4	1,309	1,134	+465,46%	+552,74%
March/2023	6,28	1,339	1,167	+369,12%	+438,18%
April/2023	6,29	1,367	1,189	+360,02%	+429,04%
May/2023	5,73	1,390	1,204	+312,23%	+375,73%
June/2023	5,71	1,411	1,217	+304,58%	+369,23%
July/2023	5,77	1,433	1,233	+302,65%	+368,02%
August/2023	5,7	1,453	1,242	+292,38%	+358,81%
September/2023	5,82	1,469	1,246	+296,28%	+367,01%
October/2023	6,48	1,478	1,251	+338,43%	+417,91%
November/2023	6,44	1,488	1,265	+332,70%	+409,18%
December/2023	-	1,503	1,277	-	-
January/2024	6,87	1,526	1,298	+350,10%	+429,15%
February/2024	6,24	1,546	1,317	+303,54%	+373,85%
March/2024	6,19	1,560	1,349	+296,88%	+358,88%
April/2024	6,42	1,573	1,368	+308,05%	+369,27%
May/2024	6,25	1,583	1,377	+294,82%	+353,85%
June/2024	5,78	1,595	1,378	+262,38%	+319,55%
July/2024	5,84	1,599	1,374	+265,30%	+325,14%
August/2024	5,74	1,600	1,380	+258,75%	+315,95%
September/2024	6,21	1,597	1,382	+288,94%	+349,29%
October/2024	6,08	1,599	1,388	+280,32%	+338,15%
November/2024	6,33	1,610	1,394	+293,09%	+354,15%
December/2024	14,01	1,627	1,407	+761,09%	+895,56%
January/2025	7,04	1,672	1,444	+321,05%	+387,64%
February/2025	7,8	1,694	1,478	+360,45%	+427,82%
March/2025	6,39	1,719	1,501	+271,73%	+325,77%
April/2025	7,38	1,753	1,511	+321,07%	+388,46%
May/2025	5,87	1,766	1,517	+232,33%	+287,05%

Source: Prepared by the author, based on data from Inside Airbnb, the FipeZAP Index, and the QuintoAndar Imovelweb Index.

*Note: The variations include additional costs incorporated into short-term rental prices, such as water, electricity, condominium fees, maintenance, etc.

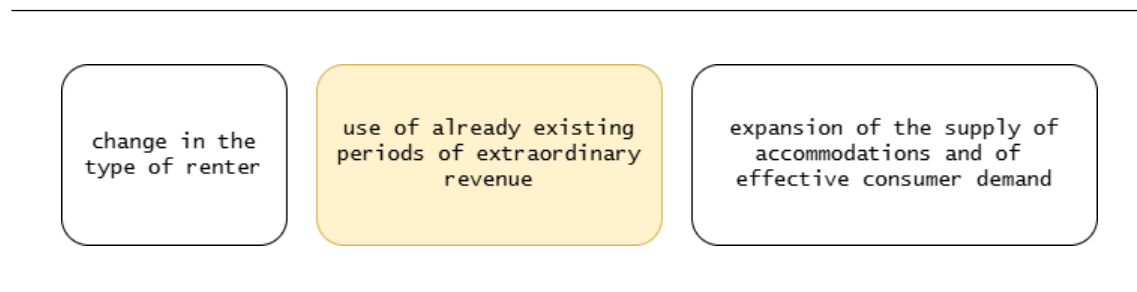
In this section, the foundational strategy guiding Airbnb's activities was presented: the conversion of housing into tourist accommodation aimed at serving a new consumer. As indicated through the example of Rio de Janeiro, this conversion is shaped by socioeconomic and spatial factors that vary from one neighborhood to another, such as the stock of vacant dwellings, population increases and decreases, and characteristics of the housing stock. As argued, this conversion does not present a causal relationship with the variables analyzed, but rather a contextual one, such that neighborhoods with distinct patterns may undergo processes of touristification and gentrification associated with short-term rentals. In this sense, different patterns can be observed in the South Zone, the West Zone, and the central region, with a tendency toward greater conversion in the latter over the coming years due to the ongoing production of housing.

Furthermore, as indicated through the comparison of prices, residential rental and short-term rental present distinct patterns in their variations over time: while the former shows smaller fluctuations, with more gradual and progressive increases, the latter is essentially oscillatory and characterized by peaks. As argued in Chapter 1, this characteristic allows Airbnb and other claimants to capital to orient themselves toward maximum profitability, thereby exploring different combinations of price, demand, and time. One of these combinations occurs during periods of extraordinary revenue, such as New Year's Eve, discussed in the following section.

4.2. Exploiting existing demand: extraordinary prices during New Year's Eve

Continuing the analysis of strategies for the expansion of land rent, this section seeks to understand the use of already existing tourist demand in cities as a pathway for the expanded accumulation of capital by the different claimants involved in Airbnb's activities, constituting the second strategy examined (Figure 43). To this end, based on the seasonal variations previously identified, the analysis focuses on the prices charged during New Year's Eve, a period of extraordinary revenue marked by a historically consolidated tourist demand in the city of Rio de Janeiro and especially concentrated in the neighborhood of Copacabana, where the New Year's Eve celebration takes place. It is argued that this period illustrates how property owners, and consequently the platform itself, expand their gains through speculative practices linked to land rent and explored through an already consolidated tourism market. This expansion, in turn, becomes especially attractive when there is a growing orientation toward targeting international consumers, preferably from countries that use central currencies.

Figure 43 – Expanded accumulation: strategy 2



Source: Prepared by the author.

To analyze the prices presented in this section, it is important to keep in mind the different forms of rent discussed by Marx and Harvey, since these are the mechanisms that enable a lesser or greater expansion of land rent through short-term rentals. In this sense, during a period of extraordinary revenue: any property owner may benefit from the expansion of *absolute rent* due to the increase in tourist demand in the city; certain property owners benefit from the expansion of *monopoly rent* because they possess properties with unique characteristics — such as properties located near tourist attractions like Christ the Redeemer and Sugarloaf

Mountain; certain property owners benefit from *differential rent I* because they own properties in areas with greater access to urban infrastructure, such as those located in the South Zone; and certain property owners, through *differential rent II*, benefit from improvements previously made to the property, such as renovations and the acquisition of high-end furnishings. In practice, a single property owner may combine these different forms of rent, depending on the characteristics of the property and its location within the city of Rio de Janeiro. Furthermore, the possibilities for expansion are also influenced by the type of demand involved. For example, for a tourist spending New Year's Eve in Rio de Janeiro, staying in Copacabana is more attractive; meanwhile, for a football supporter or a fan attending a concert at Maracanã Stadium, it is more convenient to stay in the surrounding area.

For the analysis, the median prices⁵ of entire homes and private rooms were first calculated for each data collection conducted by Inside Airbnb between 2015 and 2025, with the aim of understanding hosts' pricing behavior throughout the year. It should be emphasized that this strategy presents limitations, since data collections are conducted once per month, while hosts may modify prices on a daily basis. The results of these calculations are presented in Figures 44, 45, and 46. Based on the three figures, it can be observed that prices for December began to show a significant increase from 2020 onward, diverging from the values charged during the other months of the year⁶. It is assumed, however, that this increase results from a change in the timing of data collection: until 2019, Inside Airbnb's December collections were conducted during the first half of the month, whereas from 2020 onward they began to be conducted during the last week of December — that is, during the New Year's Eve period itself (the final and first weeks of the year). Thus, it is interpreted that, by shifting the data collection to the last week of December, Inside Airbnb began to capture a practice that was already common in Rio de Janeiro's short-term rental market and that predates platformization: the practice of increasing prices during periods of high demand.

⁵ The median was used in order to avoid distortions caused by extreme values. Null values were also excluded from the analysis.

⁶ Other variations were observed throughout the period, such as price increases during the Olympic Games and also around Carnival dates (an event without a fixed date, varying between February and March according to the date of Easter). However, the analysis focuses on the example of New Year's Eve because it presents greater consistency and allows for the comparison of data across different years.

Figure 44 – Rio de Janeiro: median price of entire home listings per data scrape (2015–2025)



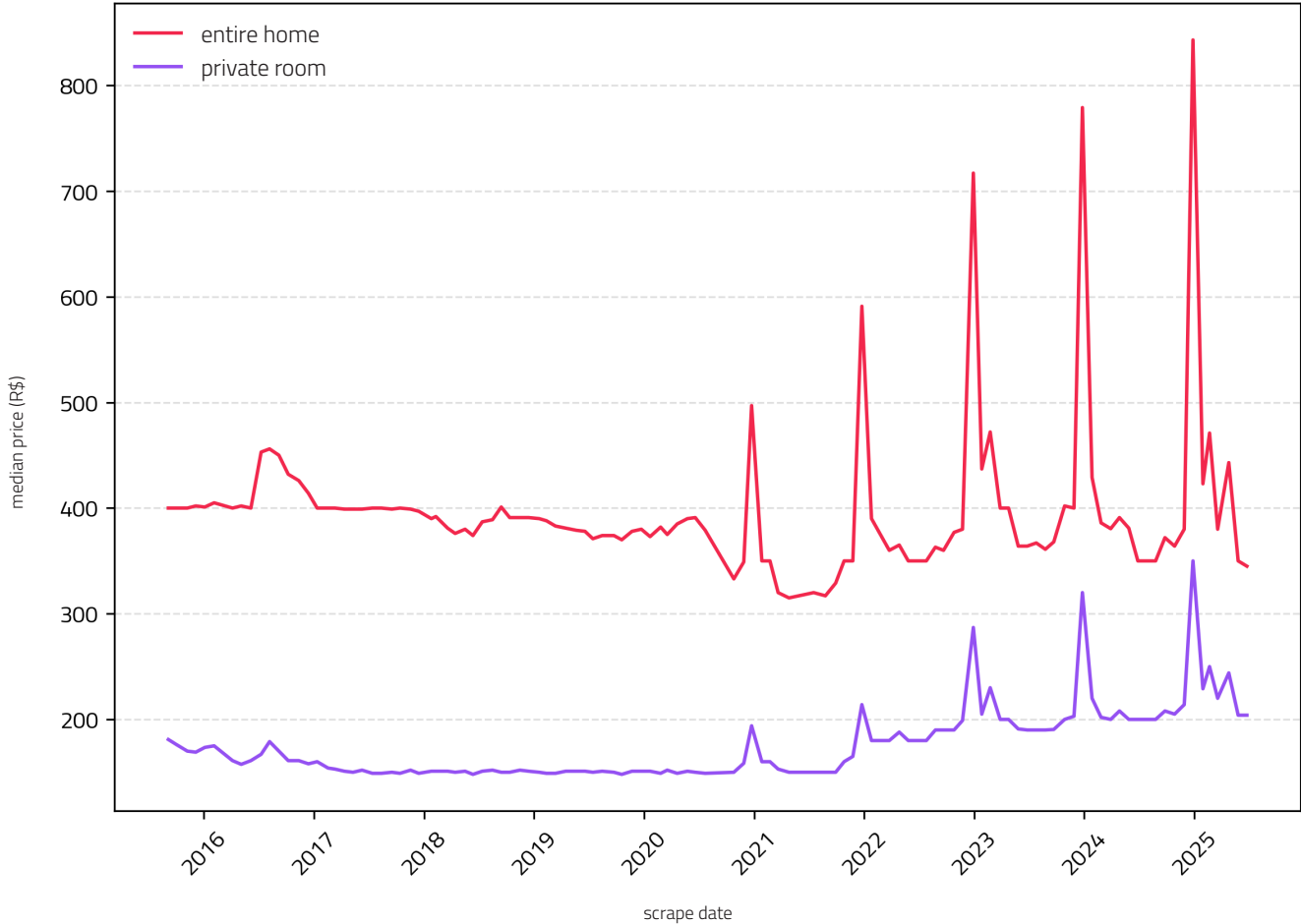
Source: Prepared by the author, based on different data scrapes conducted by Inside Airbnb.

Figure 45 – Rio de Janeiro: median price of private room listings per data scrape (2015–2025)



Source: Prepared by the author, based on different data scrapes conducted by Inside Airbnb.

Figure 46 – Rio de Janeiro: evolution of the median price of entire home and private room listings (2015–2025)



Source: Prepared by the author, based on different data scrapes conducted by Inside Airbnb.

Based on the identification of price increases during the New Year's Eve period, the differences between the median price from January to November and the median price⁷ recorded in December were examined, both for entire homes (Table 10) and private rooms (Table 11) from 2020 onward. Both tables therefore indicate the increase in prices charged during the New Year's Eve period in comparison to those charged throughout the rest of the year. In the specific case of entire homes, it can be observed that in 2022 and 2023 the median prices recorded in December were nearly double those observed between January and November. In 2024, this difference reached a new level, with an increase of more than 120%. Regarding private rooms, the greatest variation occurred in 2024, with a 70.58% increase in prices in December. These data confirm the high susceptibility of short-term rentals to seasonal demand, marking an important distinction in relation to the residential rental market, since this is a type of profit that property owners renting their units through long-term leases are unable to access. In this sense, these data demonstrate the expansion of land rent in the city of Rio de Janeiro during periods of extraordinary revenue through short-term rentals, while also showing that this expansion intensifies year after year and can be observed across different listing types, not only entire homes.

Table 10 – Rio de Janeiro: variation in the median prices of entire home listings

year	median price (January to November)	median price (end of December)	seasonal variation
2020	R\$ 373,00	R\$ 497,00	+33,24%
2021	R\$ 333,44	R\$ 591,00	+77,24%
2022	R\$ 364,50	R\$ 717,00	+96,71%
2023	R\$ 396,78	R\$ 779,00	+96,33%
2024	R\$ 375,20	R\$ 843,00	+124,68%

Source: Prepared by the author, based on different data scrapes conducted by Inside Airbnb.

⁷ In practice, this corresponds to the *arithmetic mean* of the *median prices* calculated for each scrape between the months of January and November. Because the analysis is based on monthly median prices, and in order to avoid confusing the reader, these values are also referred to as *median prices*.

Table 11 – Rio de Janeiro: variation in the median prices of private room listings

year	median price (January to November)	median price (end of December)	seasonal variation
2020	R\$ 151,00	R\$ 194,00	+28,48%
2021	R\$ 162,44	R\$ 214,00	+31,74%
2022	R\$ 185,70	R\$ 287,00	+54,55%
2023	R\$ 198,90	R\$ 320,00	+60,88%
2024	R\$ 205,18	R\$ 350,00	+70,58%

Source: Prepared by the author, based on different data scrapes conducted by Inside Airbnb.

Following the same procedure, the differences in median prices charged in each neighborhood during the year 2024 were also analyzed. For this analysis, only neighborhoods with more than ten entire home listings (Figure 47; Table 11) or more than ten private room listings (Figure 48; Table 12) in the December scrape (27-12-2024) were considered, in order to establish a minimum sample for calculating median prices. For entire homes, 72 neighborhoods were analyzed, and it was found that 69 of them presented an increase in median prices during the New Year's Eve period. Across the 72 neighborhoods, seasonal variations ranged from -46.20% to +182.79%. The neighborhoods with the greatest price increases were: Santo Cristo, with +182.79%; Copacabana, with +182.20%; Leme, with +154.44%; Ipanema, with +151.88%; Del Castilho, with +147.39%; Catete, with +128.63%; Saúde, with +124.27%; Centro, with +123.98%; Botafogo, with +123.03%; and Flamengo, with +114.06%. In December, 17 neighborhoods recorded prices that approached or exceeded double the values charged during the previous months. The three neighborhoods that presented price reductions were: Bangu, with -46.20%; Santa Cruz, with -19.04%; and Paciência, with -5.01% — suburban neighborhoods located outside the city's traditional tourist circuit and therefore characterized by low demand for tourist accommodations.

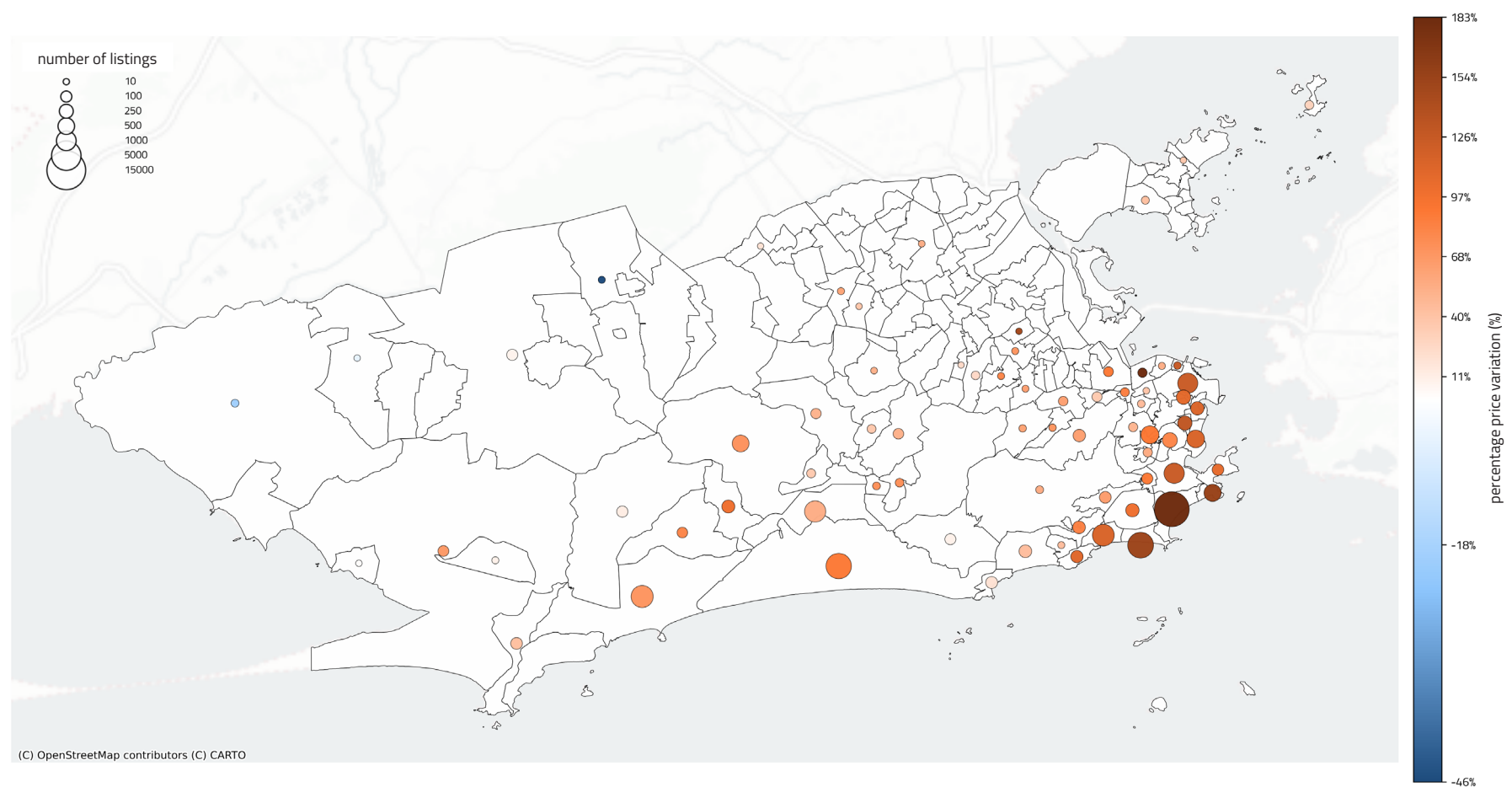
The same dynamic is observed in private room listings. The analysis identified a total of 58 neighborhoods with at least 10 private room listings, of which 54 presented price increases during the New Year's Eve period. Across the 58 neighborhoods, seasonal variations ranged from -25.63% to +122.70%. The neighborhoods with the greatest increases were: Camorim, with +122.70%; Centro, with +116.32%; Copacabana, with +114.13%; Leblon, with +112.39%; Saúde, with +108.59%; Leme,

with +103.38%; São Cristóvão, with +98.93%; Lagoa, with +96.87%; Lapa, with +93.76%; and Ipanema, with +92.15%. During the New Year's Eve period, seven neighborhoods recorded prices that approached or exceeded double the values charged during the previous months. Finally, the four neighborhoods that presented price reductions were: Campo Grande, with -25.63%; Pedra de Guaratiba, with -13.02%; Alto da Boa Vista, with -1.74%; and Irajá, with -1.52%.

The data presented reinforce the understanding that short-term rentals respond to periods of extraordinary revenue, such as New Year's Eve, driven by high tourist demand. Furthermore, they demonstrate that this rental modality makes it possible to expand land rent in neighborhoods already marked by strong real estate pressure in the residential market, such as those in the South Zone, West Zone, and central region, as indicated in Figures 47 and 48. At the same time, it extends this dynamic to areas historically outside the tourist circuit, signaling the first indications of processes of gentrification and touristification, as is the case of Santo Cristo, Camorim, and São Cristóvão. These tendencies are likely to intensify with the expansion of accommodation supply stimulated by tourism development policies and urban renewal projects, such as the Porto Maravilha Project and its expansion into São Cristóvão, as well as Reviver Centro, which are discussed in greater detail in section 4.3.

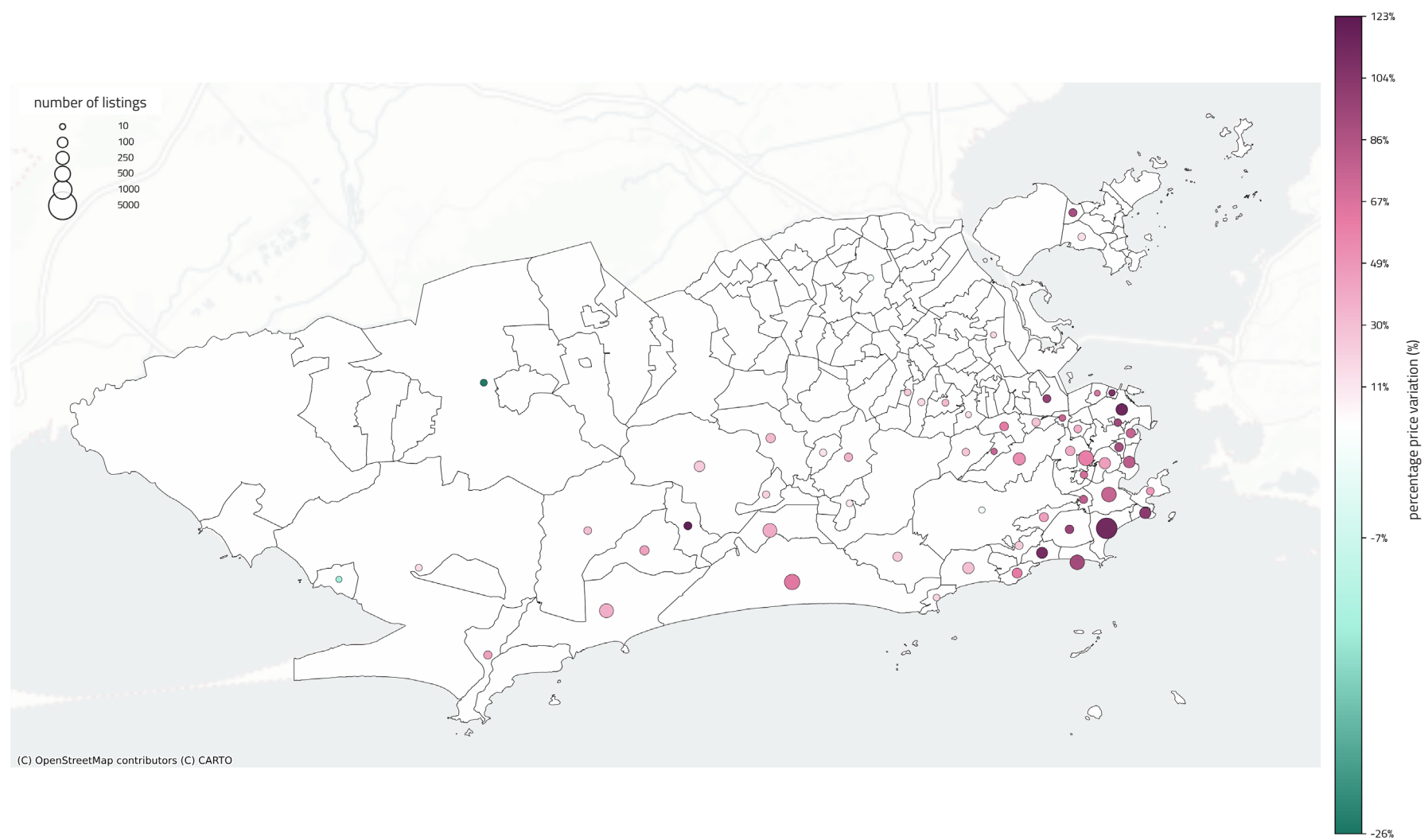
In addition, the data demonstrate in practice what was argued in Chapter 1 through rent theory: that even properties located in less privileged neighborhoods, distant from the city's main tourist attractions, can become potential instruments for greater transfers of land rent. Within this broader context, private rooms introduce a new way of expanding land rent within local real estate dynamics, whether through underused properties adapted for tourist use or through units still occupied by their owners. In a context of temporary demand — such as Carnival, New Year's Eve, or events held in the city — this type of listing also enables the rapid expansion of accommodation supply, allowing transfers of land rent that would not be possible through the residential rental market. In this sense, the flexibility of housing use — a property, even while listed, may still be used for other purposes until a reservation is made — emerges as a major advantage of short-term rentals.

