GeoAtos
Revista Geografia em Atos

unesp

AEROSHOPPING: THE RESTRUCTURING OF AIRPORT TERMINALS IN BRAZIL

AEROSHOPPING: A REESTRUTURAÇÃO DOS TERMINAIS AEROPORTUÁRIOS NO BRASIL

AEROSHOPPING: LA REESTRUCTURACIÓN DE LAS TERMINALES AEROPORTUARIAS EN BRASIL

Lucas AZEREDO RODRIGUES[1]
e-mail: lucas.azeredo.rodrigues@gmail.com

Márcio Rogério SILVEIRA[2]
e-mail: marcio.gedri@gmail.com

How to reference this paper:

AZEREDO RODRIGUES, Lucas; SILVEIRA, Márcio Rogério. Aeroshopping: the restructuring of airport terminals in Brazil. **Revista Geografia em Atos**, Presidente Prudente, v. 10, n. 00, e026012, 2026. e-ISSN: 1984-1647. DOI: 10.35416/2026.11393.

| **Submitted**: 10/02/2026
| **Revisions required**: 20/04/2026
| **Approved**: 12/06/2026
| **Published**: 05/08/2026

Editors: Prof. Dr. Nécio Turra Neto
Prof. Me. Karina Malachias Domingos dos Santos

[1] Federal University of Santa Catarina (UFSC), Florianópolis – SC. PhD in Geography and Basic Education Teacher in the Municipality of Camboriú/SC.
[2] Federal University of Santa Catarina (UFSC), Florianópolis – SC. Professor in the Department of Geosciences and the Graduate Program in Geography.

ABSTRACT: Following the introduction of airport concessions in Brazil in 2011, airports assumed a strategic role in the territorial organization of the air transport sector. The entry of new actors, particularly foreign operators, introduced new forms of service management within airport hinterlands, increasing competitiveness while intensifying the unequal distribution of flights. This study analyzes the strategies adopted by public and private stakeholders that contributed to capital centralization and the concentration of air traffic flows, as well as their impacts on Brazilian territory. It argues that the concentration of flights in hub airports is part of a broader process of regional aviation restructuring, reducing the number of destinations served. Moreover, the participation of foreign capital in airport concessions reflects the declining investment capacity and reduced role of the State in strategic sectors. The findings indicate that this restructuring reinforces the centralization of flows, capital concentration, and territorial selectivity, redefining the strategic role of airports.

KEYWORDS: Commercial Aviation. Logistics Strategies. Territorial Competitiveness. Transportation Geography. Airports.

RESUMO: *Após o início das concessões aeroportuárias no Brasil, em 2011, os aeroportos passaram a adquirir um papel significativo na organização territorial do setor aéreo. A inserção de novos agentes, sobretudo operadores estrangeiros, impôs novas formas de exploração dos serviços nas hinterlândias aeroportuárias. A multinacionalização desses espaços ampliou a competitividade, ao mesmo tempo em que favoreceu uma distribuição desigual dos voos. Este trabalho tem como objetivo analisar as principais estratégias adotadas por entes públicos e privados que contribuíram para a centralização de capital e a concentração de fluxos, bem como seus impactos no território brasileiro. Parte-se do entendimento de que a concentração de voos em hubs integra um movimento mais amplo de reestruturação da aviação regional, contribuindo para a redução da oferta de destinos. Ademais, a inserção de capital estrangeiro nas concessões evidencia a diminuição da capacidade de investimento e da participação estatal em setores estratégicos, como o transporte. Observa-se que a reestruturação do setor aéreo tem reforçado a centralização dos fluxos e a concentração de capital, implicando em maior seletividade territorial. Esse processo redefine o papel dos aeroportos como infraestruturas estratégicas subordinadas à lógica da acumulação.*

PALAVRAS-CHAVE: *Aviação Comercial. Estratégias Logísticas. Competitividade Territorial. Geografia dos Transportes. Aeroportos.*

RESUMEN: *Tras el inicio de las concesiones aeroportuarias en Brasil, en 2011, los aeropuertos pasaron a desempeñar un papel estratégico en la organización territorial del sector aéreo. La incorporación de nuevos actores, especialmente operadores extranjeros, introdujo nuevas formas de gestión de los servicios en los hinterlands aeroportuarios, ampliando la competitividad e intensificando la distribución desigual de los vuelos. Este estudio analiza las estrategias adoptadas por actores públicos y privados que contribuyeron a la centralización del capital y a la concentración de los flujos aéreos, así como sus impactos en el territorio brasileño. Se parte del supuesto de que la concentración de vuelos en aeropuertos hub forma parte de un proceso más amplio de reestructuración de la aviación regional, reduciendo la oferta de destinos. Además, la participación de capital extranjero en las concesiones evidencia la disminución de la capacidad de inversión y del papel del Estado en sectores estratégicos, reforzando la centralización de los flujos, la concentración del capital y la selectividad territorial.*

PALABRAS CLAVE: *Aviación comercial. Estrategias logísticas. Competitividad territorial. Geografía del transporte. Aeropuertos.*

Introduction

Following the start of the airport concession process in Brazil in 2011, terminals began to take on an increasingly commercial character, driven by the exploitation of non-aeronautical activities. Characteristic of infrastructure under private control, this process of multifunctionality has consolidated itself as a strategy for expanding capital accumulation by concessionaire companies—many of them controlled by foreign groups, including with state participation in their countries of origin—, with emphasis on the expansion of services aimed at consumption, gastronomy, and leisure.

Back in 2001, the Brazilian Airport Infrastructure Company (INFRAERO) launched the Aeroshopping project at Porto Alegre International Airport. The initiative aimed to expand commercial areas inside the terminal, anticipating a trend that would become more evident with the concession of airports. With the entry of major international operators into the sector, the logic of transforming terminals into commercial centers has intensified, becoming driven by a systematic search for revenue unrelated to air operations.

Silveira (2025, p. 20, our translation) observes that "the State adopts and incorporates business management models based on intercapitalist logics of competition and competitiveness to conduct territorial fluidity". According to the author, although state logistics should have a greater role in infrastructure management, the participation of private capital in territorial planning decisions has expanded significantly in recent decades. This is forcefully expressed in the replacement of public companies by private concessionaires, which operate under a logic of profitability and corporate rationalization of space.