Figure 47 – Rio de Janeiro: variation in the median prices of entire homes by neighborhood (January–November vs. December 2024)



Source: Prepared by the author, based on different Inside Airbnb data scrapes conducted in 2024.

Figure 48 – Rio de Janeiro: variation in the median prices of private rooms by neighborhood (January–November vs. December 2024)



Source: Prepared by the author, based on different Inside Airbnb data scrapes conducted in 2024.

Table 12 – Rio de Janeiro: Variation in median prices of entire home listings by neighborhood (January–November vs. December 2024)

neighborhood	number of entire home listings on 27-12-2024	median price (January to November 2024)	median price (December 2024)	seasonal variation
Santo Cristo	50	R\$ 170,09	R\$ 481,00	+182,79%
Copacabana	9894	R\$ 326,36	R\$ 921,00	+182,20%
Leme	579	R\$ 373,36	R\$ 950,00	+154,44%
Ipanema	2955	R\$ 555,82	R\$ 1.400,00	+151,88%
Del Castilho	12	R\$ 184,73	R\$ 457,00	+147,39%
Catete	280	R\$ 237,5	R\$ 543,00	+128,63%
Saúde	22	R\$ 218,05	R\$ 489,00	+124,27%
Centro	1081	R\$ 185,73	R\$ 416,00	+123,98%
Botafogo	1137	R\$ 300,41	R\$ 670,00	+123,03%
Flamengo	650	R\$ 294,77	R\$ 631,00	+114,06%
Leblon	1520	R\$ 602,68	R\$ 1.284,50	+113,13%
Glória	210	R\$ 244,64	R\$ 519,50	+112,36%
Vidigal	152	R\$ 285,59	R\$ 598,50	+109,57%
Lapa	282	R\$ 193,41	R\$ 400,00	+106,82%
Urca	121	R\$ 377,32	R\$ 774,00	+105,13%
Lagoa	213	R\$ 681,45	R\$ 1.359,00	+99,43%
Camorim	189	R\$ 242,00	R\$ 481,00	+98,76%
Santa Teresa	697	R\$ 254,41	R\$ 484,00	+90,24%
Humaitá	106	R\$ 431,27	R\$ 816,50	+89,32%
Barra da Tijuca	2790	R\$ 512,91	R\$ 971,00	+89,31%
São Cristóvão	63	R\$ 236,77	R\$ 447,00	+88,79%
Praça da Bandeira	42	R\$ 211,23	R\$ 390,00	+84,64%
Gávea	175	R\$ 543,95	R\$ 1.000,00	+83,84%
Laranjeiras	339	R\$ 352,41	R\$ 639,00	+81,32%
Méier	17	R\$ 204,64	R\$ 371,00	+81,30%
Vargem Pequena	83	R\$ 299,27	R\$ 539,00	+80,10%
Anil	38	R\$ 287,91	R\$ 501,50	+74,19%
Gardênia Azul	25	R\$ 302,82	R\$ 527,00	+74,03%
Jacarepaguá	535	R\$ 268,82	R\$ 461,00	+71,49%
Recreio dos Bandeirantes	1601	R\$ 408,64	R\$ 700,00	+71,30%
Andaraí	21	R\$ 245,64	R\$ 420,00	+70,98%
Cachambi	17	R\$ 205,36	R\$ 350,00	+70,43%
Guaratiba	93	R\$ 441,00	R\$ 741,00	+68,03%
Jardim Botânico	127	R\$ 521,32	R\$ 859,00	+64,77%
Vila Isabel	56	R\$ 222,77	R\$ 365,50	+64,07%

Tijuca	158	R\$ 308,64	R\$ 505,00	+63,62%
Engenho Novo	16	R\$ 280,18	R\$ 457,50	+63,29%
Grajaú	21	R\$ 250,45	R\$ 407,00	+62,50%
Marechal Hermes	18	R\$ 190,50	R\$ 307,00	+61,15%
Cosme Velho	50	R\$ 541,82	R\$ 843,00	+55,59%
Alto da Boa Vista	26	R\$ 660,14	R\$ 1.025,00	+55,27%
Irajá	14	R\$ 165,68	R\$ 255,00	+53,91%
Gamboa	17	R\$ 205,45	R\$ 316,00	+53,81%
Barra Olímpica	1348	R\$ 419,32	R\$ 641,50	+52,99%
Praça Seca	14	R\$ 235,27	R\$ 359,50	+52,80%
Freguesia (Jacarepaguá)	84	R\$ 332,82	R\$ 507,00	+52,34%
Taquara	76	R\$ 271,50	R\$ 408,50	+50,46%
Rio Comprido	48	R\$ 304,55	R\$ 455,00	+49,40%
Estácio	23	R\$ 332,41	R\$ 484,00	+45,60%
Rocinha	17	R\$ 202,68	R\$ 292,00	+44,07%
São Conrado	176	R\$ 1.250,32	R\$ 1.793,00	+43,40%
Jardim Guanabara	27	R\$ 249,45	R\$ 356,00	+42,71%
Barra de Guaratiba	127	R\$ 316,14	R\$ 450,00	+42,34%
Cidade Nova	13	R\$ 303	R\$ 423,00	+39,60%
Bento Ribeiro	12	R\$ 159,32	R\$ 219,50	+37,77%
Pechincha	42	R\$ 266,86	R\$ 363,50	+36,21%
Bancários	12	R\$ 150,77	R\$ 205,00	+35,97%
Curicica	44	R\$ 255,91	R\$ 345,00	+34,81%
Maracanã	69	R\$ 371,41	R\$ 500,00	+34,62%
Paquetá	42	R\$ 300,00	R\$ 388,00	+29,33%
Engenho de Dentro	36	R\$ 291,45	R\$ 364,00	+24,89%
Encantado	11	R\$ 219,59	R\$ 273,00	+24,32%
Joá	137	R\$ 5.136,27	R\$ 6.100,00	+18,76%
Parque Anchieta	11	R\$ 144,05	R\$ 171,00	+18,71%
Vargem Grande	107	R\$ 513,73	R\$ 579,00	+12,71%
Ilha de Guaratiba	17	R\$ 519,59	R\$ 571,00	+9,89%
Itanhangá	98	R\$ 1.303,91	R\$ 1.424,00	+9,21%
Campo Grande	102	R\$ 218,91	R\$ 237,50	+8,49%
Pedra de Guaratiba	12	R\$ 185,64	R\$ 190,00	+2,35%
Paciência	12	R\$ 273,18	R\$ 259,50	-5,01%
Santa Cruz	26	R\$ 299,55	R\$ 242,50	-19,04%
Bangu	17	R\$ 282,55	R\$ 152,00	-46,20%

Source: Prepared by the author, based on different data collections conducted by Inside Airbnb in 2024. Methodological note: Only neighborhoods with more than 10 entire home listings on 27-12-2024 were considered.

Table 13 – Rio de Janeiro: Variation in median prices of private rooms by neighborhood (January–November vs. December 2024)

neighborhood	number of private room listings on 27-12-2024	median price (January to November 2024)	median price (December 2024)	seasonal variation					
Camorim	36	R\$ 229,91	R\$ 512,00	+122,70%	Vargem Pequena	64	R\$ 217,00	R\$ 314,50	+44,93%
Centro	160	R\$ 138,45	R\$ 299,50	+116,32%	Barra de Guaratiba	41	R\$ 251,82	R\$ 364,00	+44,55%
Copacabana	1573	R\$ 211,09	R\$ 452,00	+114,13%	Rio Comprido	67	R\$ 142,95	R\$ 199,00	+39,21%
Leblon	130	R\$ 271,91	R\$ 577,50	+112,39%	Barra Olímpica	309	R\$ 280,18	R\$ 390,00	+39,20%
Saúde	16	R\$ 152,45	R\$ 318,00	+108,59%	Estácio	32	R\$ 144,00	R\$ 199,00	+38,19%
Leme	137	R\$ 201,59	R\$ 410,00	+103,38%	Recreio dos Bandeirantes	324	R\$ 250,64	R\$ 346,00	+38,05%
São Cristóvão	36	R\$ 97,77	R\$ 194,50	+98,93%	Freguesia (Jacarepaguá)	42	R\$ 196,32	R\$ 266,50	+35,75%
Lagoa	48	R\$ 275,82	R\$ 543,00	+96,87%	Méier	20	R\$ 125,41	R\$ 167,00	+33,16%
Lapa	29	R\$ 147,09	R\$ 285,00	+93,76%	Taquara	69	R\$ 187,91	R\$ 250,00	+33,04%
Ipanema	383	R\$ 247,73	R\$ 476,00	+92,15%	Vargem Grande	32	R\$ 205,68	R\$ 270,00	+31,27%
Catete	50	R\$ 165,82	R\$ 317,00	+91,17%	São Conrado	143	R\$ 581,95	R\$ 750,00	+28,88%
Portuguesa	37	R\$ 126,55	R\$ 241,00	+90,45%	Maracanã	42	R\$ 148,18	R\$ 190,00	+28,22%
Flamengo	159	R\$ 193,18	R\$ 350,00	+81,18%	Grajaú	28	R\$ 164,45	R\$ 210,00	+27,69%
Humaitá	39	R\$ 168,91	R\$ 304,00	+79,98%	Itanhangá	66	R\$ 207,86	R\$ 261,50	+25,80%
Praça da Bandeira	18	R\$ 113,32	R\$ 201,00	+77,38%	Encantado	18	R\$ 165,59	R\$ 207,00	+25,01%
Andaraí	15	R\$ 112,86	R\$ 200,00	+77,20%	Jacarepaguá	107	R\$ 217,14	R\$ 270,00	+24,35%
Botafogo	399	R\$ 181,00	R\$ 320,00	+76,80%	Gávea	38	R\$ 245,77	R\$ 302,50	+23,08%
Glória	62	R\$ 148,77	R\$ 261,50	+75,77%	Curicica	25	R\$ 244,27	R\$ 300,00	+22,81%
Cosme Velho	27	R\$ 241,00	R\$ 411,00	+70,54%	Joá	18	R\$ 444,32	R\$ 536,00	+20,63%
Gamboa	11	R\$ 101,41	R\$ 170,00	+67,64%	Bonsucesso	12	R\$ 75,77	R\$ 90,50	+19,44%
Barra da Tijuca	477	R\$ 255,41	R\$ 421,00	+64,83%	Engenho de Dentro	23	R\$ 321,91	R\$ 380,00	+18,05%
Vidigal	86	R\$ 238,77	R\$ 389,50	+63,13%	Guaratiba	19	R\$ 201,91	R\$ 236,00	+16,88%
Vila Isabel	51	R\$ 135,5	R\$ 220,00	+62,36%	Jardim Guanabara	29	R\$ 199,09	R\$ 231,00	+16,03%
Santa Teresa	431	R\$ 173,05	R\$ 277,00	+60,07%	Engenho Novo	12	R\$ 116,23	R\$ 133,50	+14,86%
Tijuca	193	R\$ 143,5	R\$ 220,00	+53,31%	Pechincha	24	R\$ 271,73	R\$ 309,00	+13,72%
Urca	31	R\$ 250,64	R\$ 371,00	+48,02%	Anil	18	R\$ 247,91	R\$ 275,00	+10,93%
Jardim Botânico	60	R\$ 192,55	R\$ 280,00	+45,42%	Irajá	14	R\$ 122,36	R\$ 120,50	-1,52%
Laranjeiras	140	R\$ 175,41	R\$ 254,50	+45,09%	Alto da Boa Vista	14	R\$ 355,18	R\$ 349,00	-1,74%
					Pedra de Guaratiba	12	R\$ 206,95	R\$ 180,00	-13,02%
					Campo Grande	20	R\$ 166,73	R\$ 124,00	-25,63%

Source: Prepared by the author, based on different data collections conducted by Inside Airbnb in 2024. Methodological note: Only neighborhoods with more than 10 private room listings on 27-12-2024 were considered.

Although data on advertised prices are not sufficient to indicate the realization of value — that is, the effective completion of bookings — they nevertheless reveal the high speculative potential of short-term rentals in the city, especially when driven by periods of extraordinary revenue. As demonstrated in this section, the variations in median prices throughout the year in Rio de Janeiro reveal that the New Year's Eve period has enabled a growing expansion of land rent, sustained by a historically consolidated demand for consumption in the city. By enabling expanded accumulation within a short period of time, short-term rentals become highly profitable for both property owners and Airbnb, even without the need for high occupancy rates throughout the year. In this context, property owners may obtain, within only a few days or months of short-term rental activity, revenues equivalent to or even greater than those generated through an entire year of residential rental.

Furthermore, although short-term rental is a practice that predates platformization — and therefore the expansion of land rent through this modality was already possible and traditionally explored by property owners — digital platforms have given this logic a new scale, intensity, and speed. As argued throughout this thesis, Airbnb, through short-term rentals, reinvents pathways for the expansion of U.S. imperialism, transforming urban space, property owners, and workers in peripheral countries into instruments of this process. Just as it is in the interest of property owners with listings on Airbnb and of the real estate market more broadly to expand land rent in order to obtain higher profits — through short-term rental, residential rental, and property sales — it is also in Airbnb's interest that this process occurs and intensifies, insofar as it enables expanded accumulation of capital, even at the cost of the impoverishment of the working class and the intensification of economic dependency. In this sense, a scenario conducive to the expansion of short-term rental activities and to the territorial penetration of Airbnb can be observed.

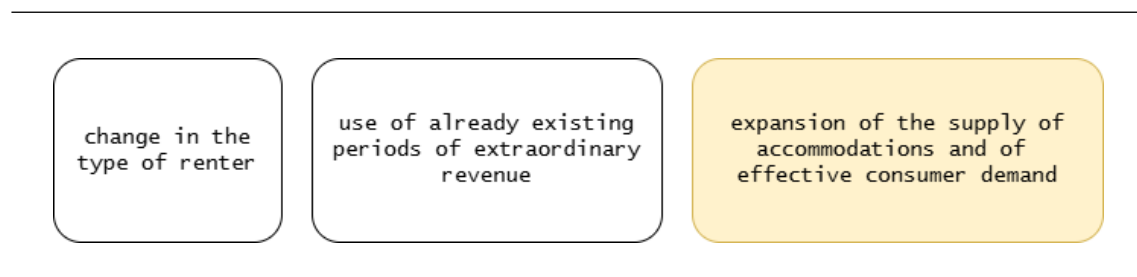
In light of the data presented, it is argued that the activities controlled by Airbnb in Rio de Janeiro tend to intensify international tourism by expanding the supply of accommodations in neighborhoods already marked by a high concentration of listings and by extending touristification to areas previously outside the tourist circuit through the expansion of already existing consumer demand. This occurs because, as demonstrated, periods of high tourist demand in cities, by functioning as periods of extraordinary revenue, enable an accumulation process facilitated by an already consolidated tourism industry, itself anchored in the local lower circuit of the urban economy, thereby constituting an effective source

of expanded profit. However, the expansion of land rent for greater accumulation by different claimants to capital is not limited to already consolidated periods and demands: it also occurs through the creation of new periods of extraordinary revenue based on new consumer demands, as well as through investments in urban space. These latter processes make it possible to expand land rent permanently, rather than only during specific periods of the year, making them especially advantageous for claimants to capital, as will be discussed in the following section.

4.3. Expanding supply and demand: mega-events and urban renewal projects

In the two previous sections, it was demonstrated how the expanded transfer of land rent becomes possible both through the change in the type of renter and through periods of high tourist demand already existing in cities. This section analyzes how investments in the creation of new periods of extraordinary revenue and in improvements to urban space have been mobilized as a strategy to expand capital accumulation through short-term rentals by increasing both the supply of tourist accommodations and effective consumer demand (Figure 49). As discussed in Chapter 1, mega-events and urban renewal projects increase the demand for tourist accommodations and investment properties in cities, unfolding into an increase in the supply of accommodations and, consequently, into the expansion of Airbnb's territorial penetration. In light of this, this section argues that events such as the 2014 FIFA World Cup and the 2016 Olympic Games, as well as urban renewal projects such as Porto Maravilha and Reviver Centro, have contributed — and continue to contribute — to the growth in both demand and supply of tourist accommodations in the city of Rio de Janeiro.

Figure 49 – Expanded accumulation: strategy 3



Source: Prepared by the author.

To do so, this section builds upon the idea already explored in Chapter 1 that periods of extraordinary revenue, such as the FIFA World Cup and the Olympic Games, generate increases in accommodation occupancy and are grounded in the expansion of the four forms of rent identified by Marx (2013) and Harvey (2013) — *absolute rent*, *monopoly rent*, *differential rent I*, and *differential rent II* — because during these periods there is an effectively greater demand for the consumption of the *lodging commodity*. In this sense, as verified in the previous section, the increase in

effective consumer demand results in greater occupancy across the stock of tourist accommodations and enables the charging of higher prices for lodging. It should be emphasized, however, that land rent is also expanded outside periods of high tourist demand through urban renewal projects, which make possible a permanent expansion of rent in certain areas of the city through investments in urban improvements, as is the case of Olympic Barra — from the first investments related to the Olympic Games to the real estate developments of the present day — and the city center of Rio de Janeiro. Thus, the possibilities for expanding the profitability of short-term rentals through mega-events are not restricted to periods of extraordinary revenue, since such events are generally accompanied by urban projects and generate long-term impacts on the real estate dynamics of cities.

This time, however, instead of analyzing the prices charged on the platform, the analysis focuses on the evolution of the supply and density of listings in order to identify the processes of expansion and densification of short-term rentals over time. It is argued that these processes indicate the main strategies used by claimants to capital to stimulate effective consumer demand, thereby ensuring the realization of capital — that is, the effective commercialization of *lodging* — and resulting in the expansion of the supply of tourist accommodations, thus expanding Airbnb's territorial penetration within the city. To this end, and based on Inside Airbnb data scrapes conducted between 2015 and 2025, two indicators were analyzed: the *number of listings* and *listing density* (*listings/km²*). The *number of listings* is considered especially relevant for indicating the general expansion of accommodation supply across different areas of the city, even when this expansion does not necessarily translate into significant densification. In this sense, the number of listings helps identify not only the growth of supply in neighborhoods where it is already consolidated, but also the neighborhoods into which Airbnb's territorial penetration has been expanding. *Listing density*, in turn, makes it possible to identify the areas that already present high concentrations and where this concentration has intensified over time. Thus, both indicators are complementary and interweave two main processes: the *intensification of supply* in already consolidated areas and the *territorial expansion of supply* into new areas.

The first stage therefore involved calculating the absolute number of listings in each scrape, making it possible to identify the oscillations between dates and, consequently, the peaks, declines, and periods of growth and contraction in the number of listings (Figure 50; Figure 51). In total, 111 data scrapes were ana-

lyzed, encompassing 181,727 unique listings registered on Airbnb between 2015 and 2025 in the city of Rio de Janeiro⁸. According to the data presented, between September 2015 and May 2025 the number of listings in the city increased from 13,145 to 42,580, representing an increase of 29,435 listings (223.93%) over the entire period, thereby confirming the overall expansion of accommodation supply during the last decade.

The sharpest increase occurred between June and August 2016, when, in only two months, the supply of accommodations nearly doubled, rising from 20,912 to 41,097 listings, representing an increase of 20,185 new listings (96.52%). At that time, Rio de Janeiro was hosting the 2016 Olympic and Paralympic Games, an event that attracted a large flow of both international and domestic visitors and also represented an expansion in effective consumer demand for the *lodging commodity* within the city. It is important to note that, through a partnership with the Olympic Committee, Airbnb acted as the official provider of alternative accommodations during the event. This has become a frequent strategy of Airbnb, which has acted either as a sponsor or as the official accommodation provider during mega-events, as occurred during the 2024 Paris Olympic Games and as is planned for the 2026 FIFA World Cup, to be hosted in the United States, Canada, and Mexico.

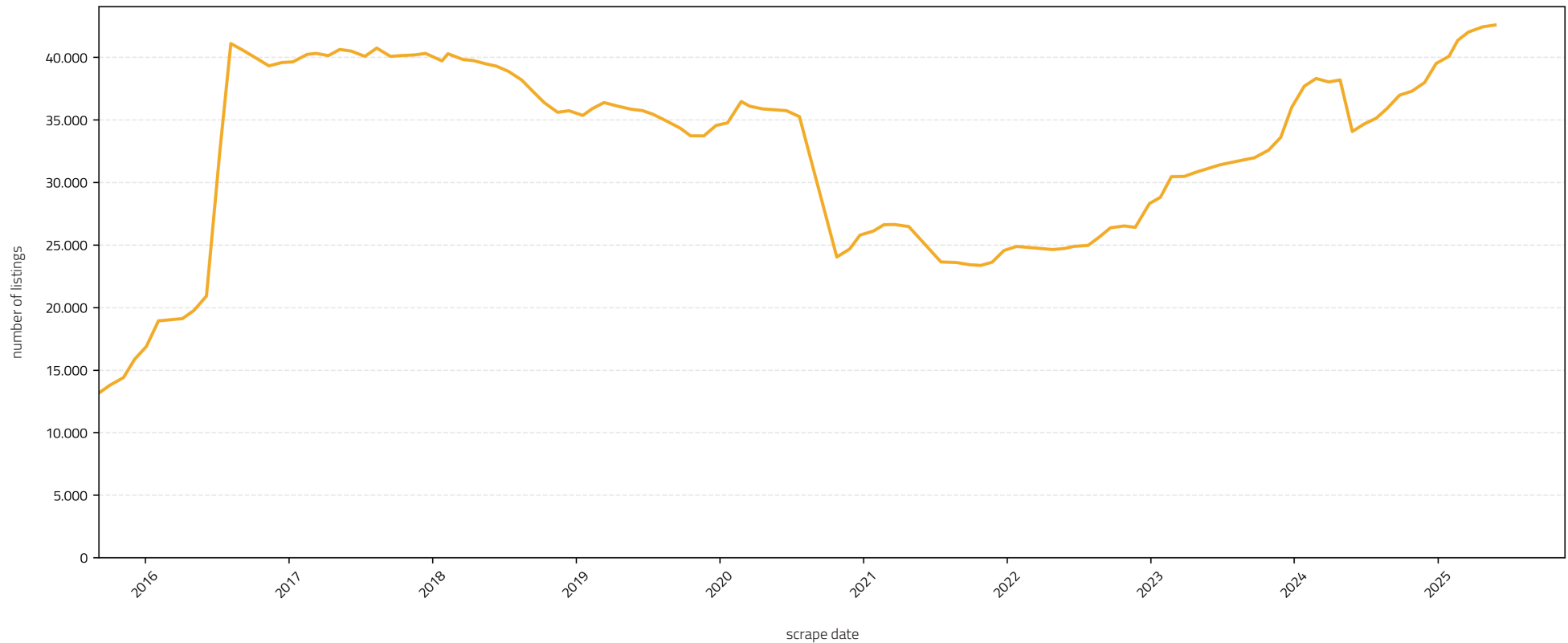
⁸ To obtain this figure, the total number of listing identifiers across all data scrapes (id attribute) was calculated, excluding repeated occurrences.