Paulo Gala (2025) precisely articulates this dynamic by demonstrating that the concessions process was not limited to a simple transfer of assets from the State to the market, but constituted a movement of effective "denationalization". It is, to a large extent, a matter of replacing Brazilian state control with the control of foreign states, as exemplified by the case of AENA, a Spanish mixed-capital company responsible for the concession of 17 strategic airports in Brazil. The same situation applies to Zurich Airport Brasil (operating 10 airports worldwide and 4 in Brazil). Situations of this nature are less common in core capitalist countries, which often possess institutional mechanisms aimed at economic sovereignty and strategic control of infrastructure. In the Brazilian case, a limited adoption of instruments is observed through concessions to the private sector, which maintain a significant level of sovereignty and internal economic multiplier effect.

This situation has recently deepened when the CCR group, through its airport division, negotiated a set of concessions covering about 20 airports in Latin America, 17 of which are in Brazil, for the amount of R$ 11.5 billion, with the ASUR group (Grupo Aeroportuario del Sureste), based in Mexico. ASUR's shareholder structure is primarily composed of large investment funds and institutional investors, highlighting the highly financialized nature of this control. The result is that a significant portion of the national airport infrastructure has come to be managed by foreign private groups, often associated with foreign state capital, which produces relevant geoeconomic and geopolitical repercussions and contributes to the weakening of Brazilian national sovereignty.

The prevailing logic has become the maximization of corporate profits, integrating revenues from the stock market, the real estate sector, territorial marketing, and airport fees, combined with the capture of public subsidies granted by federative entities at different scales. This arrangement has as its central consequence the remittance of large volumes of capital abroad, which inserts aeroshoppings and other airport commercial activities as strategic components of this accumulation model.

Airports are part of a technical-scientific-informational system that contributes decisively to the circulation of people, goods, and capital, directly affecting regional dynamics. According to Santos (2014; 2017), engineering systems make up a network of fixed points that feed the flows, and it is through this interaction that the territory is organized, being constantly modified by capitalist strategies of use and appropriation of space. This logic of fluidity and competitiveness also drives investment in infrastructure as a mechanism for territorial valorization which, consequently, is captured by foreign public and private agents.

The present article is situated in the field of the Geography of Circulation, Transport, and Logistics (Silveira, 2011), mobilizing a perspective of the technical-scientific-informational environment (Santos, 2014; 2017), the notion of networks, flows, and the organization of space, as well as the perspective of hinterland developed by Corrêa (1987) and the discussions on territorial competitiveness present in Silveira (2020). Based on this framework, airports are understood as strategic points in the articulation of flows and fixed elements, in a context in which the recent restructuring expresses new forms of corporate use of the territory.

The liberalization of the aviation sector and the internationalization of airport management, formalized starting in 2017 with the permission for foreign companies to hold up to 100% of the capital in airport concessions in Brazil, intensified this process. The logic of

concentrating flights and investments in large hubs[3] favors airports with a greater capacity to attract passengers and generate ancillary revenue, consolidating them as strategic nodes in the national urban and logistics network. The major airports, especially those in mid-sized cities and smaller state capitals, such as Florianópolis, have become the primary focus of this new form of capital accumulation, a dynamic that was uncommon during INFRAERO's administration. However, this is a strategy that could also be conducted through a public company, provided it is linked to a national development project and accompanied by institutional mechanisms for the protection of strategic interests.

These large airport terminals exert influence over extensive areas, acting as hubs that radiate flows and services to their respective regions of influence. The networks of relationships established between regions are capable of generating a multiplicity of ramifications, restructuring territories as new dynamics impose themselves (Arroyo, 2015). She emphasizes that structures dedicated to circulation become central to the process of spatial ordering, reaffirming the relevance of infrastructure in defining regional hierarchies.

Thus, it is necessary to understand that an airport does not serve exclusively the municipality where it is located, but a wide region. The IBGE (2021), for example, defines the areas of influence of airports based on the displacement of users from different municipalities in search of air service. Given the limited number of terminals with regular flights in Brazil, it is common for passengers to make long land journeys.

The presence of multiple services associated with air operations—such as food, lodging, retail, ground transportation, logistics, and maintenance—reinforces the idea that airports are embedded in an airport hinterland, that is, an area of functional and economic influence. Corrêa (1987, p. 86, our translation) defines hinterland as an "area economically subordinate to an urban center," a concept widely used for ports, but also applicable to airports, given their logistical centrality and capacity for regional articulation.

In the current context, the drive for market logic has intensified the expansion of commercial activities at the terminals. Major airport hubs, with modern infrastructure and high passenger volume, become the most attractive spaces for the development of aeroshopping, precisely because the consumption potential is directly related to the number of users in transit. These airports operate as strategic hubs in the national air network, requiring coordinated action between state logistics and corporate management to concentrate flights and connections, offering passengers a greater variety of origins and destinations at a single location.

[3] Airports are the operational hubs of airlines.

The central hypothesis of this work is that airports granted to the private sector, largely controlled by foreign groups, have begun to guide a restructuring of their terminals with the objective of increasing revenues derived from commercial and service activities (marketing, real estate, leisure, and cultural, among others), especially in those located at strategic points in the Brazilian airport hierarchy. The objective, therefore, is to analyze the main strategies of territorial appropriation adopted by airport concessionaires and their impacts on space.

From a methodological point of view, the research has a qualitative character, supported by quantitative data. Initially, a bibliographic and theoretical review was conducted regarding the topic of airport restructuring and transport geography. Subsequently, an analysis was conducted of data made available by official agencies, such as the National Civil Aviation Agency (ANAC) and the Brazilian Institute of Geography and Statistics (IBGE), with an emphasis on the distribution of air traffic flows. Additionally, fieldwork was carried out, with direct observation of airport spaces, photographic records, systematized notes, and interviews, allowing for an understanding of the organization of commercial areas and the strategies for space usage. The analysis was guided by the geographical interpretation of the territory as a result of the interaction between flows and fixed points, and the repercussions oriented towards a model of neoliberal territorial competitiveness.

This article is organized into four parts: 1) The transformation of airports into multifunctional spaces, with the concepts of airport city and aerotropolis; 2) The role of the restructuring of airports conceded to the private sector and the logic of investment concentration; 3) The configuration of the aeroshopping as an element of territorial competitiveness; 4) Airports and their role in hinterlands and urban dynamics in the context in which they are inserted.