Figure 50 – Rio de Janeiro: number of listings (2015–2025)



Source: Prepared by the author, based on different data scrapes conducted by Inside Airbnb.

Figure 51 – Rio de Janeiro: evolution of the number of listings (2015–2025)



Source: Prepared by the author, based on different data scrapes conducted by Inside Airbnb.

After the peak in the number of listings in 2016, the supply remained high, with more discrete fluctuations and a tendency toward contraction until the second half of 2020, when a sharp decline can be observed. Between July and October 2020, the number of listings fell from 35,255 to 24,030, representing a reduction of 11,225 listings (-46.71%), possibly reflecting the impacts of the COVID-19 pandemic on the short-term rental market and on the tourism sector more broadly. This decline forms part of a broader period of contraction in the number of listings that began in 2018 and extended until 2021. Since the end of 2021, however, the supply of accommodations has once again shown growth tendencies (Table 14): it increased by 13.76% in 2022, 24.99% in 2023, 4.79% in 2024, and 6.23% through May 2025. Furthermore, a sharper increase in supply occurred during the first months of 2024, which may be associated with the Carnival period, but also with the Madonna concert held in May 2024, the first event of *Todo Mundo no Rio*. Throughout the entire period analyzed, the largest increase in the supply of listings (+134.55%) occurred in 2016, while the greatest reduction occurred in 2020 (-25.81%).

Table 14 – Rio de Janeiro: annual variation in the number of listings (2015-2025)⁹

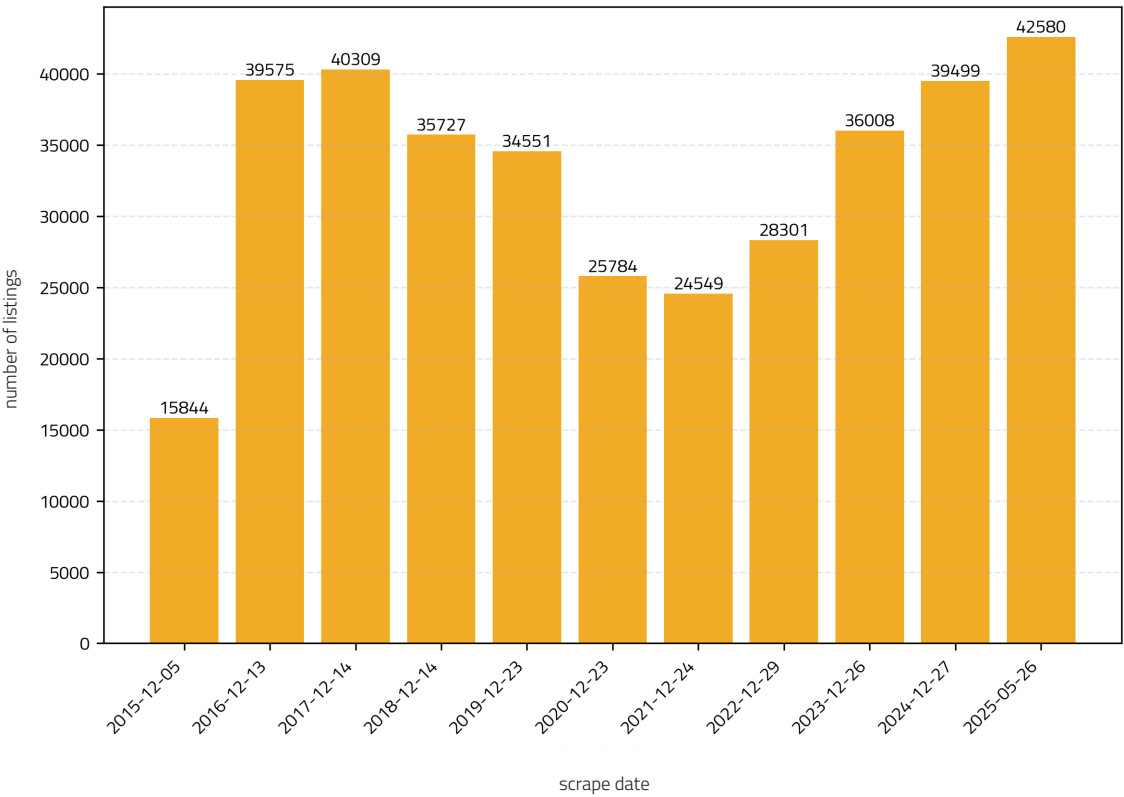
2015	+20,53%
2016	+134,55%
2017	+1,70%
2018	-10,03%
2019	-2,26%
2020	-25,81%
2021	-5,96%
2022	+13,76%
2023	+24,99%
2024	+4,79%
2025	+6,23%

Source: Prepared by the author, based on different data scrapes conducted by Inside Airbnb.

⁹ The annual variation in the number of listings was calculated based on data from the first and last data scrapes of each year.

Based on Figure 50, one data scrape from each year was selected for the preparation of comparative tables and for the cross-analysis of temporal data. Scrapes conducted in December were selected for the years 2015 to 2024, while the May scrape was selected for 2025, as these represented the most recent data available for each year. Following the trends previously discussed, the first selected scrape presents the lowest supply of listings in the analyzed period (15,844), while the last presents the highest supply (42,580), indicating an overall growth of 168.75% in the supply of listings (Figure 52). Furthermore, the same fluctuations discussed earlier can be observed, related to the surge in supply in 2016, the strongest reduction in 2020 and 2021, and the renewed growth beginning in 2022. It is therefore understood that the eleven selected scrapes are representative of the dynamics of the evolution of listing supply over the years and are useful for the comparative analysis carried out in the following pages.

Figure 52 – Rio de Janeiro: number of listings in the eleven selected data scrapes



Source: Prepared by the author, based on different data scrapes conducted by Inside Airbnb.

Figure 53 was then produced, presenting a comparative overview of the spatial distribution of listings across the eleven selected data scrapes, as well as Table 15, which compiles neighborhood-level data, considering those with the largest number of listings in the most recent scrape, dated 26-05-2025. The most significant changes are observed when comparing the 2015 scrape with the subsequent ones, since the 2015 scrape represents the distribution of listings prior to the Olympic Games — although it is possible that the 2015 scrapes already reflected the initial impacts of the event. Comparing the 2015 and 2016 scrapes, it can be observed that the distribution of listings expanded into the West Zone and North Zone, where listings had previously not been identified. Furthermore, the supply also intensified in areas that already presented high concentrations, as well as in the surroundings of the Olympic Park, built between 2012 and 2016 to host part of the Olympic competitions. This process was accompanied by the intensification of listings in Barra da Tijuca and Recreio dos Bandeirantes, as well as by the expansion of supply into Jacarepaguá. In this sense, the Olympic Games, by increasing the effective demand for accommodations in the city, played an important role in expanding Airbnb's territorial penetration in Rio de Janeiro, both through the intensification of listings in areas where supply was already high and through expansion into areas with little or no previous supply.

The *number of listings* confirms this process, demonstrating the growth of supply in the South Zone, the West Zone, and the central region, as well as its expansion into suburban areas, although with lower intensity.

Between 2015 and 2016: Copacabana increased from 3,366 to 8,772 listings (+161.61%); Ipanema from 1,301 to 3,164 (+143.20%); Barra da Tijuca from 1,305 to 4,308 (+230.11%); Recreio dos Bandeirantes from 534 to 2,173 (+306.93%); present-day Olympic Barra from 382 to 2,171 (+468.32%); and Jacarepaguá from 88 to 759 (+762.50%). The maps also reveal that, even in 2015, the main patterns of listing distribution in the South Zone and the city center were already present, with high concentrations in Copacabana and adjacent neighborhoods. Although there are no available data for the period, it is assumed that the 2014 FIFA World Cup, hosted in Brazil, contributed to the formation of this pre-existing stock of accommodations.

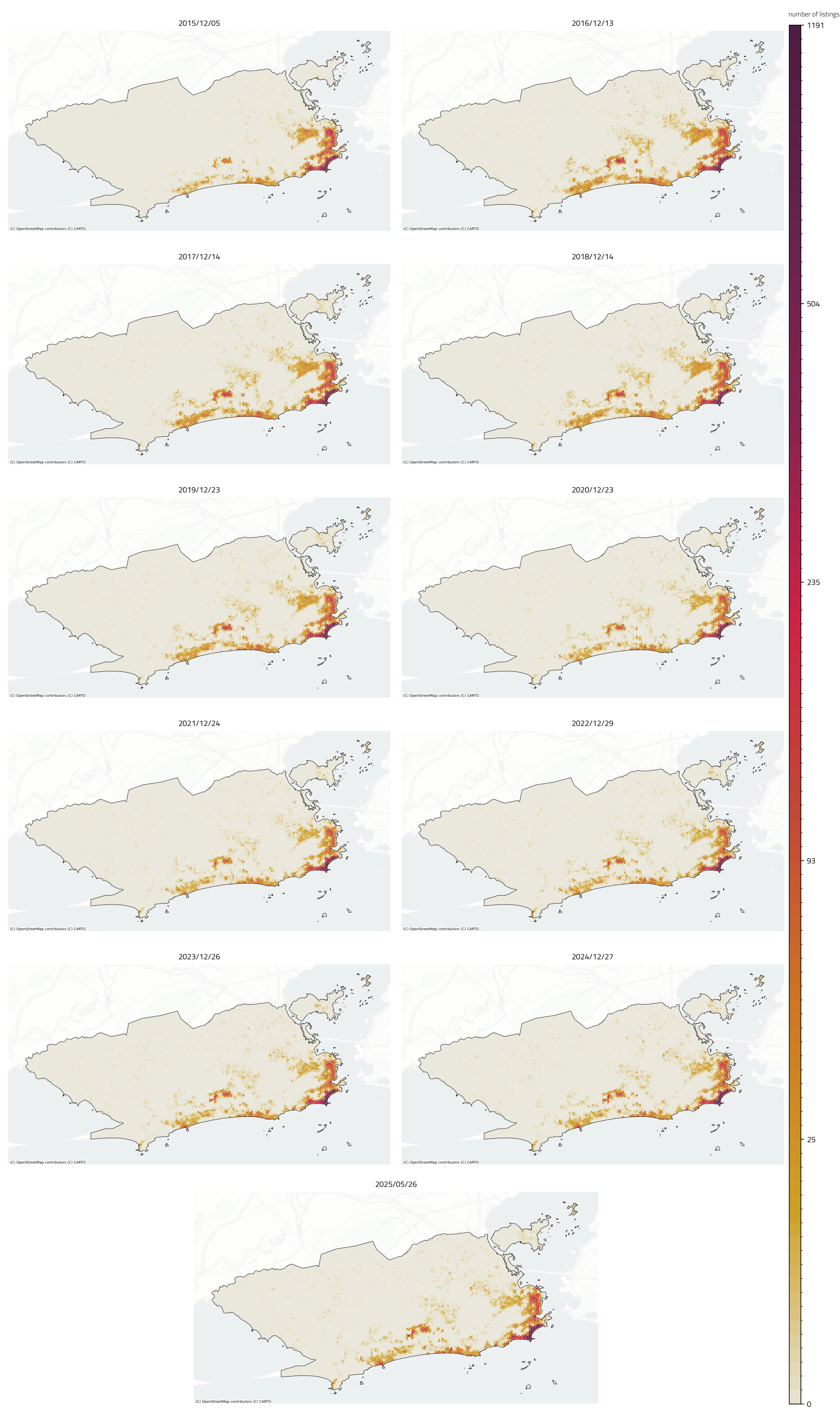
Furthermore, the 2016 scrape reveals a generalized increase in supply across suburban neighborhoods, demonstrating that the Olympic Games stimulated the emergence of new listings in different areas of the city, albeit with varying intensity.

Neighborhoods from different parts of the city also presented expressive increases in the number of listings between the analyzed scrapes (2015–2016). Tijuca, for example, increased from 466 to 943 listings; Freguesia from 20 to 287; Engenho de Dentro from 17 to 106; Curicica from 2 to 98; and Anil, which previously had no listings, came to register 82. Vargem Pequena increased from 30 to 241 listings, Vargem Grande from 14 to 188, Taquara from 2 to 225, and Catete from 209 to 409. In total, of the city's 165 neighborhoods, 149 registered at least one new listing in the 2016 scrape.

Between 2015 and 2025: most neighborhoods that already presented a high supply experienced further increases in the number of listings: Copacabana (+291.38%); Ipanema (+177.17%); Barra da Tijuca (+172.72%); Recreio dos Bandeirantes (+298.13%); Botafogo (+96.34%); Leblon (+86.60%); Olympic Barra (+372.51%); Centro (+396.85%); Santa Teresa (+60.50%); and Flamengo (+97.36%). In the case of Jacarepaguá, which presented an increase of +762.50% between 2015 and 2016 and +732.95% between 2015 and 2025, it becomes evident that the Olympic Games were decisive for the formation of the neighborhood's accommodation stock and for its partial maintenance up to the present day. The same process can be observed in Taquara, which presented 2 listings in 2015, increased to 225 in 2016, and currently presents 155. An expansion in the supply of listings can also be observed in suburban neighborhoods, such as Campo Grande, which had no listings in 2015, registered 75 listings in 2021, and currently presents 127.

Since 2015, however, some reductions have also occurred: Tijuca (-5.58%); Lagoa (-5.73%); Jardim Botânico (-5.51%); Humaitá (-6.07%); Vila Isabel (-16.00%); Maracanã (-42.19%); Cosme Velho (-4.40%); and Andaraí (-14.06%). In general, reductions are observed in neighborhoods where the supply of tourist accommodations is smaller and the activity is less professionalized. Furthermore, it can be noted that the distribution patterns established in 2016 were maintained, although with reductions in listings in neighborhoods near the Olympic Park between 2017 and 2021. This movement is expected, since it reflects the entry and exit of occasional hosts who take advantage of periods of extraordinary revenue but do not ultimately professionalize their activities.

Figure 53 – Rio de Janeiro: evolution of the spatial distribution of listings (2015–2025)



Source: Prepared by the author, based on different data scrapes conducted by Inside Airbnb.

Table 15 – Rio de Janeiro: variation in the supply of listings (2015–2025)

Neighborhood	Number of listings by scrape date										26/05/2025	Variation (%)	Variation (%)	Variation (%)
	12/5/2015	13/12/2016	14/12/2017	14/12/2018	23/12/2019	23/12/2020	24/12/2021	29/12/2022	26/12/2023	27/12/2024		(2015-2016)	(2015-2025)	(2021-2025)
Copacabana	3366	8772	9829	8541	8952	7376	7217	8345	10981	12359	13174	+160,61%	+291,38%	+45,22%
Ipanema	1301	3164	3345	2993	2999	2449	2457	2816	3447	3558	3606	+143,20%	+177,17%	+31,86%
Barra da Tijuca	1305	4308	4214	3868	3762	2500	2388	2751	3401	3490	3559	+230,11%	+172,72%	+32,90%
Recreio dos Bandeirantes	534	2173	2113	1844	1624	1120	1129	1395	1802	2060	2126	+306,93%	+298,13%	+46,90%
Botafogo	956	1936	1984	1729	1695	1196	1094	1227	1575	1708	1877	+102,51%	+96,34%	+41,72%
Leblon	1000	1812	1858	1618	1600	1157	1172	1424	1743	1767	1866	+81,20%	+86,60%	+37,19%
Barra Olímpica	382	2171	2092	1877	1724	1039	895	1240	1527	1807	1805	+468,32%	+372,51%	+50,42%
Centro	349	734	751	700	685	552	489	560	882	1318	1734	+110,32%	+396,85%	+71,80%
Santa Teresa	924	1434	1385	1192	1082	887	886	974	1149	1238	1483	+55,19%	+60,50%	+40,26%
Flamengo	492	1007	1043	926	896	580	551	647	813	892	971	+104,67%	+97,36%	+43,25%
Leme	475	789	791	608	609	496	456	539	708	779	868	+66,11%	+82,74%	+47,47%
Jacarepaguã	88	759	783	689	612	504	432	526	621	703	733	+762,50%	+732,95%	+41,06%
Laranjeiras	483	907	866	784	681	430	387	415	564	539	589	+87,78%	+21,95%	+34,30%
São Conrado	137	351	316	291	241	225	207	219	363	407	491	+156,20%	+258,39%	+57,84%
Tijuca	466	943	905	829	723	480	405	383	452	416	440	+102,36%	-5,58%	+7,95%
Catete	209	409	394	354	316	231	188	204	330	358	422	+95,69%	+101,91%	+55,45%
Lapa	155	258	286	264	241	192	204	212	306	347	390	+66,45%	+151,61%	+47,69%
Glória	170	367	396	345	351	203	230	230	290	310	360	+115,88%	+111,76%	+36,11%
Vidigal	149	227	238	197	149	130	140	156	210	283	359	+52,35%	+140,94%	+61,00%
Lagoa	314	542	508	442	395	254	225	245	275	276	296	+72,61%	-5,73%	+23,99%
Camorim	11	56	62	98	93	115	104	143	208	256	248	+409,09%	+2154,55%	+58,06%
Gávea	209	375	397	347	311	190	191	201	229	231	236	+79,43%	+12,92%	+19,07%
Jardim Botânico	236	443	410	354	309	208	184	192	213	206	223	+87,71%	-5,51%	+17,49%
Humaitá	214	396	369	306	291	162	138	163	204	187	201	+85,05%	-6,07%	+31,34%
Itanhangá	88	236	228	186	176	139	121	132	168	168	187	+168,18%	+112,50%	+35,29%
Barra de Guaratiba	21	57	62	77	55	51	77	135	153	171	181	+171,43%	+761,90%	+57,46%
Urca	90	229	186	165	147	110	100	112	142	164	172	+154,44%	+91,11%	+41,86%
Vargem Pequena	30	241	236	187	185	112	104	111	153	155	169	+703,33%	+463,33%	+38,46%
Taquara	2	225	204	195	167	123	108	139	147	155	166	+11150,00%	+8200,00%	+34,94%
Joá	47	91	81	84	82	84	100	121	135	159	161	+93,62%	+242,55%	+37,89%
Guaratiba	5	64	78	62	55	83	75	70	104	118	155	+1180,00%	+3000,00%	+51,61%
Campo Grande	0	66	64	70	76	84	75	97	115	127	153	-	-	+50,98%
Santo Cristo	12	20	17	16	20	11	10	18	22	71	150	+66,67%	+1150,00%	+93,33%
Vargem Grande	14	182	171	157	125	96	73	87	107	144	150	+1200,00%	+971,43%	+51,33%
Vila Isabel	175	376	340	308	266	185	148	132	142	131	147	+114,86%	-16,00%	-0,68%
Freguesia (Jacarepaguá)	20	287	256	245	224	137	120	121	133	130	142	+1335,00%	+610,00%	+15,49%
Rio Comprido	94	164	150	130	103	91	88	98	112	136	141	+74,47%	+50,00%	+37,59%
Maracanã	237	388	352	317	294	168	122	127	119	132	137	+63,71%	-42,19%	+10,95%
São Cristóvão	71	135	123	124	107	77	73	78	82	105	126	+90,14%	+77,46%	+42,06%
Praça da Bandeira	33	88	81	77	79	54	40	36	64	69	91	+166,67%	+175,76%	+56,04%
Curicica	2	98	93	98	87	55	62	67	94	78	87	+4800,00%	+4250,00%	+28,74%
Cosme Velho	91	168	167	113	106	80	77	76	85	86	87	+84,62%	-4,40%	+11,49%
Estácio	38	81	98	90	91	70	55	48	62	69	83	+113,16%	+118,42%	+33,73%
Engenho de Dentro	17	106	100	83	81	44	26	36	54	66	72	+523,53%	+323,53%	+63,89%
Grajaú	57	120	115	102	109	48	43	48	53	54	71	+110,53%	+24,56%	+39,44%
Pechincha	11	110	104	85	70	51	38	58	63	67	65	+900,00%	+490,91%	+41,54%
Anil	0	86	91	74	58	41	42	52	56	58	62	-	-	+32,26%
Méier	19	82	75	54	48	28	23	24	68	54	62	+331,58%	+226,32%	+62,90%
Paqueta	0	11	15	15	32	32	39	44	46	48	58	-	-	+32,76%
Andaraí	64	122	122	101	84	50	36	34	42	51	55	+90,63%	-14,06%	+34,55%

Source: Prepared by the author, based on different data scrapes conducted by Inside Airbnb.

Methodological note: The 50 neighborhoods with the largest number of listings on 26-05-2025 were considered.

Between 2021 and 2025: a progressive increase in the number of listings can be observed across most of the analyzed neighborhoods, with particular emphasis on a sudden and significant rise in listings in Santo Cristo between December 2024 and May 2025, from 71 to 150 listings. This increase is related to the real estate developments recently launched in the area and to the unfolding effects of the Porto Maravilha and Reviver Centro projects, launched in 2009 and 2021 by the Municipality of Rio de Janeiro to revitalize the city's central area, with impacts studied and mapped by Manduca (2025) and Stroher et al. (2025). Since 2021, the number of listings in Santo Cristo has grown by 93.33%, and in Centro by 71.80%. In the West Zone, expansion can also be observed in Olympic Barra (+50.42%) and Camorim (+58.06%). These data demonstrate that, even after the end of the Olympic Games, the stock of accommodations has continued to grow, driven by developments that still benefit from the real estate appreciation promoted by the mega-event and that continues to reverberate through the region's real estate dynamics.

Regarding *listing density*, a densification of listings can be observed especially in the South Zone and in the central region of Rio de Janeiro, as indicated in Table 16, which presents density variations across the eleven selected data scrapes.

Between 2015 and 2016: in Copacabana, density increased from 820.80 to 2,139.06 listings/km², representing 1,318.26 new listings per km²; in Lapa, the increase was 345.26; in Ipanema, 603.91; in Leme, 321.33; in Leblon, 377.13; in Catete, 293.67; in Flamengo, 312.83; in Botafogo, 204.21; in Centro, 70.97; and in Glória, 172.80. Significant increases were also identified in Laranjeiras, with 170.04 new listings per km²; in Humaitá, with 172.60; and in Olympic Barra, with 163.04. Between 2015 and 2016, 49 of the 50 analyzed neighborhoods presented densification.

Between 2015 and 2025: in Copacabana, densification represented 2,391.69 new listings per km²; in Lapa, 787.73; and in Ipanema, 747.18. In some cases, the variations registered between 2015 and 2016 represent the majority of the growth observed up to 2025, indicating that, in some neighborhoods, the main process of densification occurred during 2016. The variations between 2015 and 2025 also reflect the broader period of reduction in listings between 2018 and 2021. Thus, between 2015 and 2025, reductions occurred in Humaitá (-12.33); Cosme Velho (-4.48); Jardim Botânico (-4.83); Maracanã (-59.98); São Francisco Xavier (-7.71); and Andaraí (-3.98).

From 2021 to 2025: although densification can be observed across different neighborhoods in the city — with 47 of the 50 analyzed neighborhoods presenting densification during this period — it intensified mainly in the South Zone and in the central region. In Copacabana, the increase was 1,452.62 new listings per km²; in Lapa, 623.48; in Ipanema, 372.46; in Leme, 421.61; in Leblon, 322.33; in Catete, 343.60; in Flamengo, 163.16; in Centro, 229.50; in Glória, 114.03; and in Santa Teresa, 115.76. During this latter period, central neighborhoods that between 2015 and 2016 had not presented significant variations began to densify: Santo Cristo, which between 2015 and 2016 registered 4.75 new listings per km², presented an increase of 83.10 between 2021 and 2025, with densification occurring especially from 2024 onward. The same occurred in Saúde, which between 2015 and 2016 registered 8.25 new listings per km² and, between 2021 and 2025, a densification of 93.45, especially from 2023 onward. Both neighborhoods have been impacted by the real estate dynamics driven by the urban renewal projects in the central region.