The transformation of airports into multifunctional spaces

Since the early days of commercial aviation, airports have always played an essential role: serving as points for the boarding and disembarking of people and goods. However, with technological advances, the restructuring of logistics networks, and the significant growth in passenger volume, terminals have come to demand a significant diversification of services and functions, becoming more complexly integrated into the dynamics of production and circulation within the territory.

Kasarda (2008) observes that, in recent decades, not only airport terminals but also their adjacent areas have become attractive spaces for retail and business, often rivaling traditional urban commercial centers. In Florianópolis, the airport concession awarded to the Zurich group granted the concessionaire control over the aeroshopping and an extensive tract of land earmarked for the development of parking lots, hotels, and other activities of economic interest to the group. This arrangement produces an environment of asymmetric competition in relation to local agents and favors the remittance of dividends abroad, deepening the mechanisms of surplus extraction associated with the financialization of airport infrastructure and with the production of forms of unequal territorial competitiveness. According to Kasarda (2008), these environments are conducive to the formation of an infrastructure geared towards the generation of business and technological conglomerates, directly linked to airport operations.

This model, known as an "airport city," refers to the establishment of high-density areas specialized in logistics, commerce, and services, located in the immediate vicinity of airports and fostered by their own management. According to Guller and Guller (2002), this is a strategy frequently adopted in countries with a high volume of passengers and good air connectivity, such as the United States, where airports operate as true nodes of urban and economic development.

Among the central characteristics of this model are the search for new revenue sources—especially through non-aeronautical activities—, the provision of extensive mobility and accessibility infrastructure, the presence of numerous boarding and disembarking gates, and an environment favorable to the installation of companies and services. Such attributes intensify territorial competitiveness, making these terminals more attractive to the circulation of capital and to the logic of the financialization of space.

Kasarda (2008) expands this conception by introducing the concept of the aerotropolis, in which airport-linked business clusters extend beyond their immediate surroundings, expanding according to a logic similar to that of traditional metropolises. In this model, the terminal acts as a central hub from which commercial, industrial, residential, and logistical zones of influence radiate. Connectivity, in this context, is the key element that drives spatial interactions, contributing to the formation of new regional dynamics around airports and consolidating them as fundamental structures of the territory.

There are two main sources of revenue at airports: aeronautical, derived directly from air operations—such as landing, boarding, and connection fees—and non-aeronautical, coming from various commercial activities, such as shop rentals, restaurants, parking, advertising, VIP

areas, among others. According to Shin and Roh (2021), when analyzing data from 411 airports globally, non-aeronautical revenues accounted for 59% of the total in the Middle East, 40% in Asia, 28% in Latin America, and only 16% in Europe. Although the data does not reflect the post-pandemic scenario, it is possible to perceive distinct consumption patterns among the regions, which highlights differentiated strategies for commercial exploitation.

In the Brazilian case, the 2024 data presented in Table 1 reveal the growing relevance of non-aeronautical revenues, especially in terminals conceded to the private sector. At Guarulhos International Airport (SP), the country's main hub , "other revenues" exceed R$ 1.7 billion, a value higher than that collected from aeronautical activities (R$ 1.1 billion), highlighting a model strongly supported by commercial multifunctionality. A similar situation is observed at Galeão Airport (RJ), where more than 50% of net revenue comes from sources not directly related to aviation. In Salvador (BA), this percentage is close to 40%, while in Florianópolis (SC), a medium-sized airport, about a third of total revenue comes from commercial and cargo activities, which reinforces the centrality of the "aeroshopping" logic even outside major urban centers.

Table 1 – Net Operating Revenue in 2024 (in R$ thousands)

Net Operating Revenue	Florianópolis/SC	Galeão/RJ	Salvador/BA	Guarulhos/SP
Airport	165,991	337.9	191,801	1,135,115
Cargo	30,133	299.8	17,937	894,934
Sales and IT	84,063	461.2	109,002	N.D.
Other Recipes	9,822	36.2	8,792	1.720.472*

Source: ANAC (2025). *Regarding non-tariff revenues.

The growing share of non-aeronautical revenues in the financial structure of airports reinforces, in Brazil, the adoption of a model aligned with international strategies for the commercialization of terminals. This model places airports within a logic of competitiveness that goes beyond mere inter-capitalist competition, operating instead according to parameters of territorial competitiveness, in which the outward flow of corporate profit is linked to the appropriation of subsidies, financing, and public investments. Following the start of the concessions, concessionaires came under pressure to expand their revenue sources, which resulted in the physical restructuring of the terminals with a focus on commercial areas. Concrete examples of this trend include the construction of new terminals in Florianópolis and Vitória, in addition to the extensive renovations carried out in Salvador, Galeão, and Curitiba. There is, therefore, an accumulation by dispossession (Harvey, 2005), through systematic

processes of transferring assets, resources, and collective or public rights to the private sphere (in addition to the "normal" forms of accumulation based on the exploitation of wage labor, triggered above all in contexts of overaccumulation crisis).

In this new stage, airports cease to be mere points of embarkation and disembarkation and begin to function as spaces for lingering and consumption. This reconfiguration is based on two main pillars: the logic of consumption and the passenger's dwell time. The first one is related to a global trend of stimulating the shopping and leisure experience in high-traffic environments. The second refers to operational factors, such as the unpredictability of urban travel to terminals and the increasing anticipation of passenger arrival. In this context, idle time at airports is increasingly being converted into consumption time, strengthening the strategic role of commercial areas in airport dynamics.

There is an intensification of competition among airport concessionaires to attract new flights and passengers, which expands the possibilities for generating non-aeronautical revenue. In this sense, there is a trend of prioritizing segments with higher purchasing power, increasing the profitability of the services offered both at the terminals and in their hinterlands.

According to Kasarda (2008), the concept of an airport city is defined as an airport structured as a commercial and logistics hub directly interconnected with urban infrastructure and its surrounding activities. Kasarda and Chen (2020) deepen this understanding by highlighting that such infrastructures also connect with convention centers, events, shopping malls, and specialized service zones, incorporating, within the scope of city marketing, the logic of so-called smart cities. This type of structure, already consolidated in international hubs such as Dallas/Fort Worth (USA) and Schiphol (Amsterdam), expands the reach of airport infrastructure and reinforces its role as a catalyst for activities in airport hinterlands, that is, as an expression of the territory as a source of resources for corporate accumulation.

The consolidation of this concept results in the aerotropolis, defined by Kasarda and Lindsay (2011) as an urban model in which the airport acts as a logistical and economic core, generating a series of functional ramifications in its surroundings. For the authors, it is a form of metropolitan organization oriented by global flows, in which the airport is capable of attracting new investments and economic dynamics to its hinterland.