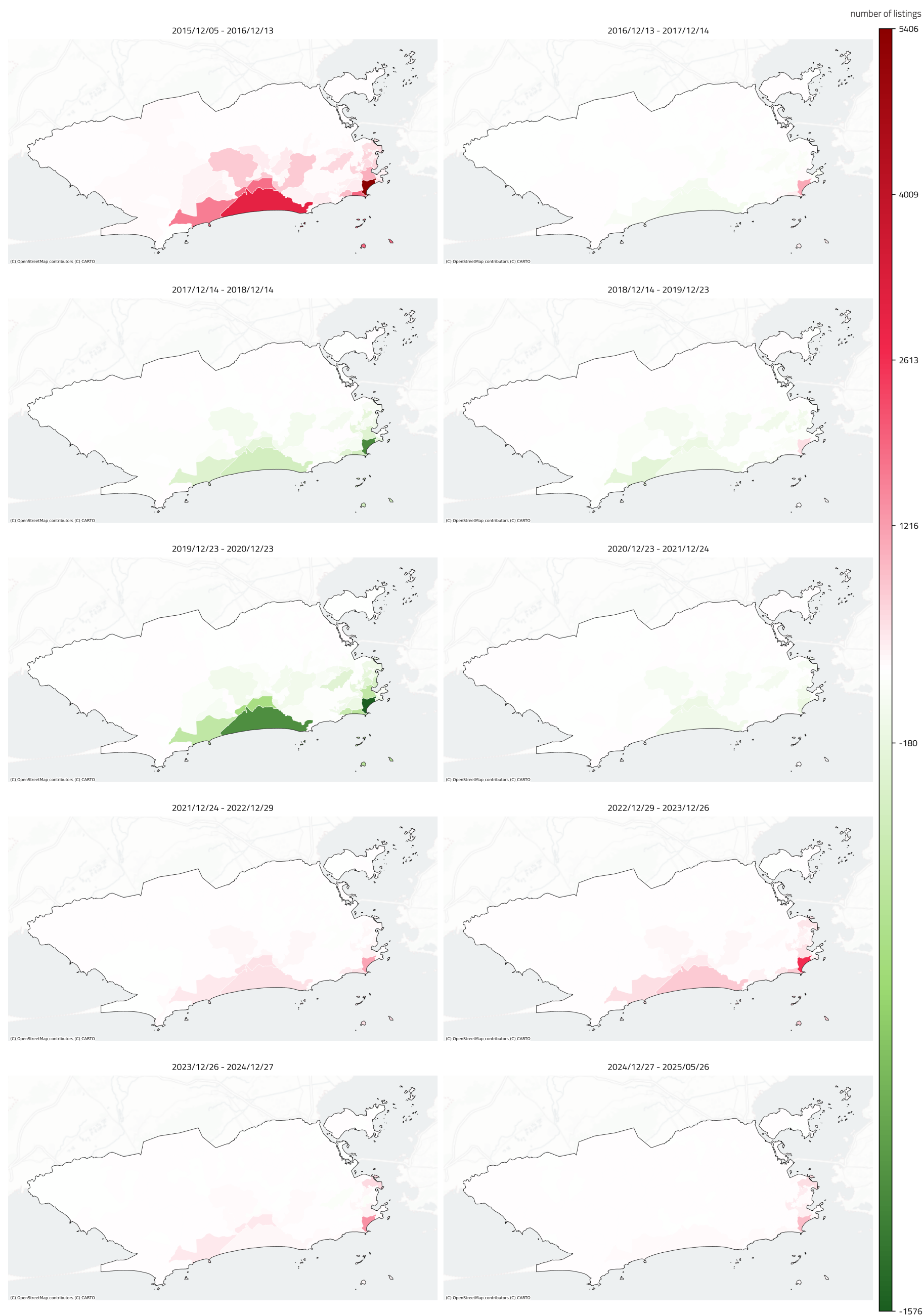
Finally, Figures 54 and 55 synthesize these data by demonstrating how the increase in supply and density was spatially distributed over the years. In general, in absolute terms, the supply expanded significantly in West Zone neighborhoods due to the stimuli generated by the Olympic Games, resulting in greater densification in neighborhoods within this region. However, although densification was also identified in the West Zone, since 2021 it has occurred more intensely in the South Zone and in the central region.

Table 16 – Rio de Janeiro: variation in listing density (2015–2025)

listing density by scrape date (number of listings/km²)												Variation (listings/km²) (2015-2016)	Variation (listings/km²) (2015-2025)	Variation (listings/km²) (2021-2025)
Neighborhood	12/5/2015	13/12/2016	14/12/2017	14/12/2018	23/12/2019	23/12/2020	24/12/2021	29/12/2022	26/12/2023	27/12/2024	26/05/2025			
Copacabana	820,80	2.139,06	2.396,81	2.082,73	2.182,96	1.798,65	1.759,87	2.034,94	2.677,73	3.013,76	3.212,50	+1.318,26	+2.391,69	+1.452,62
Lapa	519,56	864,82	958,68	884,94	807,84	643,59	683,81	710,63	1.025,72	1.163,15	1.307,29	+345,26	+787,73	+623,48
Ipanema	421,73	1.025,64	1.084,31	970,20	972,15	793,86	796,46	912,83	1.117,37	1.153,35	1.168,91	+603,91	+747,18	+372,46
Leme	486,08	807,41	809,45	622,18	623,21	507,57	466,64	551,58	724,52	797,17	888,25	+321,33	+402,17	+421,61
Leblon	464,45	841,58	862,94	751,47	743,11	537,36	544,33	661,37	809,53	820,68	866,66	+377,13	+402,21	+322,33
Catete	306,89	600,56	578,54	519,80	464,00	339,19	276,05	299,55	484,56	525,68	619,65	+293,67	+312,76	+343,60
Flamengo	298,86	611,69	633,56	562,49	544,26	352,31	334,70	393,01	493,85	541,83	589,82	+312,83	+290,96	+255,12
Botafogo	199,21	403,42	413,42	360,29	353,20	249,22	227,97	255,68	328,20	355,91	391,13	+204,21	+191,92	+163,16
Centro	64,33	135,31	138,44	129,04	126,27	101,76	90,14	103,23	162,59	242,96	319,65	+70,97	+255,31	+229,50
Glória	149,11	321,91	347,35	302,61	307,88	178,06	201,74	201,74	254,37	271,91	315,77	+172,80	+166,66	+114,03
Santa Teresa	179,17	278,06	268,56	231,14	209,81	171,99	171,80	188,86	222,80	240,06	287,56	+98,89	+108,39	+115,76
Laranjeiras	193,70	363,74	347,30	314,42	273,11	172,45	155,20	166,43	226,19	216,16	236,21	+170,04	+42,51	+81,01
Vidigal	91,90	140,00	146,79	121,50	91,90	80,18	86,35	96,21	129,52	174,54	221,42	+48,11	+129,52	+135,07
Humaitá	202,94	375,54	349,94	290,19	275,97	153,63	130,87	154,58	193,46	177,34	190,62	+172,60	-12,33	+59,75
Barra Olímpica	34,81	197,85	190,65	171,06	157,11	94,69	81,56	113,00	139,16	164,68	164,49	+163,04	+129,68	+82,93
Praça da Bandeira	45,84	122,24	112,51	106,96	109,74	75,01	55,56	50,01	88,90	95,85	126,40	+76,40	+80,57	+70,84
Saúde	41,23	49,48	49,48	68,72	65,97	52,22	30,23	32,98	90,70	109,94	123,69	+8,25	+82,46	+93,45
Cosme Velho	101,96	188,23	187,11	126,60	118,76	89,63	86,27	85,15	95,23	96,35	97,47	+86,27	-4,48	+11,20
Joã	27,82	53,86	47,94	49,71	48,53	49,71	59,18	71,61	79,90	94,10	95,28	+26,04	+67,47	+36,10
Gávea	81,02	145,37	153,90	134,51	120,56	73,65	74,04	77,92	88,77	89,55	91,49	+64,35	+10,47	+17,44
Santo Cristo	7,12	11,87	10,09	9,50	11,87	6,53	5,94	10,68	13,06	42,14	89,04	+4,75	+81,91	+83,10
Estácio	38,76	82,62	99,96	91,80	92,82	71,40	56,10	48,96	63,24	70,38	84,66	+43,86	+45,90	+28,56
Jardim Botânico	87,76	164,73	152,46	131,64	114,90	77,35	68,42	71,40	79,21	76,60	82,92	+76,97	-4,83	+14,50
Maracanã	142,15	232,71	211,12	190,13	176,33	100,76	73,17	76,17	71,37	79,17	82,17	+90,57	-59,98	+9,00
Barra da Tijuca	28,20	93,10	91,07	83,59	81,30	54,03	51,61	59,45	73,50	75,42	76,92	+64,90	+48,71	+25,31
São Conrado	21,11	54,10	48,70	44,85	37,14	34,68	31,90	33,75	55,94	62,73	75,67	+32,98	+54,56	+43,77
Urca	38,81	98,75	80,21	71,15	63,39	47,43	43,12	48,30	61,23	70,72	74,17	+59,94	+35,36	+31,05
Recreio dos Bandeirantes	17,42	70,88	68,93	60,15	52,98	36,53	36,83	45,51	58,78	67,20	69,35	+53,46	+51,93	+32,52
Lagoa	61,45	106,07	99,41	86,50	77,30	49,71	44,03	47,95	53,82	54,01	57,93	+44,62	-3,52	+13,89
Vila Isabel	54,40	116,87	105,68	95,74	82,68	57,50	46,00	41,03	44,14	40,72	45,69	+62,48	-8,70	-0,31
Tijuca	46,30	93,69	89,91	82,36	71,83	47,69	40,24	38,05	44,91	41,33	43,71	+47,39	-2,58	+3,48
Rio Comprido	28,12	49,06	44,88	38,89	30,82	27,22	26,33	29,32	33,51	40,69	42,18	+20,94	+14,06	+15,86
Encantado	6,60	17,92	13,21	15,09	14,15	15,09	6,60	12,26	24,52	31,13	38,67	+11,32	+32,07	+32,07
Gamboa	10,78	19,77	14,38	15,28	18,87	14,38	17,97	19,77	25,16	32,35	38,64	+8,99	+27,86	+20,67
Paquetá	0,00	6,45	8,79	8,79	18,76	18,76	22,86	25,80	26,97	28,14	34,00	+6,45	+34,00	+11,14
Camorim	1,50	7,62	8,43	13,33	12,65	15,64	14,15	19,45	28,29	34,82	33,73	+6,12	+32,24	+19,59
São Cristóvão	17,29	32,88	29,96	30,20	26,06	18,75	17,78	19,00	19,97	25,57	30,69	+15,59	+13,40	+12,91
Portuguesa	0,00	14,33	19,39	18,54	26,13	17,70	20,23	26,13	26,97	37,93	30,34	+14,33	+30,34	+10,11
Cidade Nova	9,63	21,39	33,16	21,39	24,60	22,46	14,98	13,91	20,32	20,32	26,74	+11,77	+17,11	+11,77
Rocinha	11,13	23,66	20,87	19,48	16,00	13,22	18,79	16,70	16,00	19,48	26,44	+12,52	+15,31	+7,65
Curicica	0,60	29,35	27,85	29,35	26,05	16,47	18,57	20,06	28,15	23,36	26,05	+28,75	+25,45	+7,49
Mêier	7,69	33,19	30,35	21,85	19,43	11,33	9,31	9,71	27,52	21,85	25,09	+25,50	+17,40	+15,78
Gardênia Azul	0,81	33,16	27,50	19,41	20,22	13,75	21,03	25,07	24,27	25,88	25,07	+32,35	+24,27	+4,04
São Francisco Xavier	32,36	69,35	57,02	58,56	50,85	36,99	30,82	41,61	33,90	21,57	24,66	+36,99	-7,71	-6,16
Andaraí	28,30	53,95	53,95	44,66	37,15	22,11	15,92	15,04	18,57	22,55	24,32	+25,65	-3,98	+8,40
Catumbi	7,41	20,39	25,95	29,66	11,12	16,68	14,83	18,54	24,10	18,54	24,10	+12,98	+16,68	+9,27
Pechincha	3,89	38,86	36,74	30,03	24,73	18,02	13,42	20,49	22,25	23,67	22,96	+34,97	+19,08	+9,54
Todos os Santos	9,88	38,51	39,50	41,48	41,48	31,60	25,68	24,69	29,63	20,74	22,71	+28,64	+12,84	-2,96
Riachuelo	12,93	35,56	34,48	28,01	25,86	16,16	14,01	16,16	17,24	14,01	22,63	+22,63	+9,70	+8,62
Vasco da Gama	4,63	4,63	9,27	6,95	5,79	12,75	5,79	6,95	16,22	13,90	20,86	0,00	+16,22	+15,06

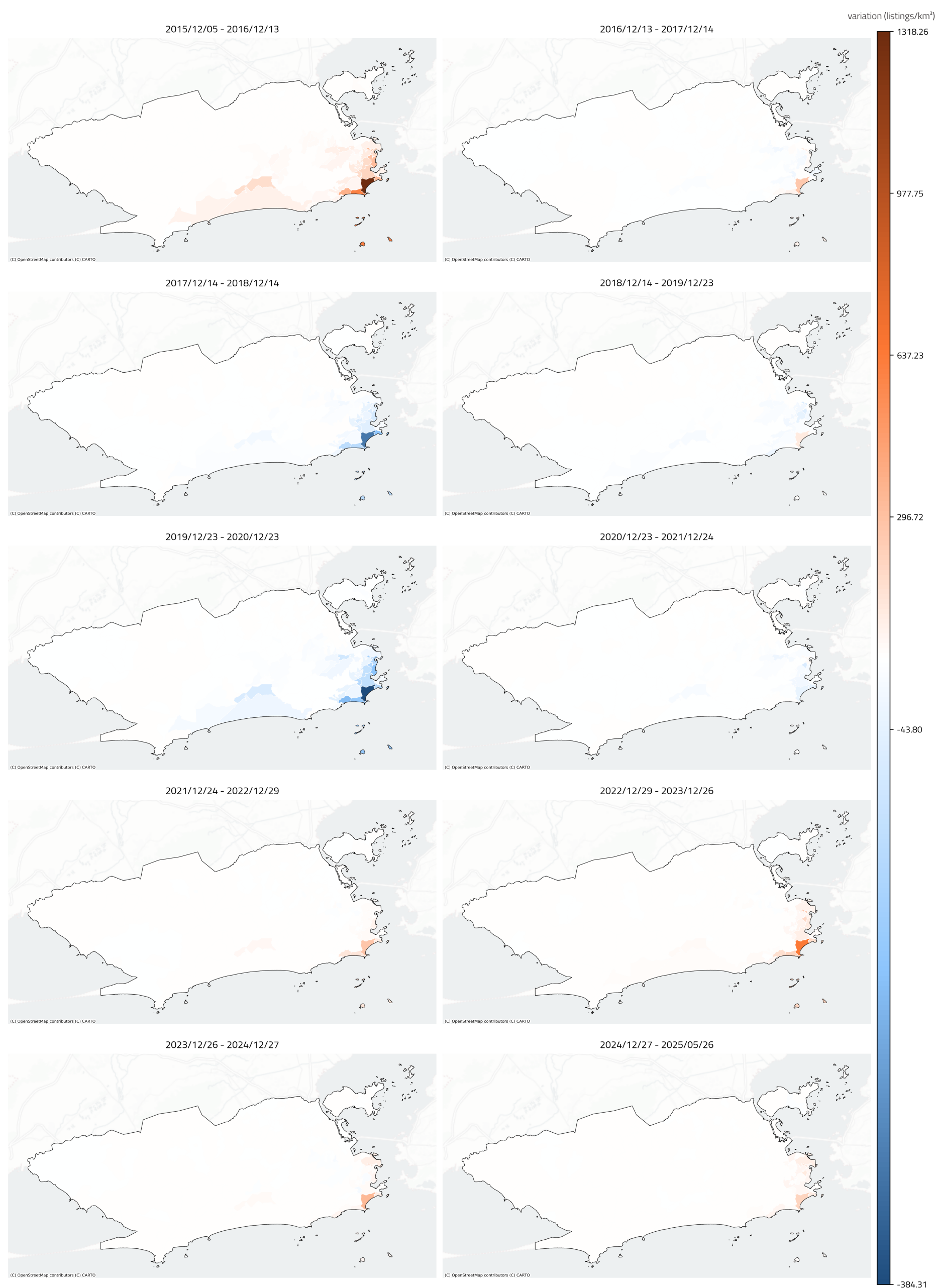
Source: Prepared by the author, based on different data scrapes conducted by Inside Airbnb.

Figure 54 – Rio de Janeiro: annual variations in the number of listings by neighborhood (2015–2025)



Source: Prepared by the author, based on different data scrapes conducted by Inside Airbnb.

Figure 55 – Rio de Janeiro: annual variations in listing density by neighborhood (2015–2025)



Source: Prepared by the author, based on different data scrapes conducted by Inside Airbnb.

As a final analytical stage, the distribution of listings within neighborhoods was analyzed for two periods: 2015–2016 and 2021–2025. As previously established, the first period is understood as illustrative of the more immediate impacts of the Olympic Games on the expansion of accommodation supply in the city, while the second period is illustrative above all of the ongoing urban renewal projects in the central region, as well as of the current tendencies of Airbnb's territorial penetration in the city of Rio de Janeiro. Thus, in general terms:

Between 2015 and 2016: at the local level, the greatest increases in listings were observed throughout nearly the entire extent of Copacabana, where the hexagon with the highest increase was located: 444 new listings in the surroundings of Praça do Lido, near Posto 2 and close to transportation access to Corcovado (Figure 56a). Because it is a privileged location, this area becomes especially attractive for those seeking to benefit from the expansion of land rent, and therefore constitutes a strategic space for investment in the short-term rental market. Significant increases were also observed in Ipanema — where the hexagon with the largest increase concentrated 272 new listings near Arpoador — and in Leblon — with hexagons registering up to 107 new listings near the Antero de Quental / Leblon metro station (Figure 56a). Increases were also observed throughout Botafogo, with hexagons reaching up to 79 new listings (Figure 56a), and toward central neighborhoods, with hexagons reaching up to 85 new listings between Lapa and Centro (Figure 56b).

In Barra da Tijuca, although the increases were smaller, they extended across the neighborhood's residential areas, especially in Jardim Oceânico, where the hexagon with the greatest increase was located: 66 new listings (Figure 56c). The same occurred in Recreio dos Bandeirantes, with hexagons reaching up to 63 new listings near Recreio Shopping (Figure 56d). In present-day Olympic Barra, the increases were especially significant in the surroundings of the Olympic Park, with hexagons reaching up to 230 new listings (Figure 56e). Between Olympic Barra and Jacarepaguá, the largest increases occurred along Estrada dos Bandeirantes, near Riocentro, with hexagons reaching up to 86 new listings. The expansion in the supply of listings also extended, although less intensely, into surrounding neighborhoods. The same can be observed in North Zone neighborhoods, with more modest increases in listing supply, slightly more pronounced in the Greater Tijuca area (Figure 56a,f).

Between 2021 and 2025: the hexagon with the greatest increase in listings was also located in Copacabana, again in the surroundings of Praça do Lido, with 534 new listings (Figure 57a). Similar to the previous period, a significant expansion of supply can be observed throughout the entire neighborhood. In Ipanema, the increases are more significant near the border with Copacabana, with one hexagon indicating 235 new listings near Pedra do Arpoador. In Leblon, the increase in listings remains pronounced around the Antero de Quental / Leblon metro station, while in Botafogo an increase of 212 new listings can be observed near the waterfront. In the central region, there was an increase of 226 new listings near Praça Mauá and the Museum of Tomorrow. The same can be observed between the Carioca and Cinelândia stations, with hexagons registering 185 and 157 new listings (Figure 57b). In addition, there is a hexagon with 76 new listings in Santo Cristo.

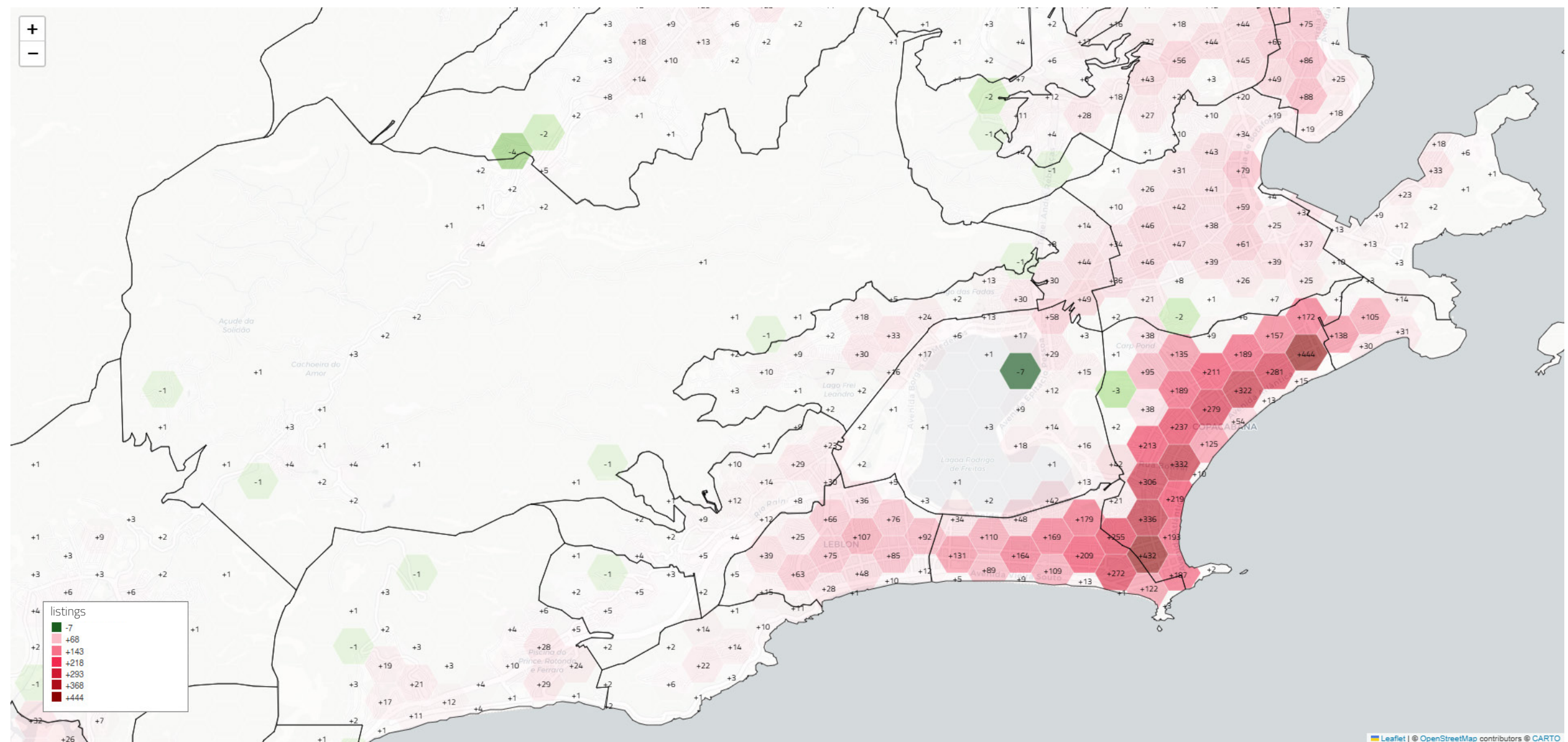
In Barra da Tijuca, new listings emerged near the Marapendi Canal, especially in buildings located along Rua Rosalina Brand (Figure 57c). Unlike what was observed during the Olympic Games period, between 2021 and 2025 more reductions in listing supply can be observed throughout the neighborhood, as also occurred in Recreio dos Bandeirantes, where the main area of expansion in supply was located at the beginning of Avenida Gilka Machado (Figure 57d). In Olympic Barra, the largest increase occurred near Riocentro, with 323 new listings, followed by 93 new listings in the surroundings of the Olympic Park (Figure 57e). Throughout the North Zone, increases and reductions can be identified that tend to result in an overall expansion of supply, although in a more modest way, as presented in Table 15 (Figure 57f).

Comparing the two periods, a continuity in the patterns of supply intensification can be identified, especially in the South Zone, as observed in Copacabana, Leblon, and Ipanema. Thus, there are areas traditionally targeted by the short-term rental market, such as the surroundings of Praça do Lido, Pedra do Arpoador, and the Antero de Quental / Leblon station, which presented a continuous increase in listings throughout the analyzed period. It can also be observed that the surroundings of the Olympic Park have continued to experience an expansion in supply even after the Olympic Games. Finally, more recently, the expansion of Airbnb's territorial penetration can be identified in areas of the central region that previously had few or no listings.

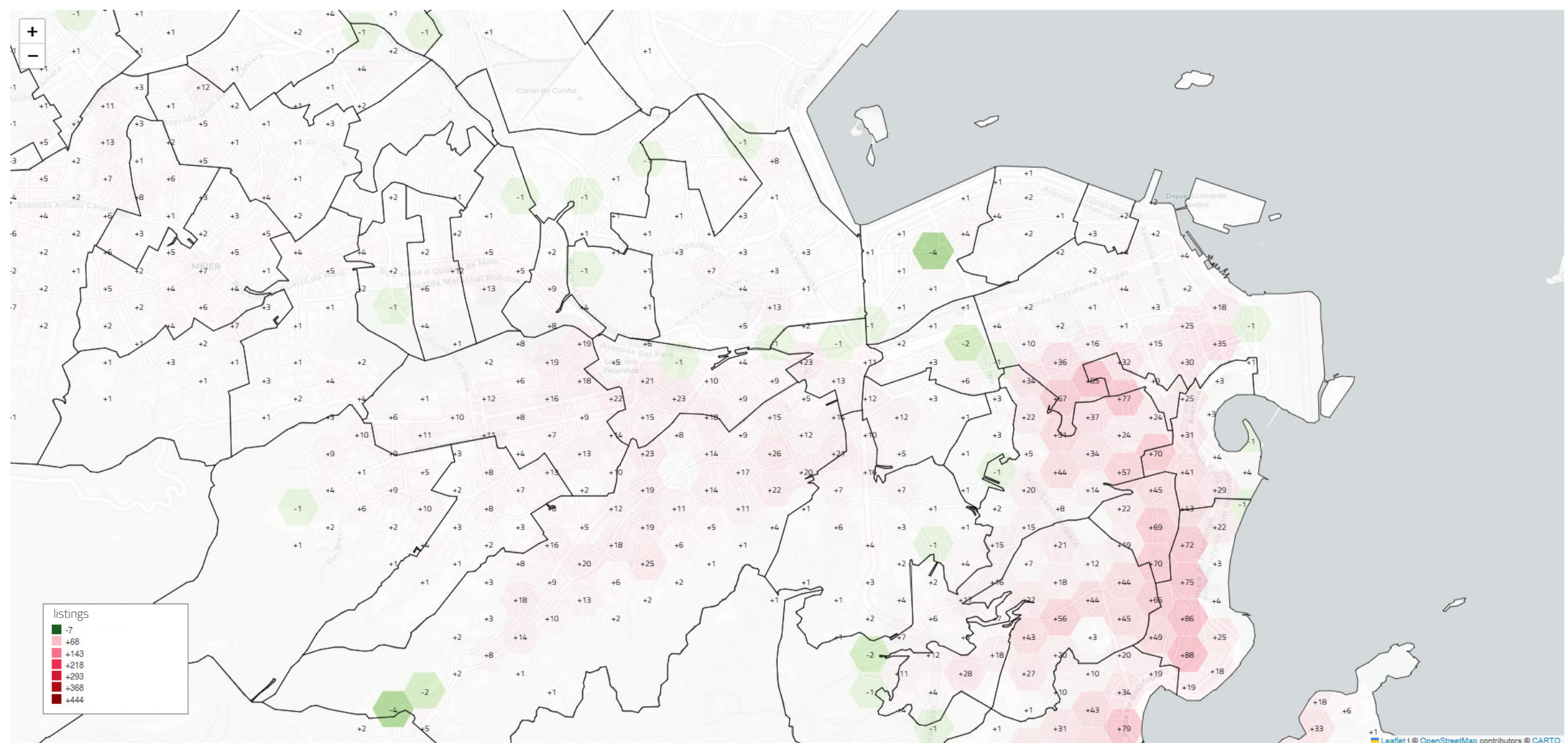
Figure 56 – Rio de Janeiro: variation in listings between 2015 and 2016



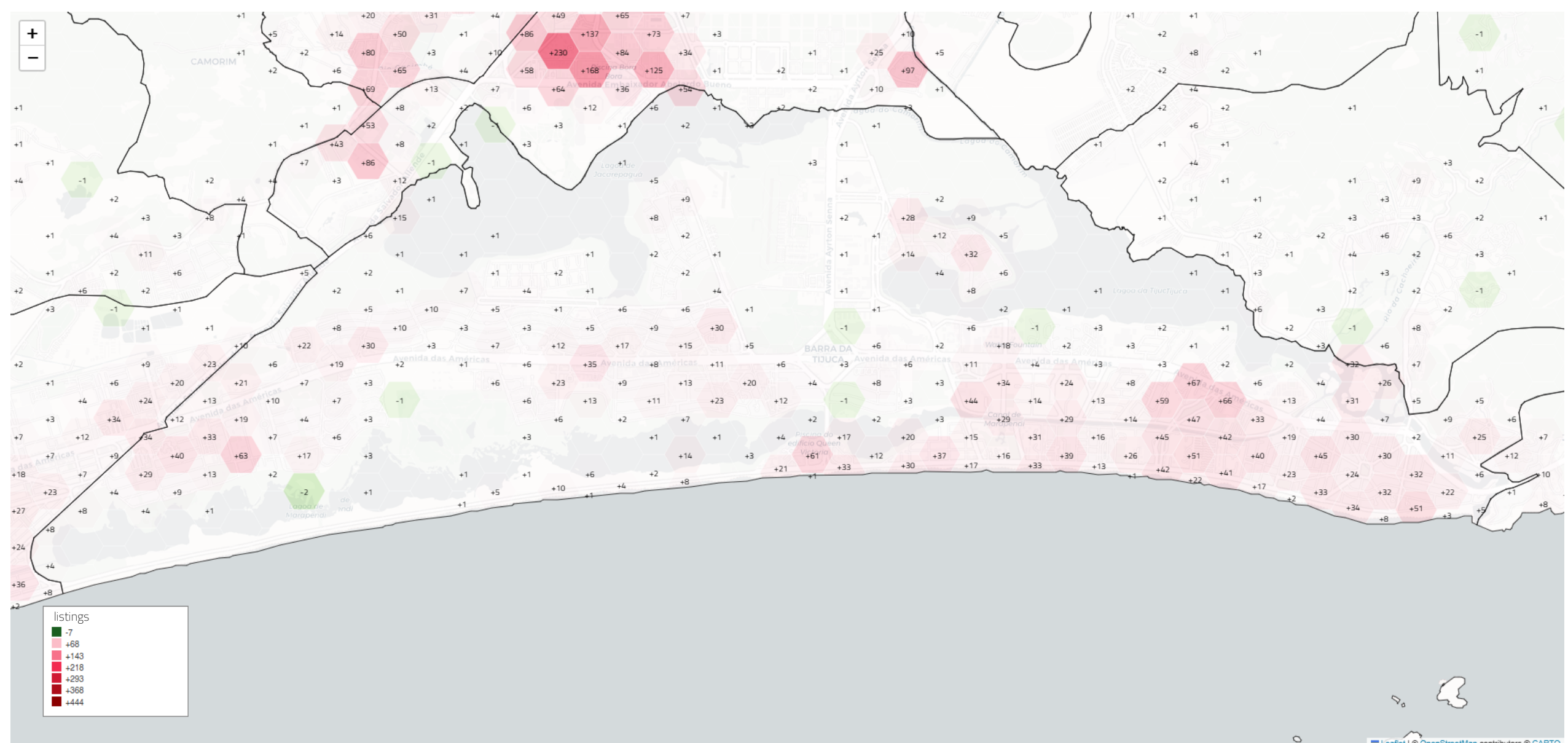
a. Variation in listings in Copacabana and adjacent neighborhoods (2015–2016)



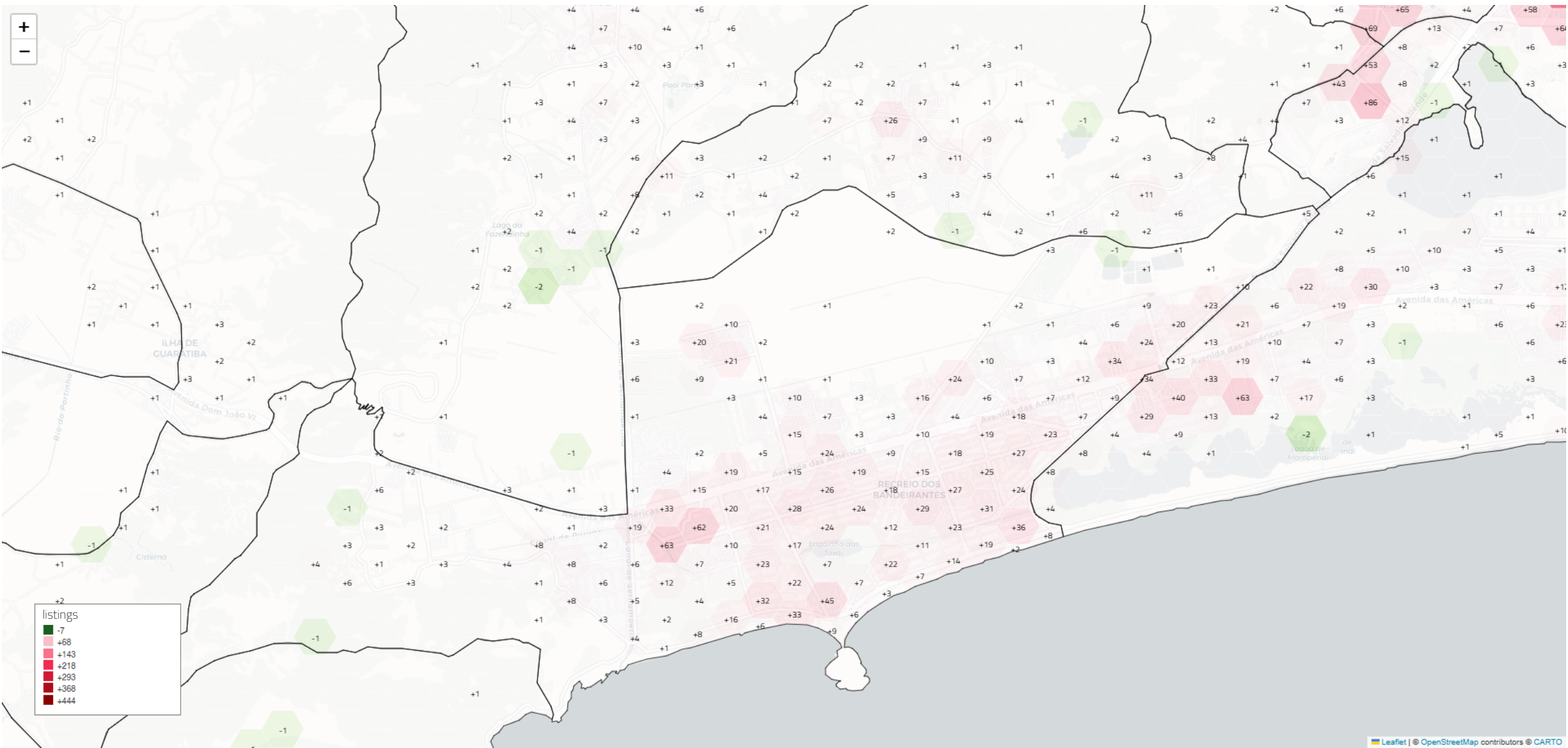
b. Variation in listings in the central region and North Zone neighborhoods (2015–2016)



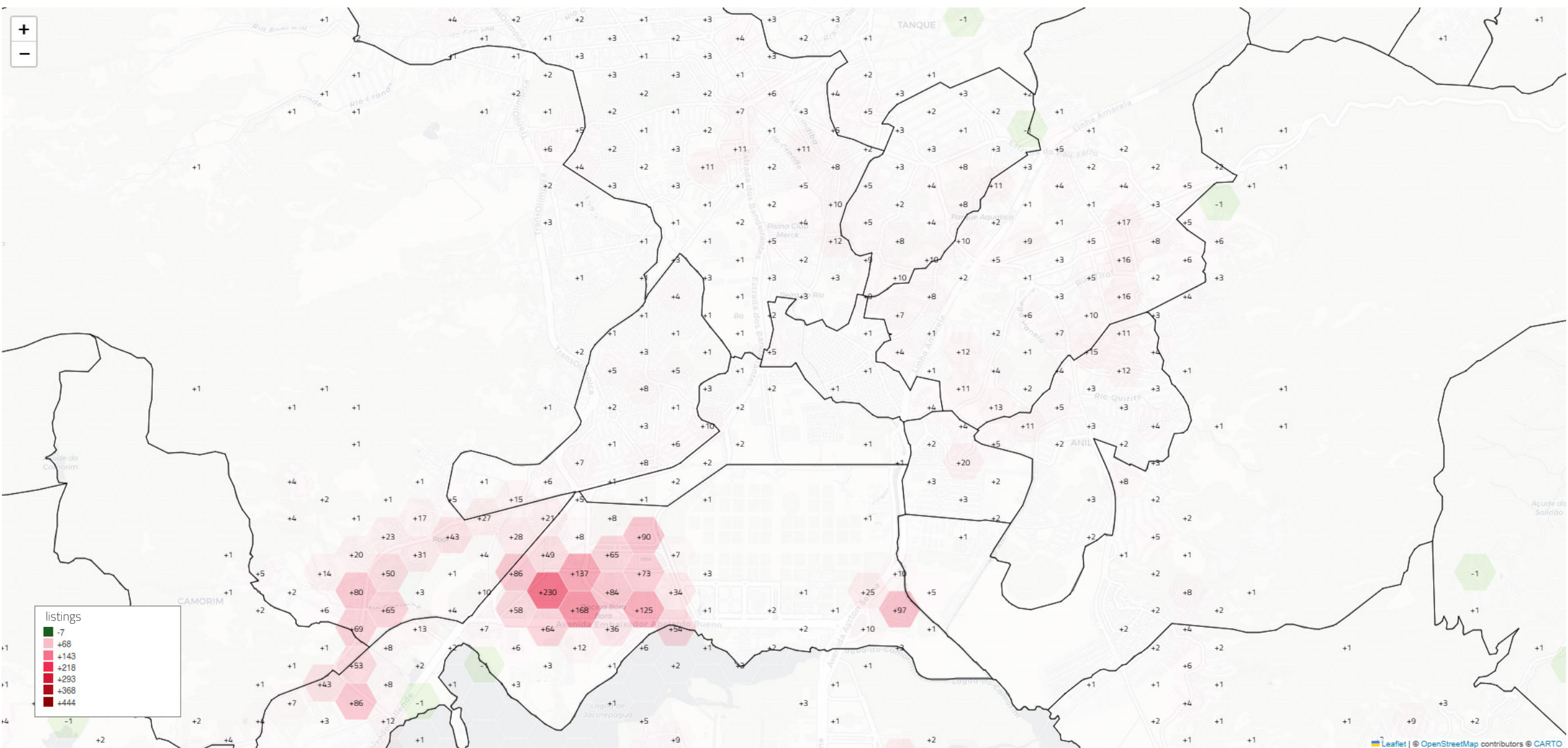
c. Variation in listings in Barra da Tijuca (2015–2016)



d. Variation in listings in Recreio dos Bandeirantes (2015–2016)



e. Variation in listings in Jacarepaguá, Olympic Barra, and adjacent neighborhoods (2015–2016)



f. Variation in listings in North Zone neighborhoods (2015–2016)

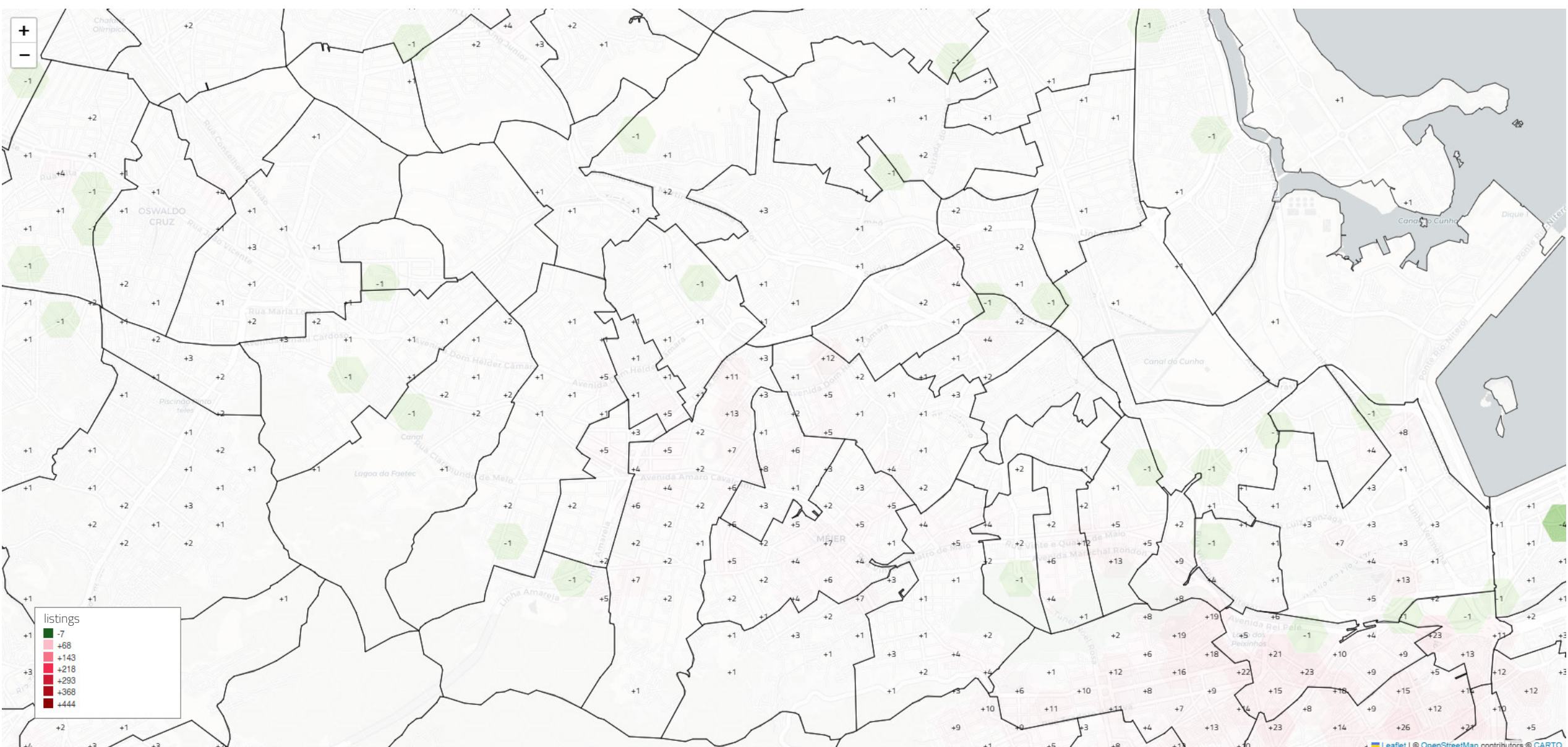
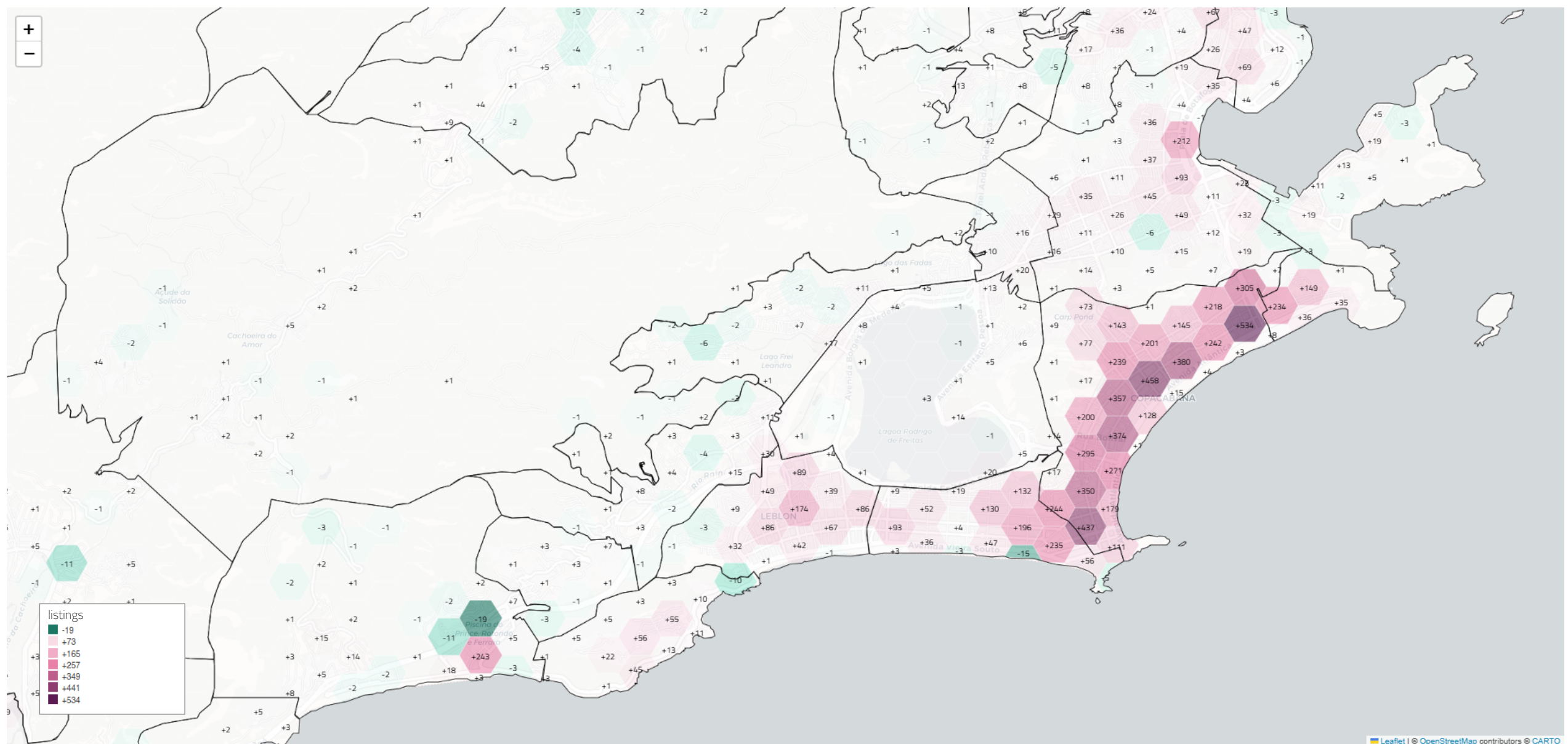