In the Brazilian context, the full consolidation of airport-city or aerotropolis models is not yet observed, largely due to the limited coordination between state planning and corporate land-use strategies. Accessibility limitations to the terminals and the precariousness of the urban

infrastructure in the surroundings of major hubs compromise the elevation of these airports to such categories.

However, the case of Florianópolis Airport, under the management of Zurich Airport Brasil, stands out as an emblematic example of an attempt to bring the airport and the city closer together. The new terminal inaugurated in 2019—which cost R$ 620 million and received R$ 376 million in financing from BNDES (BNDES, 2018)—was designed with a proposal for greater urban integration, incorporating gastronomic spaces, event areas, communal spaces, and an accessibility standard similar to that of the city's main shopping malls. The functional logic of Floripa Airport approaches not only the aeroshopping model, but also a developing airport city.

Factors such as urban mobility challenges, the lack of territorial planning, and the concentration of flights in a few hubs limit the development of airport infrastructure that is better connected to the urban and regional network. On the other hand, such structures play a central role in the territorial competitiveness of the aviation sector, becoming points of attraction for investments and new routes, which fosters the circulation of people, goods, and capital, while at the same time tending to reinforce regional inequalities by concentrating flows and investments in specific locations within the territory.

The Brazilian reality: concessions, restructuring and the new centrality of the terminals

Started in 2011, the airport concession process in Brazil has significantly transformed the organization of air sector infrastructure on a national scale. With the entry of the private sector, airports began operating under the logic of profitability, which required profound restructuring of their operational and commercial structures. In addition to the physical expansion of the terminals, there was a reorganization of the areas designated for retail and leisure, with the goal of extending passengers' dwell time and increasing non-aeronautical revenues.

The concession policy favored the concentration of investments in large terminals, especially in the Southeast region, where important hubs are consolidated—such as São Paulo (Congonhas and Guarulhos), Campinas, Rio de Janeiro (Galeão), and Belo Horizonte (Confins). ANAC data (2025) indicate that, as of September 2025, the ten busiest airports in the country handled 66% of domestic and 97% of international passenger traffic in the country. This high spatial concentration reinforces regional inequalities and highlights the centralization of air

traffic flows in a few network nodes, reducing the competitiveness of other terminals and limiting regional development throughout their area of influence.

The spatial differentiation regarding the distribution of airports with scheduled flights, as presented in Rodrigues (2025), highlights airport voids, where users must travel considerable distances by land to access air services. In this context, a reconfiguration of INFRAERO's role is observed, as it begins to concentrate its operations on the management and reorganization of smaller regional airports.

Figure 1 – Federal Government Airport Concessions (2011-2023)

Source: ANAC (2025).

In November 2025, the Federal Government's Regional Airport Expansion and Development Program (AmpliAR), held its first concession round, with the intention of extending existing concessions by including new airports in the network. Out of a total of 19

airports, the concessionaire Aeroporto de Guarulhos won twelve, Fraport won one, and six received no bids.

A contradiction is observed in the current institutional configuration of the sector, since INFRAERO currently only has Santos Dumont Airport as a major reference, in comparison with the other airports under its management. At the same time, airports of the same typology are being snapped up by foreign companies. Although most are state- or municipally-administered airports, the concessionaires benefit not only from the management but also from the extension of their existing contracts. That is, GRU Airport, upon acquiring the concession for these regional airports, will have compensatory measures and contract rebalancing for the country's largest airport, Guarulhos (MPor, 2025), which reinforces the logic of asset concentration and operational power in the hands of a few agents.

In addition to concentrating a large portion of domestic air traffic, major airports (hubs) have been consolidating as spaces for consumption and leisure. Inspired by international models of "commercial boulevards," examples such as Boulevard 14/32, at Florianópolis Airport, and Bossa Nova Mall, at Santos Dumont (Rio de Janeiro), illustrate this trend. These spaces host shows and a series of activities, attracting an audience that consumes products (food, clothing, among others) and services (parking, among others). The expansion of duty-free shops into domestic boarding areas, strategically positioned after security checkpoints, intensifies passengers' exposure to consumer circuits. The presence of global brands, public services, and even establishments focused on aesthetics reinforces the multifunctionality of airport terminals.

Fieldwork conducted between 2019 and 2024 shows an expansion of commercial services that go beyond the needs of boarding and disembarking. On one hand, concessionaires are seeking to increase non-aeronautical revenues; on the other, we observe a user profile increasingly inclined to incorporate consumption practices during their travels.

This dynamic reveals a refunctionalization of Brazilian airports, which are becoming new hubs for leisure and consumption. However, the prices charged within the terminals remain higher than those of external commerce, which restricts access for the middle and popular classes—and contributes to the reproduction of forms of socio-spatial segregation in these spaces.

Some airports, such as the one in Florianópolis, have transformed into commercial and cultural hubs, even attracting non-travelers through events and initiatives to encourage local consumption. In major hubs, such as Guarulhos, Salvador, Confins, and Galeão, the expansion

of services also appears as a competitive strategy, both in pricing for airlines and in offering differentiated experiences to users.

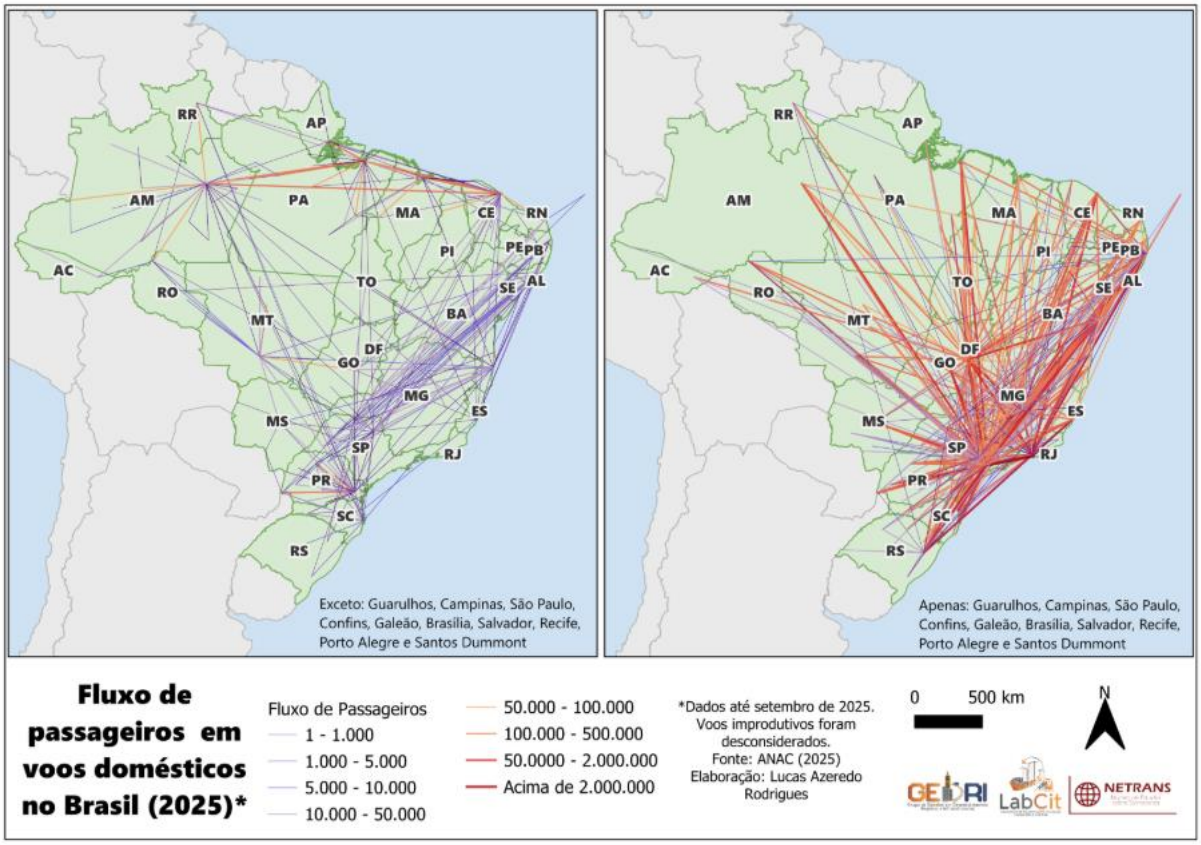
Reflection on the territorial organization of airports must consider their role as regional infrastructures and the effects on their areas of influence. In Rodrigues (2024), the regional centrality imposed by agents in the airline sector—both corporate and state—is highlighted, whose logic of capital and flow concentration reinforces the hierarchy of the hub and spoke[4] system in Brazil, contributing to the weakening of regional aviation (Figure 2). According to Silveira and Rodrigues (2021), the dismantling of regional aviation in the early 21st century significantly altered the structure of air flows, reducing direct connections between cities outside the dynamic axis and reinforcing the dependence on major national hubs.

This logic becomes evident in the distribution of flows presented in Figure 2, in which a strong concentration of connections is observed in the main hubs, in contrast to the low density of point-to-point flights between cities outside these axes. Such a configuration highlights a highly hierarchical and selective air network.

In this context, the increase in passenger flows, combined with the growing centrality of non-aeronautical revenues, is consolidated as one of the pillars of the airport concessionaires' accumulation model—a dynamic also observed in international hubs. The predominance of operators under foreign control indicates, to a certain extent, a transfer of decision-making power over strategic infrastructure within the national territory to transnational corporations. This process can be interpreted as part of the contemporary dynamics of corporate use of territory, in which the logic of accumulation takes precedence over the needs for broader territorial integration.

[4] "The hub system in Brazil has been crucial to the organization and efficiency of airline operations, concentrating flights at certain major airports, which reduces operating costs and improves connectivity between destinations. However, this centralization can also lead to overcrowding at hub airports and increase the vulnerability of operations to disruptive events, such as temporary closures due to adverse weather conditions or technical problems" (Rodrigues, 2024, p. 365, our translation).

Figure 2 – Comparative map of passenger traffic at the ten busiest airports in Brazil in 2025 (through September)



Source: Authors (2025).

The Brazilian air system expresses contradictions inherent to contemporary capitalist development. The coexistence of two complementary dynamics is observed: on one hand, technical modernization concentrated in large airport complexes, which are configured as strategic nodes for attracting flows; on the other, the persistence of inequalities in the provision of air services, which contribute to redefining—and, in many cases, reinforcing—regional centralities and asymmetries in the Brazilian territory. In this context, the expansion of activities linked to the aeroshopping consolidates itself as a central element of the concessionaires' accumulation strategies, articulating the corporate use of the territory with the intensification of the economic exploitation of flows and airport influence areas.

Aeroshopping as a corporate and territorial strategy

The term "aeroshopping" refers to the transformation of airports into areas of consumption and leisure, that is, going beyond their social function of being a point of embarkation and disembarkation. Based on the works of Graham (2013) and Ison et al. (2011),

two distinct situations emerge from airport restructuring: the demand to expand accumulation, with a focus on revenue diversification, and the reconfiguration of terminals as points of commercial activity.

The aeroshopping functions as a consumer center, which attracts audiences beyond just passengers. There is an intentional spatial articulation aimed at directing flows to strategic areas of the infrastructure. Guided by a consumerist perspective, users, especially those on layovers, end up moving through the complex, given the time interval between flights. Along this path, they end up being attracted by storefronts similar to those in shopping malls, and, consequently, generate revenue for the establishments. On the other hand, there was also a reconfiguration of the terminals to accommodate new infrastructure aimed at fueling the commercial circuit. The large corridors and the presence of globally recognized brands attract users, especially those with high purchasing power, who are in transit.

Puls (2015) points out that the long-term airport concession strategy encompasses five elements: competitive forces between airports; financial and operational implications of airport management; service quality; consumer profile behavior; and service provision portfolio (figure 3). In his case studies (Zurich and Basel airports), he demonstrated the significant importance of the trade balance resulting from the expansion of commercial services at the airport. This situation, outlined by the author, is reinforced by interviews in which users highlight the offering of services linked to retail and leisure.