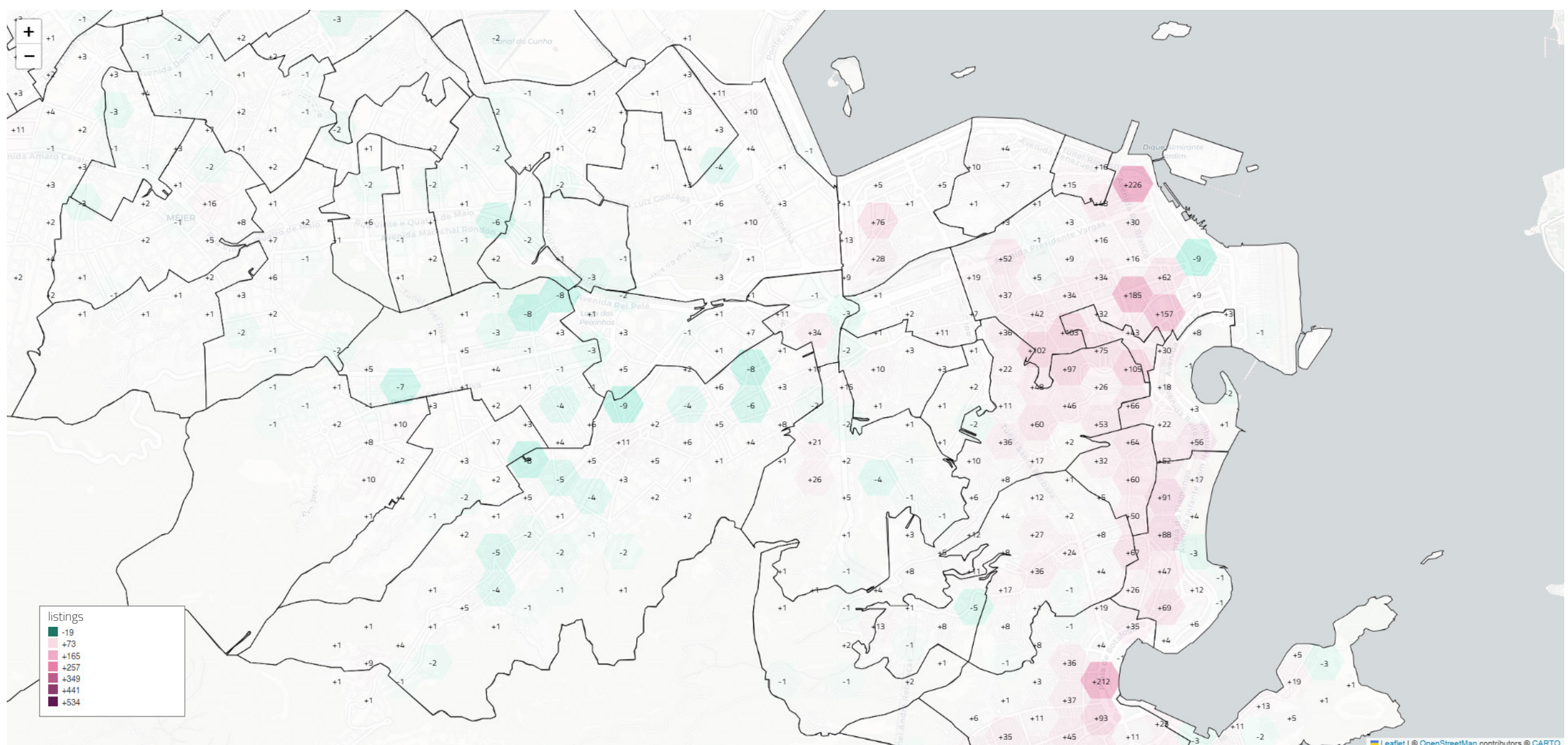
Figure 57 – Rio de Janeiro: variation in listings between 2021 and 2025



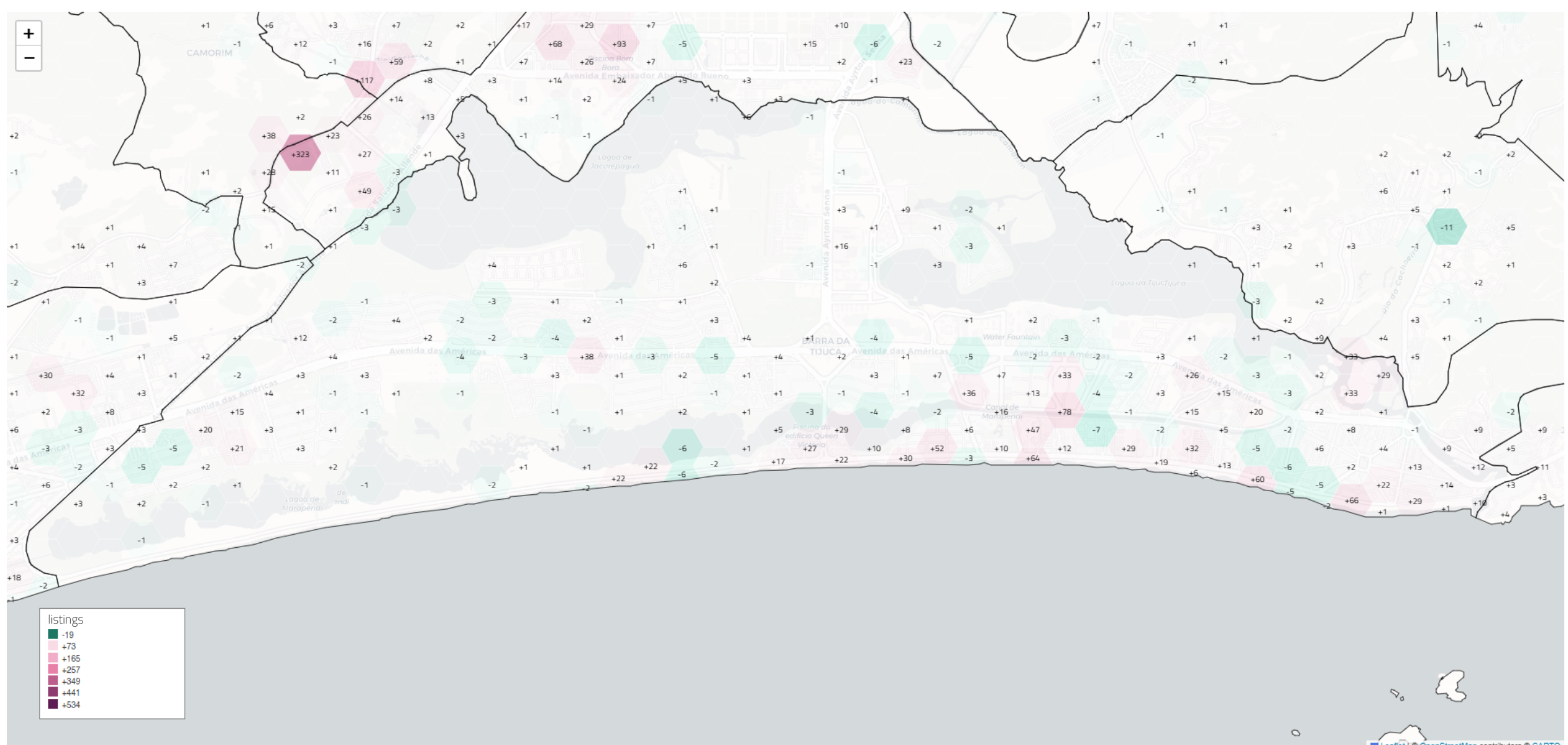
a. Variation in listings in Copacabana and adjacent neighborhoods (2021–2025)



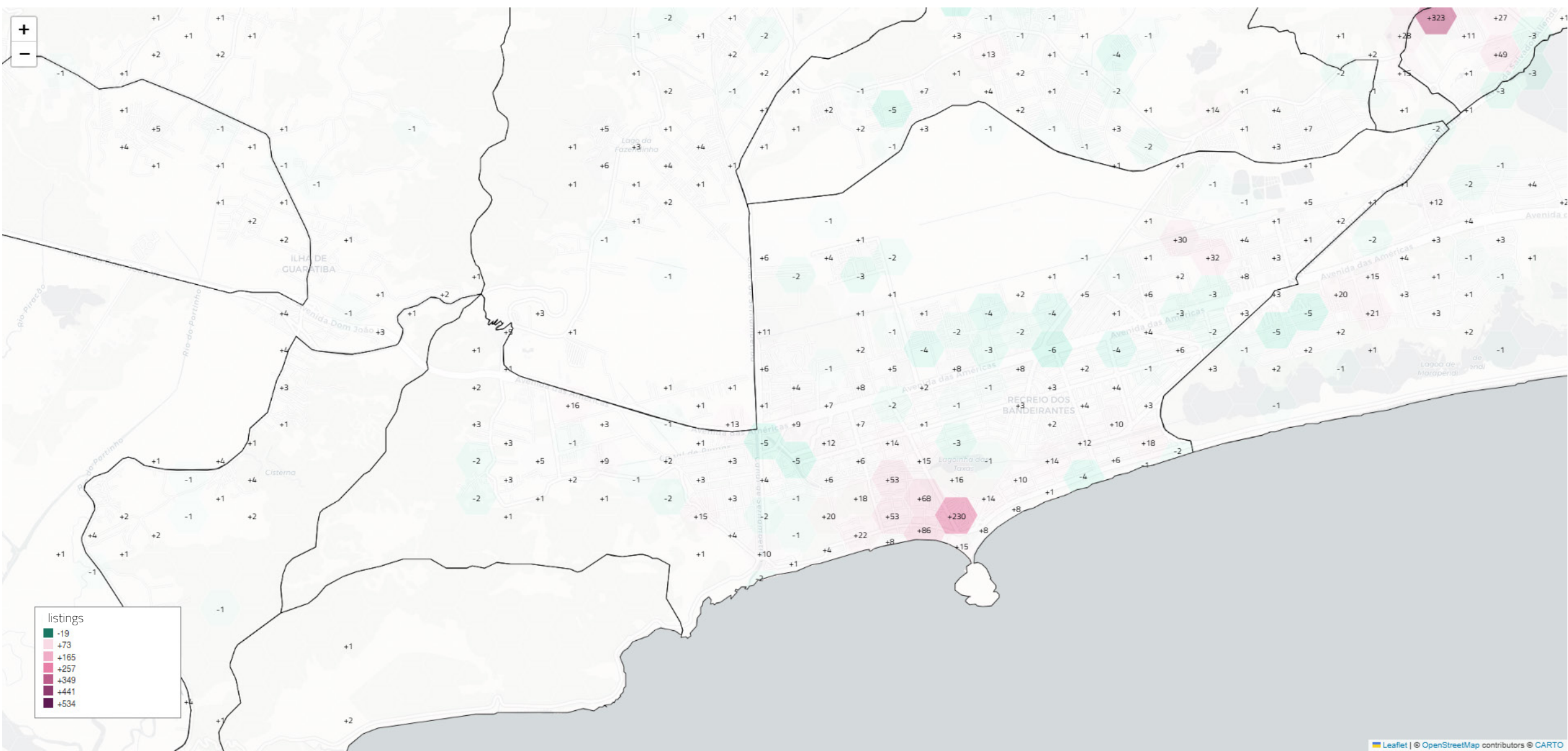
b. Variation in listings in the central region and North Zone neighborhoods (2021–2025)



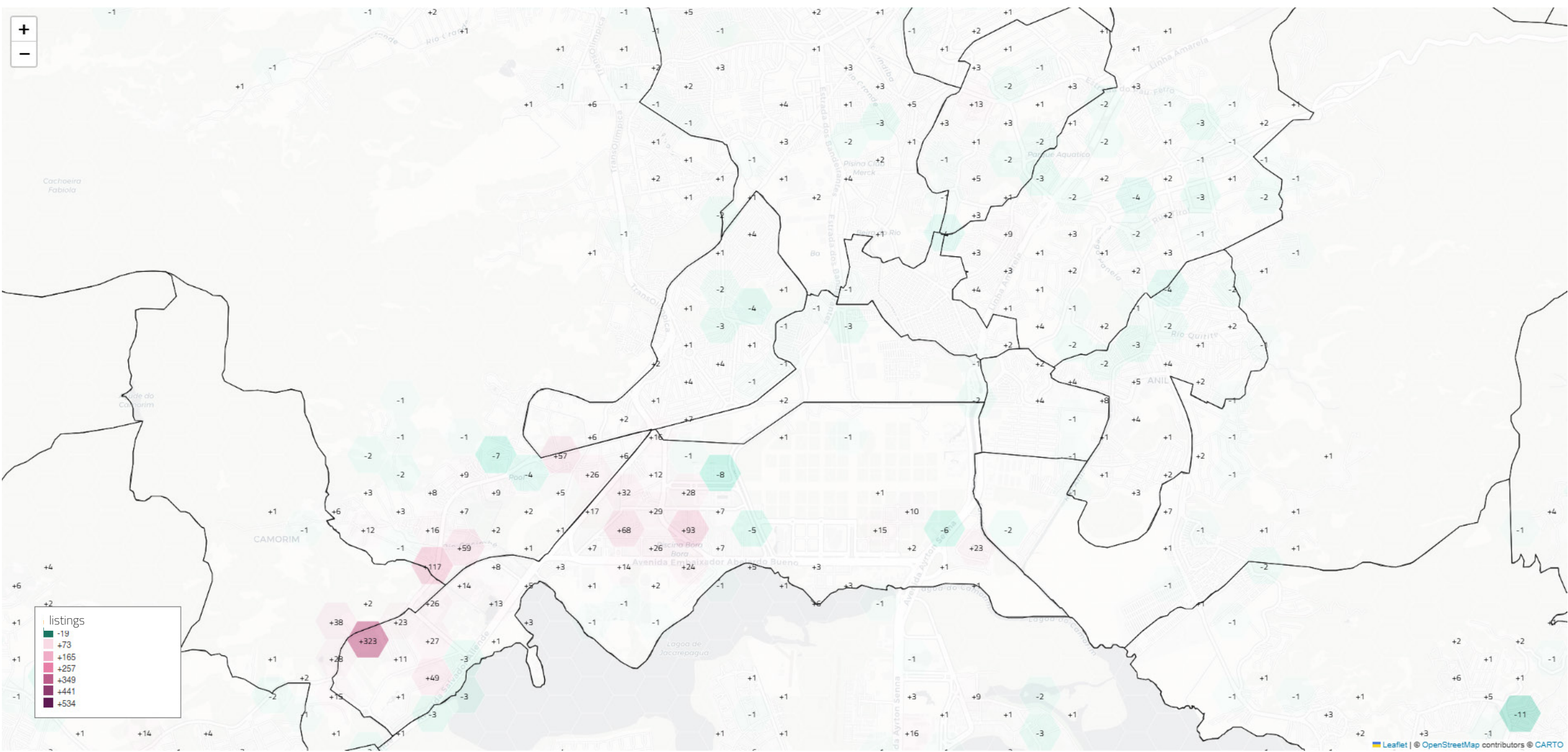
c. Variation in listings in Barra da Tijuca (2021–2025)



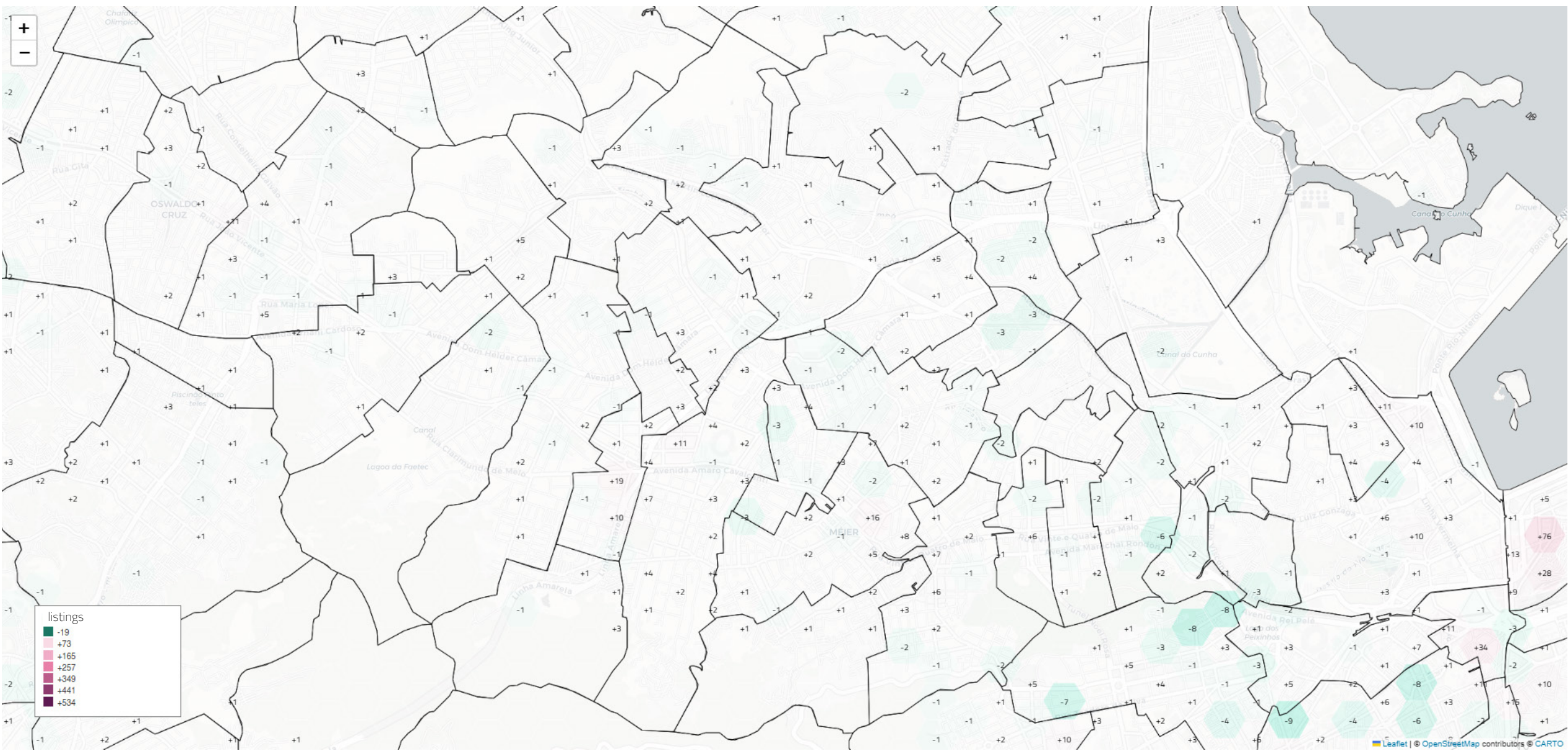
d. Variation in listings in Recreio dos Bandeirantes (2021–2025)



e. Variation in listings in Jacarepaguá, Olympic Barra, and adjacent neighborhoods (2021–2025)



f. Variation in listings in North Zone neighborhoods (2021–2025)



The analysis presented in this section highlights the role played by mega-events and urban renewal projects as mechanisms for expanding capital accumulation by Airbnb and other claimants to capital, particularly the real estate market. These mechanisms also contribute to the expansion of the platform's territorial penetration. It can be observed that, even after mega-events, the supply of accommodations tends to continue expanding, especially when combined with strategies promoted by the local real estate market, such as *investment properties*.

In this sense, it is argued that Rio de Janeiro's real estate market is currently undergoing a process of expansion of the housing stock, with the possibility of increasingly converting it into tourist accommodations as the profitability of short-term rentals rises in relation to residential rentals and as the demand for the *lodging commodity* becomes effective across different areas of the city. For this to occur, different actors may adopt a variety of strategies, including partnerships with the State through policies promoting tourism and digital nomadism, as well as new urban renewal projects — a process already underway, but likely to intensify. The State, in turn, will also seek to ensure a certain degree of control and participation in this market through short-term rental regulation policies, thereby channeling part of the circulating capital into its own apparatus.

As this process advances, it is understood that the management of tourist accommodations will become increasingly sophisticated, progressively shifting from the lower circuit — which encompasses individual hosts belonging to the working class — to the upper circuit — represented by companies specialized in listing management, which tend either to consolidate themselves as local, regional, or even national monopolies or to be replaced by them. Finally, this movement of expanding both the demand for and supply of accommodations unfolds into the intensification of the dispossession of the working class in different ways, such as: through the financialization of housing, which captures savings, pensions, and wages, thereby also intensifying the appropriation of surplus value through the charging of interest and creating a guarantee of future labor; through the increase in housing costs, which consume ever larger portions of wages; and through processes of gentrification, touristification, and displacement, which result in the direct loss of housing.

Final Considerations

Adopting theories of economic dependency and imperialism grounded in historical-dialectical materialism as its starting point, this study sought to understand the process of capital accumulation by digital short-term rental platforms in the periphery of capitalism. Based on this general objective, the following specific objectives were defined: to investigate the process of Airbnb's territorial penetration through the circuits of the urban economy; to understand how the platform's capital accumulation is realized through labor and land rent; and, finally, to analyze how this accumulation process has materialized in the city of Rio de Janeiro. To this end, a theoretical argument was developed based on: the debate on the center and periphery of capitalism developed primarily by Milton Santos and by the theorists of Marxist Dependency Theory (MDT); the conceptualization of the two circuits of the urban economy, poverty, and globalized structural poverty developed by Santos; the theories of value, surplus value, and rent developed by Karl Marx and later revisited by David Harvey; and Harvey's explanation of accumulation by dispossession. In addition, based on the concept of the urban-digital layer, a methodology of analysis was developed using data from Inside Airbnb, the Python programming language, and Geographic Information Systems (GIS), applied to the Rio de Janeiro case study in articulation with the theoretical foundations of historical-dialectical materialism. Theories of underdevelopment were also taken into consideration in order to construct an approach for analyzing these data in peripheral cities.

Throughout this study, it was argued that the dialectical relationship between the center and the periphery of capitalism establishes economic dependency between peripheral and central countries as a necessary condition for the functioning of the global capitalist system. It was further emphasized that economic dependency is directly related to the production of urban space in peripheral countries, reflecting in their cities the progressive participation and control of the global economy over local economies. Accordingly, it was argued that the platformization of economic activities in the twenty-first century forms part of a broader historical context and manifests itself as the intensification of processes already underway since at least the previous century, processes rooted in the imperialist expansion of the United States through monopolies driven by *accumulation for accumulation's sake* and also shaped by global and regional economic disputes. Within this process, accumulation controlled by the center of capitalism expands toward the periphery with the aim of reproducing capital on an expanded scale. Historically, this expansion has been enabled through partnerships with local bourgeoisies and

fractions of the local working class. In the context of platformization, this process occurs amid the progressive unification of capital through technology, science, and information and reproduces, in intensified and globalized form, the fundamental contradictions of capitalism, such as the dialectic between the accumulation of some and the impoverishment of others. Thus, platformization, as an expression of imperialist expansion, amplifies the effects of capital centralization, reaching territories that had previously been less affected by this process.

Based on this framework, an interscalar spatial analysis of short-term rental activities controlled by the Airbnb platform was proposed, first considering the implications of the economy in the production of space. This proposal is grounded in the understanding of platformization as a reinvention of forms of surplus value extraction following the global economic crisis of 2008—one of capitalism’s cyclical crises—and as an alternative adopted by the middle classes in response to their own process of impoverishment. Among the main findings, the study described how Airbnb’s monopolistic expansion occurs in a unidirectional manner—from the global to the local—and penetrates territorially through housing, thereby constituting a global network of tourist accommodations. Different actors linked to short-term rental activities were also identified as integrating the upper and lower circuits of the urban economy in cities located in the periphery of capitalism, demonstrating how Airbnb has accessed, through poverty, capital in the form of *housing* and *labor power* belonging to local property owners and workers.

Among the actors identified are the state, companies within the tourism industry, real estate investors, credit operators, construction firms, listing management companies, property owners, individual hosts, and outsourced workers. These actors are understood to interact through the two economic circuits, reflecting class relations. This process, in turn, has been constituted through diverse interests, such as: the expansion of the real estate market through the production and consumption of the *investment-home*; the channeling of part of the surplus value produced and transferred through short-term rental activities to the state; the increased profitability of properties through renting, benefiting property owners, management companies, and investors; and the working class’s search for means of subsistence. In addition, a tendency toward the displacement of listing management activities from the lower circuit to the upper circuit is identified, reflecting the levels of technology, capital, and organization present in the arrangements established between management companies, hosts, and co-hosts. This

tendency is understood as moving toward the establishment of local, regional, or even national monopolies.

Within this scenario, it was argued that Airbnb's capital accumulation occurs through two interconnected mechanisms: the *appropriation of value and surplus* value derived from labor performed through the platform, and the *appropriation of land rent* based on the monopoly of land held by local property owners. These mechanisms, in turn, are enabled by Airbnb's digital infrastructure, through which the company constitutes a global network of hosts and guests connected through listings of tourist accommodations. Additionally, other actors are incorporated into this process, such as co-hosts, outsourced workers, and property owners not registered on the platform. The global network constituted by Airbnb is established and becomes increasingly complex through class relations that enable the circulation of capital and, consequently, its accumulation by Airbnb and by other claimants of this capital. Through this network, Airbnb exercises control over the stages of capital circulation, centralizing the processes of *distribution* and *capture*, while the *production (valorization)* and *consumption (realization)* of the *lodging commodity* occur in different cities around the world. Emphasis was placed on how Airbnb benefits both from the impoverishment of the working class and from the search for expanded profits by local capitalists, represented, for example, by property owners, construction firms, and listing management companies. It was also emphasized that this process enables an acceleration in the turnover of capital through a frequency of consumption structured around *overnight stays*.

Furthermore, it was found that short-term rentals become more advantageous than residential rentals because they allow for greater profitability, achieved through the *expansion of land rent*. As argued, this expansion occurs through the change in the type of tenant, which shifts the source of the transferred surplus value: the rent paid no longer originates from the same city as the property, but from different parts of the world, thereby expanding the possibilities for speculation. Through this shift, property owners benefit from the expansion of absolute rent, but also from *monopoly rent and differential rents*, depending on the characteristics of the property and its surroundings. Based on this, it was also highlighted that revenues generated through Airbnb can be intensified through *periods of extraordinary revenue*, consisting of intervals in which high demand for accommodations enables the practice of higher prices combined with greater property occupancy.

In this sense, it is argued that short-term rental activities are currently marked by a certain experimentation surrounding the possibilities of speculation, moving toward maximum profitability—which, in turn, tends to become more viable and frequent as local productive systems become more complex and reach new levels of organization, capital, and technology. It is further interpreted that, to achieve this, the short-term rental market will explore diverse strategies, such as the creation of new periods of extraordinary revenue, the implementation of urban renewal processes, the stimulation of tourism, and the diversification of consumer profiles in order to combine the variables of *price*, *demand*, and *time*. Within this context, a broader tendency toward the internationalization of tourism in peripheral countries is also identified, aiming to increasingly incorporate visitors paid in central currencies such as the dollar and the euro, while progressively transforming peripheral cities into desirable commodities for these consumers.

Drawing on the notions of *accumulation by dispossession* and *globalized structural poverty*, it was also argued that Airbnb accumulates capital through resources that largely belong to the working class, while simultaneously contributing to the global impoverishment of that same class. Accordingly, different forms of dispossession and impoverishment associated with Airbnb's activities were highlighted: the dispossession that structures its accumulation through housing units spread across the world; the dispossession unfolding from its activities through processes such as gentrification, touristification, removals, and the erosion of neighborhood identities; the indirect dispossession arising from the incorporation of short-term rentals into the financialization of housing and the commercialization of the *investment-home* through wages, pensions, and savings, intensified by the charging of interest; the expansion of local poverty through rising living costs, especially through larger portions of wages being directed toward residential rent payments; and global impoverishment through the centralization of capital derived from surplus value produced in both peripheral and central countries and directed toward the United States.

Based on the concept of the urban-digital layer, the study demonstrated the potential of analyzing data produced by digital platforms for understanding processes of production and consumption in the periphery of capitalism, as well as the limitations of using such data when not accompanied by a theoretical framework grounded in the structural characteristics of center-periphery relations. In this regard, the necessity of articulating this analysis with the previously pre-

sented theories was emphasized, in order to construct an analytical methodology grounded in the realities of cities in the periphery of capitalism, as well as in the interscalar relations constituting the global capitalist system and the production of space. To this end, a methodology using the Python programming language and Geographic Information Systems (GIS) was developed, generating maps, charts, and tables as analytical resources applied to the Rio de Janeiro case study. An analysis based on data available in the Inside Airbnb database was therefore presented.

Based on the theoretical framework and analytical methodology developed, the study demonstrated how capital controlled by Airbnb has circulated through the city of Rio de Janeiro in three stages constituting the general process of capital circulation: *advancement*, *valorization*, and *realization*. In the first stage, it was found that the capital advanced by local property owners in the form of *housing* consists largely of entire homes, followed by private rooms, distributed mainly across neighborhoods in the South Zone, West Zone, and central region of the city, with particular emphasis on Copacabana, which concentrates more than 30% of the accommodation supply. It was argued that the concentration of supply reflects the degrees of territorial integration of certain areas into the city's traditional tourism circuit and into the global economy, thereby expressing favorable conditions for Airbnb's territorial penetration. Among these areas are favelas located in the West Zone and especially in the South Zone of the city, demonstrating that Airbnb has penetrated even areas where land monopoly is not clearly defined. In addition, it was highlighted that the accommodation supply is composed primarily of studios and one-bedroom units, followed by two- and three-bedroom properties, and that it territorializes itself according to both the historically consolidated housing stock of the city and newly emerging developments, such as the studio apartments built during the twentieth century in Copacabana and the real estate developments recently constructed in the Barra Olímpica and downtown areas, stimulated by projects such as the 2016 Olympic Games, the Porto Maravilha project, and the Reviver Centro program.

At least five patterns of listing territorialization were also identified, reflecting different degrees of Airbnb's territorial penetration across the city. Accordingly, there are: *zones of high concentration*, where Airbnb becomes inserted more easily and benefits from a preexisting integration into the global economy; *areas of local concentration*, indicating nuclei of accumulation and potential expansion of listings, while also signaling the localized activity of management companies; *intermediate*

zones, characterized by a significant supply but requiring additional stimuli for the intense realization of capital; *zones of low and continuous concentration*, demonstrating Airbnb's territorial diffusion and composed primarily of non-professionalized activities; and *dispersed listings*, where Airbnb's presence remains residual until new tourism stimuli alter the dynamics of supply. The surroundings of Praça Lido, Pedra do Arpoador, the Antero de Quental metro station (Leblon), the Olympic Park, the Botafogo waterfront, the Cinelândia and Carioca stations, Pedra do Pontal, and Praça Mauá constitute areas of especially high listing concentration.

In the stage of valorization, the study presented the manner in which the production of the *lodging commodity* has been organized in the city of Rio de Janeiro through a network of hosts, co-hosts, and listings. It was interpreted that the number of hosts is influenced by events with both local and global economic implications, such as the 2016 Olympic Games and the COVID-19 pandemic, while the number of co-hosts shows a progressive increase, reflecting the incorporation of the *co-host* as an additional actor within the platform's digital infrastructure. It was demonstrated that hosts and co-hosts may perform different functions within the platform's productive activities, acting as property owners, management companies, or workers. Within the dynamics of the city's main hosts and co-hosts, different arrangements were identified, such as: hosts who do not connect with any co-host while managing a large number of listings; hosts who connect with specific co-hosts through coordinated accommodation management; companies operating through different profiles on the platform through which they distribute and organize accommodation management; among other combinations. A broader tendency toward a supply distributed among neighborhoods with the largest number of accommodations was also observed, while at the same time localized activity by specific hosts was identified, constituting nuclei of listings managed by a single host or co-host across different neighborhoods. These arrangements integrate a global network of hosts, co-hosts, and tourist accommodations, illustrating at a smaller scale dynamics common to other cities around the world.

In the stage of realization, it was argued that the city's total revenue is determined by occupancy, price, and the quantity of accommodations. In this regard, it was found that prices are conditioned by a complex set of variables, including local construction and socioeconomic patterns, reflecting the possibilities for expanding land rent. Based on this, estimates of overnight stays and revenues were presented for different areas of the city. It was found that Copacabana, Ipanema-

ma, and Leblon are the three neighborhoods contributing most significantly to Airbnb's revenues, demonstrating that the realization of capital occurs in a concentrated manner, although other areas also participate in its composition, such that the capital captured by Airbnb is generated across different points of the city. Neighborhoods in the West Zone tend to contribute through the quantity of accommodations, while neighborhoods in the central region stand out due to higher occupancy rates. It is understood that, as the accommodation supply expands in the central region through the ongoing urban renewal process, the tendency is for this area to represent an increasingly larger share of the revenues generated through Airbnb.

The accumulation enabled by these three stages of capital circulation is, in turn, expanded through three principal strategies adopted by different claimants of capital: changing the type of tenant, making use of existing periods of extraordinary revenue, and expanding both the supply of and demand for accommodations. In this sense, the current scenario of conversion of Rio de Janeiro's housing stock into tourist accommodations was presented, analyzed on the basis of the number of dwellings, vacant dwellings, and inhabitants. Through a contextual analysis, three scenarios conditioning this conversion in the coming years were identified: (1) the large stock of vacant dwellings in the West Zone, accompanied by a tendency toward population growth in the region, where conversion depends on stimuli to accommodation consumption; (2) consolidated tourist areas in the South Zone, in some cases with a significant stock of vacant dwellings, a tendency toward population decline, and high demand for accommodation consumption; and (3) in the central region, areas with newly constructed housing stock, tendencies toward gentrification, removals, and conversion into tourist accommodations, alongside high demand for accommodations. It was argued that this conversion is motivated by the fact that short-term rentals allow for greater profitability—since prices and revenues fluctuate over time—even though strategies are required to make this activity more predictable and secure.

In this regard, the study demonstrated how New Year's Eve illustrates an *existing period of extraordinary revenue* in the city, during which revenues are expanded through tourist demand that tends to increase accommodation occupancy while enabling the practice of extraordinary prices. Within this scenario, it was emphasized that, unlike residential rentals, short-term rentals allow even owners of less productive properties to expand the land rent transferred by the

tenant, provided there is an effective demand for the consumption of the *lodging commodity*. Periods such as New Year's Eve therefore enable greater profits in less time and contribute to making short-term rentals more profitable without requiring high occupancy throughout the entire year. Accordingly, it was also emphasized that Airbnb benefits from practices predating platformization—such as the activities of an already consolidated tourism industry and price increases during periods of high tourist demand—and incorporates them into the process of global capital circulation.

Finally, the study demonstrated how mega-events and urban renewal processes contribute to greater accumulation through Airbnb by creating periods of extraordinary revenue, while also generating the long-term expansion of different forms of rent through real estate valorization in specific areas of the city. In Rio de Janeiro, this was found to occur through the 2016 Olympic Games, which, in addition to generating increases in listings and hosts on the platform, were both preceded and followed by processes of gentrification, removals, and the launch of real estate developments, especially in the surroundings of the Olympic Park. It was demonstrated that this event played an important role in Airbnb's territorial penetration into areas of the city that previously had no listings, as well as in intensifying its presence in areas already characterized by high accommodation supply. More recently, the Reviver Centro program has also stimulated the intensification of supply in the central region, as observed in Santo Cristo, where newly launched housing stock has been rapidly incorporated into the platform, demonstrating in practice the dynamics articulated by the real estate market to commercialize the *investment-home*.

Based on the results gathered throughout this thesis, it is concluded that Airbnb has territorially penetrated different countries around the world—both peripheral and central—through globalized structural poverty, which has more recently affected the middle classes as well. Within this process, short-term rentals are adopted both as a solution to individual impoverishment and as an alternative for coping with the impacts of the erosion of rights, such as labor and pension rights, which have marked a broader scenario of instability and uncertainty in the everyday life of the working class. Within this context, Airbnb bases its accumulation on the structural dispossession of working-class resources in the form of housing across different cities around the world, inserting them as fixed capital into the global process of capital circulation in order to valorize them

through *labor power* and realize them through consumption. This occurs through a global network of hosts, guests, and listings. Through this process, Airbnb produces more poverty in a structural and globalized manner, reflecting the cycle of reinvestments characteristic of *accumulation for accumulation's sake*, which—expressing one of the fundamental contradictions of capitalism—manifests itself as *poverty generating more poverty*.

As a monopoly, Airbnb, by controlling the different stages of capital circulation through its digital infrastructure, organizes its distribution and enables its capture, channeling the surplus value produced in both central and peripheral countries toward the United States. Under Airbnb's control, production is organized by local actors such as hosts, co-hosts, property owners, and outsourced workers, and has acquired new levels of organization over time, becoming increasingly complex and sophisticated. This occurs due to the growing interest of capitalist groups in accessing the accumulation enabled by platform activities, given the demonstrated speculative potential of short-term rentals. The process of consumption also becomes more complex, since increasing efforts are made to take advantage of the possibilities for expanding land rent through capital flows between countries, based on economic inequalities. This dynamic, in turn, tends to intensify poverty especially in peripheral countries, impacted by the deepening of economic dependency in relation to the center, by wage inequalities between *local residents* and *international visitors*, and also by growing inequalities between different social classes at the local scale.

Specifically in the case of Rio de Janeiro, the tendency is toward the progressive internationalization of tourism, the implementation of new urban revitalization projects, and the adoption of regulatory policies—a debate already underway in the city—in order to channel part of the profits generated through the platform toward the state apparatus. It is understood that a new area of high listing concentration will emerge in the central region through a process of gentrification similar to that observed in Barra Olímpica during the Olympic Games, but with fewer barriers to the long-term realization of capital and greater speculative potential due to the higher demand for tourist accommodations. It is further interpreted that the organization of lodging production has not yet reached its most advanced stage in Rio de Janeiro, such that in the coming years the local oligopoly of short-term rentals is likely to become more clearly defined, alongside the growing insertion of companies external to the city into accommodation management. This process

will possibly be accompanied by greater diversification in both accommodation supply and demand, in order to more intensively explore niches such as nature tourism, luxury tourism, and tourism in favelas.

In a broader context, this movement is necessary to respond to the fact that Airbnb's activities require a frequent and creative renewal of effective consumer demand. This is because, if Airbnb's general movement is in a process of monopolistic expansion is one of territorial penetration into different parts of the world, an ever-growing demand for the *lodging commodity* becomes necessary. At this point also lie the limits to Airbnb's expansion, since even if, hypothetically, all residences in the world were converted into tourist accommodations, this would not imply the realization of capital—in fact, it would move more toward a scenario of overaccumulation, characterized by excess capital without sufficient profits. It is therefore no coincidence that Airbnb has diversified its offer through the commercialization of so-called *experiences*, incorporating new working-class resources into the global circulation of capital. Finally, although this theme was not developed throughout the thesis, it is interpreted that Airbnb's dynamics of accumulation present structural similarities with those of other digital platforms.

In light of what has been presented, some limitations of this work must also be acknowledged. In general terms, an interscalar and structural analysis of Airbnb's activities was proposed, encompassing different aspects of global and urban economies through the lens of short-term rentals, such that in certain moments some of these aspects were only tangentially addressed and approached through analytical simplifications considered appropriate for the thesis proposal but which leave certain gaps to be explored. A systematic analysis was prioritized, considering the parts in relation to the totality. In this sense, it is understood that there are processes that can be investigated in greater depth in future research, especially those concerning differences between countries, in order to analyze transnational dynamics through short-term rental activities describing center-periphery relations, but also *center-center* and *periphery-periphery* relations.

There is also a need to further explore differentiations within the context of the periphery of capitalism, encompassing the study of other cities while also considering regional specificities, as in the case of Latin America. In this same regard, the need to advance studies with an integrated perspective at the national scale is emphasized, something likely to occur through facilitated access to data from digital short-term rental platforms in Brazil and other countries. The same

limitations are identified in the Rio de Janeiro case study. In general, the aim was to present an overview of Airbnb's activities through an integrated analysis grounded in the process of capital circulation. It is understood, however, that the data presented here may be explored from other perspectives and combined with diverse approaches, including qualitative methods and field studies, which tend to add information not captured through quantitative data analysis alone.

Finally, it is emphasized that this study contributes to a broader understanding of the activities of digital short-term rental platforms, especially Airbnb, by constructing a perspective grounded in Marxist debate, investigating in depth the structure of these activities and highlighting their relationship with the capitalist mode of production, imperialist expansion, the progressive global unification of capital, and the impoverishment of the working class. By drawing on studies of the periphery of capitalism, this research revisits theories of peripheral urban space in order to debate a contemporary issue and proposes a perspective that highlights the contradictions of accumulation through digital platforms, demonstrating that the problems generated by these platforms reflect the deepening of historical and already familiar problems, which in turn run throughout the history of capitalist society and the unequal production of space.

References

AALBERS, M. B. Introduction To The Forum: From Third To Fifth-Wave Gentrification: From Third To Fifth-Wave Gentrification. **Tijds. voor econ. en Soc. Geog.**, v. 110, p. 1-11, nov. 2018. DOI no chat10.1111/tesg.12332.

ABREU, M. **Evolução urbana do Rio de Janeiro**. Rio de Janeiro: Instituto Pereira Passos, 2006.

ADAMIAK, C.; SZYDA, B.; DUBOWNIK, A.; GARCÍA-ÁLVAREZ, D. Airbnb Offer in Spain—Spatial Analysis of the Pattern and Determinants of Its Distribution. **ISPRS International Journal of Geo-Information**, [s. l.], v. 8, n. 3, p. 155, 22 mar. 2019. DOI 10.3390/ijgi8030155.

AGUILERA, T.; ARTIOLI, F.; COLOMB, C. Explaining the diversity of policy responses to platform-mediated short-term rentals in European cities: A comparison of Barcelona, Paris and Milan. **Environment and Planning A: Economy and Space**, [s. l.], v. 53, n. 7, p. 1689–1712, out. 2021. DOI 10.1177/0308518X19862286.

AMARAL, M. S. O estranho marxismo da Teoria do Moderno Sistema Mundial (ou O que foi feito do imperialismo e da dependência?). In: **Anais do Colóquio Internacional Marx e o Marxismo**. Niterói: NIEP-Marx, 2017.

AMORE, A.; DE BERNARDI, C.; ARVANITIS, P. The impacts of Airbnb in Athens, Lisbon and Milan: a rent gap theory perspective. **Current Issues in Tourism**. [S. l.]: Routledge, 2022. DOI 10.1080/13683500.2020.1742674.

ANDRADE, J. N.; ARAUJO, C. P.; CRISTINO, C. T. Aluga-se: densidade da oferta do Airbnb e segundas residências no litoral pernambucano. **Revista Movimentos Sociais e Dinâmicas Espaciais**, Recife, v. 11, n. 1, 2022.

ANDRADE, J. N.; ARAUJO, C. P.; CRISTINO, C. T. Incidência e repercussões do AIR-BNB: o caso do Rio de Janeiro. **Oculum Ensaios**, n. 21, p. 1-20, 2024. DOI 10.24220/2318-0919v21e2024a5479

ANTUNES, G.; FERREIRA, J. Short-term rentals: how much is too much – spatial patterns in Portugal and Lisbon. **Tourism and hospitality management**, [s. l.], v. 27, n. 3, p. 581–603, 2021. DOI 10.20867/thm.27.3.6.

ANTUNES, R. **O privilégio da servidão**: o novo proletariado de serviços na era digital. São Paulo: Boitempo, 2018.

ARDURA URQUIAGA, A.; LORENTE-RIVEROLA, I.; RUIZ SANCHEZ, J. Platform-mediated short-term rentals and gentrification in Madrid. **Urban Studies**, [s. l.], v. 57, n. 15, p. 3095–3115, nov. 2020. DOI 10.1177/0042098020918154.

AREVALO, M.; DAY, J.; SOTOMAYOR, S.; GUILLEN, N. K. Perceptions of Airbnb's impact beyond the tourist bubbles of Cusco, Peru: an exploration of resident irritability. **International Journal of Tourism Cities**, [s. l.], v. 10, n. 2, p. 718–734, 30 maio 2024. DOI 10.1108/IJTC-10-2022-0232.

BAMBIRRA, V. **O capitalismo dependente latino-americano**. São Paulo: Expressão Popular, 2013.

BARRON, K.; KUNG, E.; PROSERPIO, D. The Sharing Economy and Housing Affordability: Evidence from Airbnb. In: EC '18: ACM CONFERENCE ON ECONOMICS AND COMPUTATION, 11 jun. 2018. **Proceedings of the 2018 ACM Conference on Economics and Computation [...]**. Ithaca NY USA: ACM, 11 jun. 2018. p. 5–5. DOI 10.1145/3219166.3219180.

BENÍTEZ-AURIOLES, B. The Peer-to-Peer market for tourist accommodation in Latin America. Supply, Demand and Prices. **Journal of Tourism Analysis: Revista de Análisis Turístico (JTA)**, [s. l.], v. 28, n. 1, 24 maio 2021. DOI 10.53596/jta.v28i1.372.

BOSMA, J. R. Platformed professionalization: Labor, assets, and earning a livelihood through Airbnb. **Environment and Planning A: Economy and Space**, [s. l.], v. 54, n. 4, p. 595–610, jun. 2022. DOI 10.1177/0308518X211063492.

CAMPBELL, M.; MCNAIR, H.; MACKAY, M.; PERKINS, H. C. Disrupting the regional housing market: Airbnb in New Zealand. **Regional Studies, Regional Science**, [s. l.], v. 6, n. 1, p. 139–142, 1 jan. 2019. DOI 10.1080/21681376.2019.1588156.

CHANG, H.-H. Does the room sharing business model disrupt housing markets? Empirical evidence of Airbnb in Taiwan. **Journal of Housing Economics**, [s. l.], v. 49, p. 101706, set. 2020. DOI 10.1016/j.jhe.2020.101706.

CLANCY, M. Tourism, financialization, and short-term rentals: the political economy of Dublin's housing crisis. **Current Issues in Tourism**, [s. l.], v. 25, n. 20, p. 3363–3380, 18 out. 2022. DOI 10.1080/13683500.2020.1786027.

COCOLA-GANT, A.; GAGO, A. Airbnb, buy-to-let investment and tourism-driven displacement: A case study in Lisbon. **Environment and Planning A: Economy and Space**, [s. l.], v. 53, n. 7, p. 1671–1688, out. 2021. DOI 10.1177/0308518X19869012.

COCOLA-GANT, A.; LOPEZ-GAY, A. Transnational gentrification, tourism and the formation of 'foreign only' enclaves in Barcelona. **Urban Studies**. [S. l.]: SAGE Publications Ltd, 2020. DOI 10.1177/0042098020916111.

COELHO, F. A.; RIBEIRO, C. R. Programa Reviver Centro: habitação de interesse mercantil para o centro carioca. São Paulo, **PosFAUUSP**, v. 32, n. 61, jul-dez. 2025. DOI 10.11606/issn.2317-2762.posfauusp.2025.230127

COLOMB, C.; MOREIRA DE SOUZA, T. Illegal short-term rentals, regulatory enforcement and informal practices in the age of digital platforms. **European Urban and Regional Studies**, [s. l.], v. 31, n. 4, p. 328–345, out. 2024. DOI 10.1177/09697764231155386.

COX, M. **The face of Airbnb, New York City**: Airbnb as a racial gentrification tool. New York: Inside Airbnb, 2017. Disponível em: <https://insideairbnb.com/reports/the-face-of-airbnb-nyc.pdf>

COX, M.; HAAR, K. **Platform failures: how short-term rental platforms like Airbnb fail to cooperate with cities and the need for strong regulations to protect housing**. Study commissioned by members of the IMCO committee of the GUE/NGL group in the European Parliament, 2020.

CRUVINEL, A. C. F. **Patrimônio e classe trabalhadora: entre o patrimônio industrial e a memória operária no bairro de Bangu**. Dissertação (Mestrado em Urbanismo) - Programa de Pós-Graduação em Urbanismo, Universidade Federal do Rio de Janeiro, Rio de Janeiro, 2020. Disponível em: https://sucupira.capes.gov.br/sucupira/public/consultas/coleta/trabalhoConclusao/viewTrabalhoConclusao.jsf?popup=true&id_trabalho=10484848.

_____. **Os conjuntos habitacionais da Aliança para o Progresso (APP) na América Latina**. 2023. 82f. Trabalho de Conclusão de Curso de Especialização em Sociologia Urbana - Instituto de Ciências Sociais, Universidade do Estado do Rio de Janeiro, 2023. Disponível em: https://www.academia.edu/104700189/Os_conjuntos_habitacionais_da_Alian%C3%A7a_para_o_Progresso_APP_na_Am%C3%A9rica_Latina

_____. Airbnb como urbanismo de plataforma: aspectos gerais e caminhos para uma abordagem multiescalar. **PosFAUUSP**, [s. l.], v. 31, n. 58, p. e214821, 5 abr. 2024a. DOI 10.11606/issn.2317-2762.posfauusp.2024.214821. Disponível em: <https://www.revistas.usp.br/posfau/article/view/214821>.