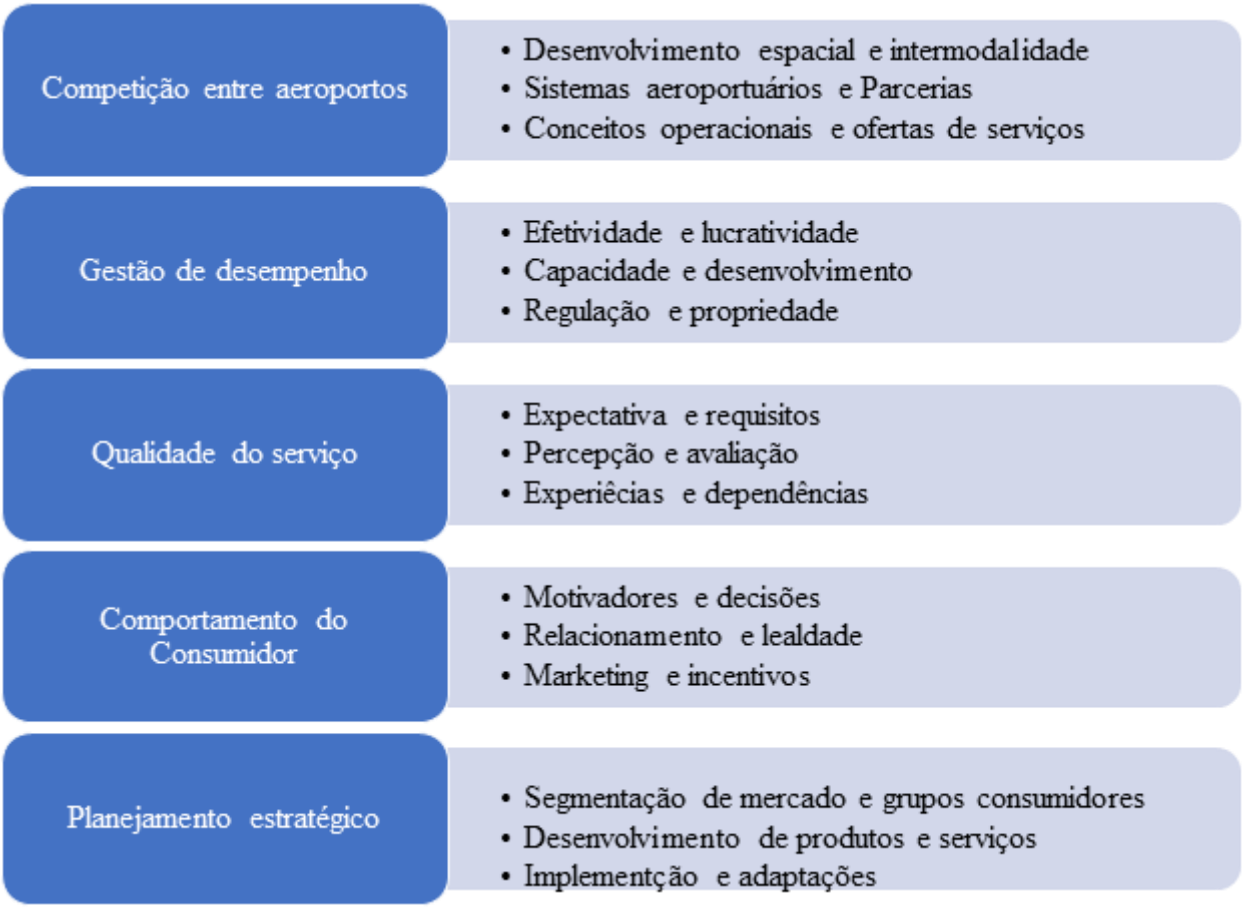
Puls and Lentz (2018) further highlight that the studies conducted by the concessionaires on passenger profiles, as well as their respective interests, facilitated the expansion of non-aeronautical sectors and, consequently, favored the implementation of leisure and shopping activities. Karagkouni (2005) points out that passengers have a tendency to spend, partly due to the free time at the terminals. The author further emphasizes that comfort and convenience carry significant weight in user consumption, indicating that the presence of retailers is linked to environments of circulation and spontaneous use.

Leading global airport operators, such as VINCI, AENA, and Zurich, incorporate internationally standardized practices linked to an extremely competitive environment—see the European reality. Studies such as Freathy and O'Connell (1999) had already pointed out that corporate logic would be introduced into the airline sector through concessions, and that such a situation reinforces the demand to reshape management practices in favor of cost reduction and profit maximization, with a focus on performance and commerce[5]. This process produces

[5] A situation that the authors describe as "private, innovative, and high-performing airports."

direct impacts on territorial organization by subordinating the use of these infrastructures to the logic of accumulation and territorial competitiveness.

Figure 3 – Structure of airport concessionaire strategies



Source: Puls (2015, p. 16).

Therefore, the logic of financialization based on the exploitation of services in airport complexes is evident, with a view to intensifying profit maximization through non-aeronautical revenues. This situation is evident when observing the structure of the concession companies operating in Brazil. The constant reorganization of airport spaces reinforces this logic of profitability. Once there is a relocation of establishments within the airport, especially regarding anchor stores, the circulation of passengers throughout the terminal in search of services fosters new forms of appeal for the user. This situation applies to both the airside and the landside.

From these transformations, territorial impacts emerge that extend beyond the airport site, reaching its entire area of influence[6]. Initially, the logic of selectivity stands out, given that

[6] It is important to note that the Brazilian case differs from others, such as the U.S. and Europe, because the availability and distribution of airports are extremely uneven. In Brazil, competition among airports is a regional

the forms of accessibility to airports in Brazil are not favorable to mass transit; therefore, those who wish to use the services often use their own vehicles (Rodrigues, 2023). Another situation is the hierarchy of airports, from the perspective that hubs in Brazil impose a level of importance based on the concentration of flows and the centralization of investments. Finally, the continuity of this process is observed, that is, the structural dependence of these large operation centers.

The expansion of service offerings and the opening of activities to the general public transform airports into hubs for commercial activities, contributing to the redefinition of their hinterlands. These areas begin to attract regional flows not only due to their airport function, but also because of the offer of events, commerce, and services. In this process, the airport begins to act as an active element in the production of urban and regional centrality.

In the case of Florianópolis, the city's elevation to the category of metropolis in the REGIC study (IBGE) reinforces the increase in its regional polarization. Although it is not the most populous municipality or the one with the highest GDP in the state, the presence of the main airport hub and its integration into a conurbated region enhance its centrality. A similar situation can be observed at airports such as Confins (MG) and Vitória (ES), which are located in expanding metropolitan regions.

The impacts on urban and territorial dynamics are visible when observing the redirection of urban equipment flows towards airports. While, on one hand, it attracts a more upscale profile, on the other, it also constitutes indirect competition with shopping malls, since some of the pricing—in typical airport retail centers—is at levels similar to those found in traditional commercial centers.