_____. Mapeando o aluguel de temporada via plataformas: o Airbnb e o Booking.com no Rio de Janeiro. In: **SEMINARIO INTERNACIONAL DE INVESTIGACIÓN EN URBANISMO**, dez. 2024. XVI Seminario Internacional de Investigación en Urbanismo, Barcelona-Córdoba, Junio-Agosto 2024b [...]. [S. l.]: Universitat Politècnica de Catalunya, Grup de Recerca en Urbanisme, Universitat Politècnica de Catalunya. Iniciativa Digital Politècnica, Universidad Nacional de Córdoba, dez. 2024. DOI 10.5821/siiu.13130. Disponível em: <http://hdl.handle.net/2117/422715>.

CRUVINEL, A.; CRESPO, J. L. M.; PARAIZO, R. C. O aluguel temporário em Portugal: perspectivas para pensar o Airbnb nas cidades brasileiras. **Anais do XXI Encontro Nacional da Associação Nacional de Pós-Graduação e Pesquisa em Planejamento Urbano e Regional** (Sessão Temática)... Curitiba: Realize Editora, 2025. Disponível em: <https://editorarealize.com.br/artigo/visualizar/122770>.

CRUVINEL, A. C. F.; MENDONÇA, P. H. R. Cartografias do aluguel temporário: o Airbnb em São Paulo e Rio de Janeiro. **Anais do evento Seminário Internacional Políticas Habitacionais de Aluguel Social**. São Paulo: FAUUSP, 2024.

CRUVINEL, A. C. F.; TEIXEIRA, L. D. C. Camadas urbano-digitais: Da infraestrutura global da Internet às dark kitchens. **VIRUS Journal**, [s. l.], v. 1, n. 28, p. 90–100, 13 dez. 2024. DOI 10.11606/2175-974x.virus.v28.229575. Disponível em: <https://www.revistas.usp.br/virus/article/view/229575>.

DAVIS, M. **Planeta favela**. São Paulo: Boitempo, 2006.

DEL CASTILLO, M. L.; KLAUFUS, C. Rent-seeking middle classes and the short-term rental business in inner-city Lima. **Urban Studies**, [s. l.], v. 57, n. 12, p. 2547–2563, set. 2020. DOI 10.1177/0042098019881351.

DOS SANTOS, Theotonio. La crisis de la teoría del desarrollo y las relaciones de dependencia en América Latina. **Cuadernos de Estudios Socioeconómicos (CESO)**, Santiago de Chile: Universidad de Chile, n. 11, 1970.

_____. **Socialismo ou fascismo: o novo caráter da dependência e o dilema latino-americano**. São Paulo: Expressão Popular, 2020.

ESTEVENS, A.; COCOLA-GANT, A.; LÓPEZ-GAY, A.; PAVEL, F. The role of the state in the touristification of Lisbon. **Cities**, [s. l.], v. 137, p. 104275, jun. 2023. DOI 10.1016/j.cities.2023.104275.

FERREIRA, P. H. C. **As plataformas digitais na produção da cidade contemporânea: uma análise urbanística do Airbnb em cidades brasileiras**. 2021. 171 f. Dissertação (Mestrado em Arquitetura) — Universidade Federal de Minas Gerais, Escola de Arquitetura, Belo Horizonte, 2021.

FERRERI, M.; SANYAL, R. Platform economies and urban planning: Airbnb and regulated deregulation in London. **Urban Studies**, v. 55, n. 15, p. 3353–3368, nov. 2018.

FRANCO, S. F.; SANTOS, C. D. The impact of Airbnb on residential property values and rents: Evidence from Portugal. **Regional Science and Urban Economics**, [s. l.], v. 88, p. 103667, maio 2021. DOI 10.1016/j.regsciurbeco.2021.103667.

GALLAGHER, L. **A história da Airbnb**. São Paulo: Buzz Editora, 2018. 272p.

GARCIA-LÓPEZ, M.-À.; JOFRE-MONSENY, J.; MARTÍNEZ-MAZZA, R.; SEGÚ, M. Do short-term rental platforms affect housing markets? Evidence from Airbnb in Barcelona. **Journal of Urban Economics**, [s. l.], v. 119, p. 103278, set. 2020. DOI 10.1016/j.jue.2020.103278. Disponível em: <https://linkinghub.elsevier.com/retrieve/pii/S0094119020300498>.

HOFÄCKER, J.; GEBAUER, M. Airbnb in Townships of South Africa: A New Experience of Township Tourism? In: ROGERSON, C. M.; ROGERSON, J. M. (orgs.). **Urban Tourism in the Global South**. GeoJournal Library. Cham: Springer International Publishing, 2021. p. 129–147. DOI 10.1007/978-3-030-71547-2_6.

GURRAN, N.; PHIBBS, P. When Tourists Move In: How Should Urban Planners Respond to Airbnb? **Journal of the American Planning Association**, v. 83, n. 1, p. 80–92, 2 jan. 2017.

GUSHIKEN, I. Y. **O impacto do Airbnb nos preços dos aluguéis residenciais na cidade do Rio de Janeiro**. São Paulo, 2023. Dissertação (Mestrado em Economia) — Fundação Getúlio Vargas, Escola de Economia de São Paulo, São Paulo, 2023.

HANNONEN, O. In search of a digital nomad: defining the phenomenon. **Information Technology & Tourism**, [s. l.], v. 22, n. 3, p. 335–353, set. 2020. DOI 10.1007/s40558-020-00177-z.

HARVEY, D. **O novo imperialismo**. 2. ed. São Paulo: Loyola, 2005.

_____. **Os limites do capital**. São Paulo: Boitempo, 2013.

_____. **Cidades rebeldes**: do direito à cidade à revolução urbana. São Paulo: Martins Fontes, 2014.

_____. **A loucura da razão econômica**: Marx e o capital no século XXI. São Paulo: Boitempo, 2018.

HÜBSCHER, M.; BORST, M. On the relationship between short-term rentals and gentrification: the case of Airbnb in Munich (Germany). **Geografie**, [s. l.], v. 128, n. 1, p. 1–24, 2023. DOI 10.37040/geografie.2022.013.

HÜBSCHER, M.; SCHULZE, J.; ZUR LAGE, F.; RINGEL, J. The impact of Airbnb on a non-touristic city. A Case study of short-term rentals in Santa Cruz de Tenerife (Spain). **Erdkunde**, v. 74, n. 3, p. 191–204, 30 set. 2020.

JOVER, J.; COCOLA-GANT, A. The Political Economy of Housing Investment in the Short-Term Rental Market: Insights from Urban Portugal. **Antipode**, [s. l.], v. 55, n. 1, p. 134–155, jan. 2023. DOI 10.1111/anti.12881.

KALINOSKI, R. QUEM DÁ MAIS? Correlação entre Airbnb e ônus excessivo com aluguel em metrópoles brasileiras. **e-metropolis, Rev. Eletrônica de Est. Urb. e Regionais**, v. 15, p. 1–11, 2024.

KATSINAS, P. Professionalisation of short-term rentals and emergent tourism gentrification in post-crisis Thessaloniki. **Environment and Planning A: Economy and Space**, [s. l.], v. 53, n. 7, p. 1652–1670, out. 2021. DOI 10.1177/0308518X21988940.

KI, D.; LEE, S. Spatial Distribution and Location Characteristics of Airbnb in Seoul, Korea. **Sustainability**, [s. l.], v. 11, n. 15, p. 4108, 30 jul. 2019. DOI 10.3390/su11154108.

KOSTER, H. R. A.; VAN OMMEREN, J.; VOLKHAUSEN, N. Short-term rentals and the housing market: Quasi-experimental evidence from Airbnb in Los Angeles. **Journal of Urban Economics**, [s. l.], v. 124, p. 103356, jul. 2021. DOI 10.1016/j.jue.2021.103356.

KOURKOURIDIS, D.; RIZOS, A.; FRANGOPOULOS, I.; SALEPAKI, A. Airbnb and Urban Housing Dynamics: Economic and Social Impacts in Greece. **Urban Science**, [s. l.], v. 8, n. 3, p. 148, 23 set. 2024. DOI 10.3390/urbansci8030148.

LAGONIGRO, R.; MARTORI, J. C.; APPARICIO, P. Understanding Airbnb spatial distribution in a southern European city: The case of Barcelona. **Applied Geography**, [s. l.], v. 115, p. 102136, fev. 2020. DOI 10.1016/j.apgeog.2019.102136.

LÊNIN, V. I. **O imperialismo**: fase superior do capitalismo. São Paulo: Boitempo, 2011.

LERENA RONGVAUX, N. Tendencias de mercantilización de la vivienda en América Latina: el submercado de alquileres temporarios a través de plataformas digitales. Airbnb en Ciudad de Buenos Aires. **Geograficando**, [s. l.], v. 18, n. 2, p. e115, 1 nov. 2022. DOI 10.24215/2346898Xe115.

LERENA RONGVAUX, N.; RODRIGUEZ, L. Airbnb in Latin America: A literature review from an urban studies perspective. **Journal of Urban Affairs**, [s. l.], p. 1–15, 23 fev. 2023. DOI 10.1080/07352166.2023.2168552.

LESTEGÁS, I.; SEIXAS, J.; LOIS-GONZÁLEZ, R.-C. Commodifying Lisbon: A Study on the Spatial Concentration of Short-Term Rentals. **Social Sciences**, [s. l.], v. 8, n. 2, p. 33, 25 jan. 2019. DOI 10.3390/socsci8020033.

LIANG, C.; YEUNG, M. C. H.; AU, A. K. M. The impact of Airbnb on housing affordability: Evidence from Hong Kong. **Environment and Planning B: Urban Analytics and City Science**, [s. l.], v. 49, n. 3, p. 1048–1066, mar. 2022. DOI 10.1177/23998083211043123.

LOBO, Y. S. **Economia colaborativa e destinos turísticos urbanos**: Uma análise da distribuição espacial da Airbnb em Curitiba. Dissertação (Mestrado em Turismo), Setor de Ciências Humanas, Universidade Federal do Paraná. Curitiba, p. 232, 2018.

_____. Economia colaborativa e destinos turísticos urbanos: análise da distribuição espacial da Airbnb em Curitiba. **Revista Brasileira de Pesquisa em Turismo**, v. 14, n. 33, p. 32-49, set-dez 2020.

LÓPEZ-GAY, A.; MADRIGAL-MONTES DE OCA, Á.; SALES-FAVÀ, J.; PINTO DA CUNHA, J. M. Apartamentos turísticos, ciudad y población en América Latina. Los casos de Ciudad de México y São Paulo. **Revista Latinoamericana de Población**, v. 13, n. 25, p. 5–35, 31 out. 2019.

LUXEMBURGO, R. **A acumulação do capital**: contribuição ao estudo econômico do imperialismo. Rio de Janeiro: Zahar Editores, 1970.

MANDUCA, H. H. C. **Riobnb**: Plataformas De Aluguel Temporário Como Agentes De Transformação Urbana. 2025. 57f. Trabalho de Conclusão de Curso (Graduação em Arquitetura e Urbanismo) – Universidade Federal do Rio de Janeiro, Rio de Janeiro, 2025.

MARINI, Ruy Mauro. **Subdesenvolvimento e revolução**. São Paulo: Expressão Popular, 2013.

MARX, Karl. **O capital**: crítica da economia política. Livro I: O processo de produção do capital. Tradução de Rubens Enderle. São Paulo: Boitempo, 2013.

MATTOS, M. B. **A classe trabalhadora**: de Marx ao nosso tempo. São Paulo: Boitempo, 2019.

MEDVEDEVA, N. The Romantic Anti-Capitalisms of Short-Term Rental Hosting. **Antipode**, pp. 1-19, mar. 2023. DOI <https://doi.org/10.1111/anti.12938>

MERMET, A.-C. Can gentrification theory learn from Airbnb? Airbnbification and the asset economy in Reykjavík. **Environment and Planning A: Economy and Space**, [s. l.], v. 54, n. 6, p. 1147-1164, set. 2022. DOI 10.1177/0308518X221094616.

MUNASINGHE, L. M.; GUNAWARDHANA, T.; WICKRAMAARACHCHI, N. C.; ARIYAWANSA, R. G. Mapping the operation of Airbnb in Sri Lankan cities. **Malaysian Journal of Society and Space**, [s. l.], v. 18, n. 2, 31 maio 2022. DOI 10.17576/geo-2022-1802-01.

NAVARRETE ESCOBEDO, D. Foreigners as gentrifiers and tourists in a Mexican historic district. **Urban Studies**, v. 57, n. 15, p. 3151-3158, 2020. DOI 10.1177/0042098019896532

NIEUWLAND, S.; VAN MELIK, R. Regulating Airbnb: how cities deal with perceived negative externalities of short-term rentals. **Current Issues in Tourism**, [s. l.], v. 23, n. 7, p. 811-825, 2 abr. 2020. DOI 10.1080/13683500.2018.1504899.

PIRACHA, A.; SHARPLES, R.; FORREST, J.; DUNN, K. Racism in the sharing economy: Regulatory challenges in a neo-liberal cyber world. **Geoforum**, [s. l.], v. 98, p. 144-152, jan. 2019. DOI 10.1016/j.geoforum.2018.11.007.

ROBERTSON, D.; OLIVER, C.; NOST, E. Short-term rentals as digitally-mediated tourism gentrification: impacts on housing in New Orleans. **Tourism Geographies**, [s. l.], v. 24, n. 6-7, p. 954-977, 10 nov. 2022. DOI 10.1080/14616688.2020.1765011.

RODRÍGUEZ, L.; VECSLIR, L.; RUBIO VACA, J. F.; MOLINA RESTREPO, J. J. De barrios tradicionales a nuevos productos turísticos: Dinámicas urbanas recientes en Palermo Viejo (Buenos Aires) y Usaquén (Bogotá). **Anales de Investigación en Arquitectura**, [s. l.], v. 10, n. 1, p. 65-87, 17 jun. 2020. DOI 10.18861/ania.2020.10.1.2971.

RODNEY, W. **Como a Europa subdesenvolveu a África**. São Paulo: Boitempo, 2022.

ROLNIK, R. **Guerra dos lugares**: a colonização da terra e da moradia na era das finanças. São Paulo: Boitempo, 2015.

SAFARI, N.; ZHANG, L.; KOMAREK, T. M. The impact of short-term rental activity on house prices: evidence from coastal Virginia. **The Annals of Regional Science**, [s. l.], v. 74, n. 1, p. 6, mar. 2025. DOI 10.1007/s00168-024-01328-4.

SANTOS, M. **Pobreza Urbana**. São Paulo: Hucitec, 1978.

_____. **Urbanização Desigual**. São Paulo: Hucitec; Edusp, 1980.

_____. **Espaço e Método**. São Paulo: Nobel, 1985.

_____. **O Espaço Dividido**: os dois circuitos da economia urbana dos países subdesenvolvidos. 2. ed. São Paulo: Edusp, 2004.

____. **Por uma outra globalização**: do pensamento único à consciência universal. 6. ed. Rio de Janeiro: Record, 2008.

____. **Técnica, Espaço e Tempo**: globalização e meio técnico-científico informacional. 5. ed. São Paulo: Edusp, 2013.

____. **Ensaio sobre a urbanização latino-americana**. São Paulo: Edusp, 2017.

SIGLER, T.; WACHSMUTH, D. New directions in transnational gentrification: Tourism-led, state-led and lifestyle-led urban transformations. **Urban Studies**, [s. l.], v. 57, n. 15, p. 3190–3201, nov. 2020. DOI 10.1177/0042098020944041.

SMIGIEL, C.; HOF, A.; KAUTZSCHMANN, K.; SEIDL, R. No sharing! A mixed methods study of short-term rentals and its socio-spatial implications in the city of Salzburg. **Spatial Research and Planning**, v. 78, n. 2, pp. 153–170, 2020. DOI 10.2478/rara-2019-0054

SÖDERSTRÖM, O. MERMET, A. When Airbnb Sits in the Control Room: Platform Urbanism as Actually Existing Smart Urbanism in Reykjavík. **Frontiers in Sustainable Cities**, v. 2, p. 1–7, 14 mai. 2020. DOI 10.3389/frsc.2020.00015

SOUZA, R. B. Territorialização do Airbnb em cidades pequenas turísticas brasileiras: regular é preciso? 2020. 237f. Dissertação (Mestrado em Arquitetura, Tecnologia e Cidade) — Universidade Estadual de Campinas, Campinas, 2021.

SOUZA, R. B.; LEONELLI, G. C. V. Airbnb no Brasil: uma nova agenda de pesquisa para os estudos urbanos. **urbe. Revista Brasileira de Gestão Urbana**, [s. l.], v. 13, p. e20200400, 2021. DOI 10.1590/2175-3369.013.e20200400.

SOUZA, R. B.; LEONELLI, G. C. V. Nova disputa ou velha convivência? Airbnb e o mercado de habitação de aluguel em cidades brasileiras turísticas de pequeno porte. **EURE**, Santiago, v. 50, n. 150, pp. 1–23, 2024. DOI 10.7764/eure.50.150.06.

SPANGLER, I. Hidden value in the platform's platform: Airbnb, displacement, and the un-homing spatialities of emotional labour. **Trans Inst Br Geogr**, p. 1–14, 2019. DOI 10.1111/tran.12367

SRIDHAR, K. S. Understanding the Digital Platform Economy: Effect of Airbnb on Housing in Indian Cities. **Housing Policy Debate**, [s. l.], v. 32, n. 4–5, p. 713–729, 4 jul. 2022. DOI 10.1080/10511482.2021.1929389.

STABROWSKI, F. 'People as businesses': Airbnb and urban micro-entrepreneurialism in New York City. **Cambridge Journal of Regions, Economy and Society**, [s. l.], v. 10, n. 2, p. 327–347, jul. 2017. DOI 10.1093/cjres/rsx004.

STOJČIĆ, N.; VIZEK, M.; GLAURDIĆ, J. Short-term rental expansion and residential displacement in tourism communities: evidence from Croatia. **Regional Studies**, [s. l.], v. 58, n. 11, p. 2115–2128, nov. 2024. DOI 10.1080/00343404.2024.2346664.

STROHER, L.; CANAN, H.; SANTORO, P. Novas fronteiras da financeirização: retrofit e aluguel no centro de São Paulo e no Rio de Janeiro. *In: Anais do Enanparq 8*, Rio de Janeiro: Enanparq, 2024.

STROHER, L.; JAENISCH, S. T.; MANDUCA, H.; AGUIAR, C.; FERREIRA, B. A disputa pela área central do Rio de Janeiro pós-2020: coalizões, conflitos e produção do espaço. *In: Anais do Enanpur XXI*, Rio de Janeiro: Enanpur, 2025.

TAMBELLI, C. N. B. **Aluga-se para temporada**: o Airbnb e a cidade como negócio. São Paulo, 2020, 145f. Dissertação (Mestrado em Geografia Humana) — Faculdade de Filosofia, Letras e Ciências Humanas da Universidade de São Paulo, 2020.

TAVOLARI, B. AirBnB e os impasses regulatórios para o compartilhamento de moradia: notas para uma agenda de pesquisa em Direito. *In: In: ZANATTA, R. A. F. (org.); PAULA, P. C. B. de (org.); KIRA, B. (org.). Economias do compartilhamento e o direito*. Curitiba: Juruá, 2017, p. 259-280.

TSENG, Y.-C.; CHAN, C.-L. When the Sharing Economy Meets Established Institutions: Uber and Airbnb in Taiwan. **IEEE Transactions on Engineering Management**, [s. l.], v. 68, n. 6, p. 1895–1906, dez. 2021. DOI 10.1109/TEM.2019.2934520.

VAN DIJCK, J.; POELL, T.; DE WAAL, M. **The Platform Society**: Public Values in a Connective World. Estados Unidos: Oxford University Press, 2018.

VAN DOORN, N. A new institution on the block: On platform urbanism and Airbnb citizenship. **New Media & Society**, [s. l.], v. 22, n. 10, p. 1808–1826, out. 2020. DOI 10.1177/1461444819884377.

VAN HOLM, E. J. Evaluating the impact of short-term rental regulations on Airbnb in New Orleans. **Cities**, [s. l.], v. 104, p. 102803, set. 2020. DOI 10.1016/j.cities.2020.102803. Disponível em: <https://linkinghub.elsevier.com/retrieve/pii/S0264275119318220>.

VISSER, G.; ERASMUS, I.; MILLER, M. Airbnb: The Emergence of a New Accommodation Type in Cape Town, South Africa. **Tourism Review International**, [s. l.], v. 21, n. 2, p. 151–168, 18 jul. 2017. DOI 10.3727/154427217X14912408849458.

WACHSMUTH, D.; WEISLER, A. Airbnb and the rent gap: Gentrification through the sharing economy. **Environment and Planning A: Economy and Space**, [s. l.], v. 50, n. 6, p. 1147–1170, set. 2018. DOI 10.1177/0308518X18778038.

WACHSMUTH, D.; BÉLANGER DE BLOIS, M.; ST-HILAIRE, C. **Short-term rentals in Toronto: market overview and regulatory impact analysis**. Relatório encomendado pela City of Toronto. Montréal: Urban Politics and Governance Research Group, 2021. 46 p.

WIJBURG, G. Commodifying Havana? Private accumulation, assetisation and marketisation in the Cuban metropolis. **Urban Studies**, [s. l.], v. 60, n. 16, p. 3216–3232, dez. 2023. DOI 10.1177/00420980231165381.

YRIGOY, I. Rent gap reloaded: Airbnb and the shift from residential to touristic rental housing in the Palma Old Quarter in Mallorca, Spain. **Urban Studies**, [s. l.], v. 56, n. 13, p. 2709–2726, out. 2019. DOI 10.1177/0042098018803261.

News

ALMIRANTE, J. Hospedagens no Airbnb inspiradas na série Friends. **UOL**, São Paulo, 22 set. 2024. Disponível em: <https://www.uol.com.br/guia-de-compras/ultimas-noticias/2024/09/22/hospedagens-no-airbnb-inspiradas-na-serie-friends.htm>. Acesso em: 4 nov. 2025.

ANDRADE, A. L. Airbnb e Rio 2016 apostam em hospedagem alternativa. **Panrotas**, 19 mar. 2015. Disponível em: https://www.panrotas.com.br/noticia-turismo/eventos/2015/03/airbnb-e-rio-2016-apostam-em-hospedagem-alternativa_112375.html. Acesso em: 6 mai. 2025.

CARVALHO, P. Nômades digitais e aluguel em dólar: por que moradores estão sendo expulsos de seus bairros na América Latina. Medellín, **BBC News Brasil**, 14 ago. 2023. Disponível em: <https://www.bbc.com/portuguese/articles/cyOp1z80yelo>. Acesso em: 7 jun. 2024.

RIO DE JANEIRO (Município). Show de Madonna: Rio atrai 1,6 milhão de pessoas à Praia de Copacabana. **Prefeitura da Cidade do Rio de Janeiro**, 5 maio 2024. Disponível em: <https://prefeitura.rio/cidade/show-de-madonna-rio-atrai-16-milhao-de-pessoas-a-praia-de-copacabana/>. Acesso em: 6 mai. 2025.

RIO DE JANEIRO (Município). Lady Gaga leva 2,1 milhões de pessoas a Copacabana em show histórico. **COR.Rio**, 12 set. 2025. Disponível em: <https://cor.rio/lady-gaga-leva-21-milhoes-de-pessoas-a-copacabana-em-show-historico/>. Acesso em: 6 set. 2025.

SAMPSON, H. "I'm a Barbie Girl": a casa dos sonhos da boneca no Airbnb tem o Ken como anfitrião. **Público**, Lisboa, 28 jun. 2023. Disponível em: <https://www.publico.pt/2023/06/28/fugas/noticia/-im-barbie-girl-casa-sonhos-boneca-airbnb-ken-anfitriao-2054910>. Acesso em: 4 nov. 2025.

SHORTELL, D. Los nómadas digitales llegan a Ciudad de México y los precios de la vivienda suben. **The New York Times**, Cidade do México, 28 dez. 2022. Disponível em: <https://www.nytimes.com/es/2022/12/28/espanol/mexico-precio-airbnb.html>. Acesso em: 7 jun. 2023.