This dynamic contributes to the reproduction of processes of socio-spatial segregation, since access to services and spaces of consumption remains restricted to certain social groups. At the same time, an intensification of real estate appreciation is observed in the areas surrounding the airport, driven by the attraction of complementary activities, such as hospitality, logistics, and corporate services. This process reinforces the airport's role as a driver of territorial appreciation, frequently associated with real estate speculation.

In a scenario of growing demand for airport services, pressures on urban infrastructure are also intensifying, especially regarding mobility. The expansion of road traffic, the overloading of public transport, and access limitations act as obstacles to the integration between the airport and the city, highlighting the absence of articulated territorial planning.

issue, given the country's aviation organizational structure. This situation requires that, although we must make adjustments to account for these realities.

Aeroshoppings, by consolidating themselves as attractive spaces under commercial logic, contribute to the attraction of new routes—especially through airline marketing strategies—, reinforcing the centrality of major hubs in the national air network. This process, while dynamizing circulation, also deepens territorial asymmetries by concentrating flows, investments, and opportunities in specific areas of the territory.

It is observed that there are political pressures exerted by the concessionaires of these infrastructures on the public authorities, aiming at the expansion of access and investments. Examples include the expansion of Line 13–Jade to Guarulhos Airport, proposals for waterway integration at Galeão, road investments in Florianópolis, and revisions to master plans in airport municipalities. Such actions demonstrate that the aeroshopping not only redefines the user profile—expanding it beyond the passenger—but also reconfigures the forms of access, use, and appropriation of these infrastructures in the territory.

Final considerations

The logic of converting airport infrastructure in Brazil—especially those with greater centrality in the urban network—into aeroshoppings is underway. This process has promoted significant restructuring in commercial aviation, associated with the financialization of the sector and the expansion of revenue maximization strategies. Airport concessions, which began in the last decade, have accelerated the multifunctionalization of terminals, driven by the entry of foreign operators that had already incorporated these practices. These agents began to influence the redirection of flows and the forms of use of the airport site, contributing to the transformation of airports into spaces of consumption and services, bringing them closer to the airport city model. However, in the Brazilian context, this process occurs in a partial and selective manner, configuring itself more as a strategy of territorial accumulation than as a fully integrated model of urban-airport development.

The transformation of airports into commercial centers reconfigures circulation patterns and contributes to the reorganization of urban centralities. Its effects manifest not only in the immediate hinterland, but also on broader regional scales, influencing passenger catchment areas. At the local level, the induction of investments in the vicinity of airports is observed, often associated with land appreciation and real estate speculation processes.

The centralization of investments and the concentration of flights in a few airports reinforce inequalities in the provision of air services in Brazil (Rodrigues, 2024). The hub and spoke system intensifies competitiveness among airports and increases interdependence in relation to a restricted number of infrastructures, resulting in a more hierarchical and selective air network, with direct impacts on territorial integration.

The incorporation of practices typical of shopping centers within airports reinforces the selectivity of these spaces, both in terms of accessibility and the costs of the services offered. Airport malls are establishing themselves as sites of competition for commercial activities and consumption flows, while simultaneously increasing pressure on urban infrastructure, especially regarding mobility and access.

From an institutional perspective, the observed results indicate the need for greater coordination between the State and private agents in the management of these infrastructures, especially considering their strategic nature for territorial integration. The current configuration, marked by the strong presence of international operators, highlights limits in the state's coordination capacity and raises questions about the governance and control of essential assets. In this scenario, INFRAERO's recent trajectory—with a reduction in its direct participation in the management of major airports—illustrates the reconfiguration of the State's role in the sector.

The aeroshopping expresses one of the main transformations of the contemporary airport: the consolidation of a multifunctional infrastructure, guided by the logic of consumption and accumulation, but still marked by selectivity and inequality of access. The expansion of this model contributes to the redirection of flows, the redefinition of centralities, and the reorganization of territorial hierarchies, generating urban and regional impacts that, in many cases, tend to deepen already existing asymmetries.

The predominance of the hub system can increase distances, travel times, and travel costs on certain routes, especially given the fragility of regional aviation. The limited intermodal integration—involving rail, road, and waterway systems—reinforces these obstacles, highlighting the need for public policies aimed at the coordination of the different transport modes.

The Brazilian case reveals, simultaneously, the potentialities and contradictions of this model: on one hand, the modernization and expansion of commercial activities at airports; on the other, the persistence and, in some cases, the deepening of territorial inequalities, resulting from the way these processes are conducted. In this sense, the aeroshopping not only ceases to

occupy a secondary position in the organization of the air sector, but asserts itself as a central element in the corporate use of the territory, subordinated to global logics of accumulation.

REFERENCES

AGÊNCIA NACIONAL DA AVIAÇÃO CIVIL (ANAC). Dados e Estatísticas. **Gov.Br**, [s.d]. Available at: https://www.gov.br/anac/pt-br/assuntos/dados-e-estatisticas. Accessed in: 03 Feb. 2026.

ARROYO, Maria M. Circuitos espaciais produtivos e círculos de cooperação: uma contribuição à análise da rede urbana. **Revista Brasileira de Estudos Urbanos e Regionais**, [*S. l.*], v. 17, n. 2, p. 11-28, 2015.

BANCO NACIONAL DO DESENVOLVIMENTO (BNDES). BNDES aprova R$ 376 milhões à Concessionária do Aeroporto Internacional de Florianópolis. **BNDES**, Rio de Janeiro, 3 dez. 2018. Available at: https://www.bndes.gov.br/wps/portal/site/home/imprensa/noticias/conteudo/bndes-aprova-r376-milhoes-a-concessionaria-do-aeroporto-internacional-de-florianopolis. Accessed in: 03 Feb. 2026.

BRASIL. Ministério de Portos e Aeriportos (MPor). Aeroporto Internacional de Guarulhos tem novo plano de investimentos no valor de R$ 2,5 bilhões. **Gov.Br**, 11 dez. 2025. Available at: https://web.archive.org/web/20251212005328/https://www.gov.br/portos-e-aeroportos/pt-br/assuntos/noticias/2025/12/aeroporto-internacional-de-guarulhos-tem-novo-plano-de-investimentos-no-valor-de-r-2-5-bilhoes. Accessed in: 5 Aug. 2026.

CORRÊA, Roberto L. **A rede urbana**. São Paulo: Ática, 1987.

FREATHY, Paul; O'CONNELL, Fergus. Planning for profit: commercial strategies at airports. **Journal of Air Transport Management**, [*S. l.*], v. 32, n. 6, p. 587-597, 1999.

GALA, Paulo. Quem realmente controla a energia, os aeroportos e os portos do Brasil? A verdade surpreendente sobre a "privatização" no país. **PauloGala.com.br**, 14 dez. 2025. Available at: https://www.paulogala.com.br/quem-realmente-controla-a-energia-os-aeroportos-e-os-portos-do-brasil-a-verdade-surpreendente-sobre-a-privatizacao-no-pais/. Accessed in: 29 Dez. 2025.

GRAHAM, Anne. **Managing airports**: an international perspective. 4. ed. London: Routledge, 2013.

INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA (IBGE). **Redes e fluxos do território**: ligações aéreas (2019-2020). Rio de Janeiro: IBGE, 2021. Available at: https://biblioteca.ibge.gov.br/visualizacao/livros/liv101899.pdf. Accessed in: 5 Aug. 2026.

ISON, Stephen; FRANCIS, Graham; HUMPHREYS, Iona; RYE, Tom. Airport retail: a study of airport shopping centers. **International Journal of Retail & Distribution Management**, [*S. l.*], v. 39, n. 6, p. 416-430, 2011.

HARVEY, David. **O novo imperialismo**. São Paulo: Edições Loyola, 2005.

KARAGKOUNI, Aristi. Airport Retail Market Power: A Performance Assessment Framework on Business Success and Regional Retail Market Characteristics. **Encyclopedia**, [*S. l.*], v. 5, n. 2, p. 66, 2025. DOI: 10.3390/encyclopedia5020066.

KASARDA, John D. Airport cities and the aerotropolis: new planning models. **Airport Management**, [*S. l.*], v. 1, n. 1, p. 1-23, 2007.

KASARDA, John D.; LINDSAY, Greg. **Aerotropolis**: The Way We'll Live Next. New York: Farrar, Straus and Giroux, 2011.

PULS, René. **Retail Concessions at European Airports**: Commercial Strategies to Improve Non-Aeronautical Revenue from Leisure Travelers. 2015. 131p. Thesis (Doctor of Business Administration) – Walden University, Minneapolis, 2015. Available at: https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=3021&context=dissertations. Accessed in: 10 Dec. 2025.

PULS, René; LENTZ, Cheryl. Retail concessions at European airports: Commercial strategies to improve non-aeronautical revenue from leisure travelers. **Journal of Airport Management**, [*S. l.*], v. 12, n. 1, p. 1-17, 2018. DOI: 10.1016/j.jairtraman.2018.04.010.

RODRIGUES, Lucas A. Transporte aéreo de passageiros no Brasil: acessibilidade e intermodalidade. *In*: XX AIR TRANSPORTATION SYMPOSIUM, 2023, Joinville. **Anais** [...]. Joinville: UFSC, 2023. p. 223-232.

RODRIGUES, Lucas Azeredo. **Transporte aéreo de passageiros no Brasil**: dinâmicas regionais e estratégias logísticas. Orientador: Márcio Rogério Silveira. 2024. 398 f. Tese (Doutorado em Geografia) – Universidade Federal de Santa Catarina, Florianópolis, 2024.

SANTOS, Milton. **A natureza do espaço**: técnica e tempo, razão e emoção. São Paulo: Edusp, 2017

SANTOS, Milton. **Metamorfoses do espaço habitado**. São Paulo: Edusp, 2014.

SHIN, Taejin; ROH, Taewoo. Impact of non-aeronautical revenues on airport landing charge in global airports. **Transportation Research Record**, [*S. l.*], v. 2675, n. 10, p. 667-677, 2021. DOI: 10.1177/03611981211012423.

SILVEIRA, Márcio Rogério. Geografia da circulação, transportes e logística: construção epistemológica e perspectivas. *In*: SILVEIRA, Márcio Rogério. (org.). **Circulação, transportes e logística**: diferentes perspectivas. São Paulo: Outras Expressões, 2011. p. 21-68.

SILVEIRA, Márcio Rogério. A competitividade territorial: alguns elementos para discussão. **Revista do Programa de Pós-Graduação em Geografia da UFGD**, Dourados, v. 12, n. 24, p. 1-20, 2020. DOI: 10.30612/el.v11i21.12048.

SILVEIRA, Márcio R. Fluidez, transporte e logística como elementos fundamentais para a competitividade territorial. **Textos para Discussão Labcit/Gedri**, [*S. l.*], v. 6, p. 16-39, 2025. Available at: https://labcit.ufsc.br/files/2025/03/td-v6-n1-art01.pdf. Accessed in: 10 Dec. 2025.

SILVEIRA, Márcio R.; RODRIGUES, Lucas A. Reestruturação do transporte aéreo de passageiros em Santa Catarina: da aviação regional para o sistema de hub. **GEOUSP Espaço e Tempo (Online)**, São Paulo, v. 24, n. 3, p. 444-467, 2021. 10.11606/issn.2179-0892.geousp.2020.173405.

CRediT Author Statement

- **Acknowledgements**: The authors thank the institutions responsible for producing and making available the databases, documents, and information used in this research.
- **Funding**: This research received financial support from the National Council for Scientific and Technological Development (CNPq), through the project "Transport and Logistics Systems and Their Roles in Territorial Competitiveness in Brazil in the First Two Decades of the 21st Century," under CNPq/MCTI/FNDCT Call No. 18/2021.
- **Conflicts of interest**: The authors declare that they have no conflict of interest.
- **Ethical approval**: As the study exclusively used secondary data, institutional documents, and publicly available information, without the direct participation of human subjects or the use of identifiable personal data, it did not require submission to a Research Ethics Committee.
- **Data and material availability**: The data used in this research were obtained from public databases and are referenced throughout the manuscript. The tables, systematizations, and other materials produced by the authors can be made available upon request.
- **Authors' contributions**: Lucas Azeredo Rodrigues contributed to the conception of the research, definition of the theoretical and methodological framework, data collection and analysis, preparation of graphical and cartographic representations, and manuscript writing. Márcio Rogério Silveira contributed to the conception and development of the research, discussion of the results, critical review, and refinement of the manuscript. Both authors participated in the review of the final version and approved the manuscript for submission for publication.