



Esta obra está licenciada com uma Licença Creative Commons Atribuição-Não Comercial-Compártilha Igual 4.0 Internacional.

Priscila Freitas da Silva

Universidade Federal Fluminense

priscilafreitasilva@id.uff.br

Leandro Bruno Santos

Universidade Federal Fluminense

leandrob Bruno Santos@id.uff.br

Received:

06/02/2023

Accepted:

08/23/2023

Available online:

12/01/2023

Collective public transport and unequal access to the city: a study of the districts of the Far North region of Campos dos Goytacazes, Rio de Janeiro, Brazil

Transporte público coletivo e desigualdade de acesso à cidade: estudo dos distritos do extremo norte de Campos dos Goytacazes, Rio de Janeiro, Brasil

El transporte público colectivo y la desigualdad en el acceso a la ciudad: estudio de los distritos del extremo norte de Campos dos Goytacazes, Rio de Janeiro, Brasil

Transports publics collectifs et inégalité d'accès à la ville : étude des districts de l'extrême-nord des Campos dos Goytacazes, Rio de Janeiro, Brésil

ABSTRACT

The issue of urban mobility and accessibility is particularly important in a city with such a fragmented territorial organization as Campos dos Goytacazes-RJ, where public transport is an essential service. This article analyses the access to Campos dos Goytacazes for the inhabitants of the northernmost part of the municipality. Qualitative and quantitative methods were used to carry out this analysis, and the results of this study highlight the need for an effective urban transport and accessibility policy, taking into account the unique territorial organization of the municipality of Campos dos Goytacazes.

KEYWORDS: public transport; accessibility; Campos dos Goytacazes; Rio de Janeiro; Brazil.

RESUMO

A discussão da mobilidade e acessibilidade urbana é de extrema importância, sobretudo em um município com uma organização territorial fragmentada como é o caso de Campos dos Goytacazes-RJ, onde é imprescindível a oferta de transporte público coletivo. Este artigo analisa como se dá o acesso ao distrito-sede de Campos dos Goytacazes pelos moradores dos distritos do extremo norte do município. Para realizar tal análise, foram utilizadas metodologias qualitativas e quantitativas. O resultado da pesquisa aponta para a necessidade de se pensar no planejamento de políticas municipais de mobilidade e acessibilidade urbanas efetivas, levando em conta as especificidades da organização territorial do município de Campos dos Goytacazes.

PALAVRAS-CHAVE: transporte público; acessibilidade; Campos dos Goytacazes; Rio de Janeiro; Brasil.

RESUMEN

La discusión acerca de la movilidad y la accesibilidad urbana es muy importante, especialmente en municipios con una organización

territorial fragmentada tal como Campos dos Goytacazes-RJ, donde la oferta de transporte público colectivo es imprescindible. Este artículo analiza cómo los habitantes de los distritos del extremo norte del municipio acceden al distrito-sede de Campos dos Goytacazes. Para realizar este análisis, se utilizaron metodologías cualitativas y cuantitativas. El resultado de la investigación señala la necesidad de incluir en el sistema de planeación políticas públicas municipales de movilidad y accesibilidad urbana que sean efectivas, considerando las especificidades de la organización territorial del municipio de Campos dos Goytacazes.

PALABRAS-CLAVE: transporte público; accesibilidad; Campos dos Goytacazes; Rio de Janeiro; Brasil.

RÉSUMÉ

La discussion sur la mobilité et l'accessibilité urbaine est extrêmement importante, surtout dans un espace qui possède une organisation territoriale fragmentée comme Campos dos Goytacazes dans l'état de Rio de Janeiro au Brésil, où l'offre de transports publics collectifs est indispensable. Cet article examine comment se fait l'accès au quartier du centre-ville de Campos dos Goytacazes par les habitants des districts de l'extrême nord de la commune. Pour effectuer une telle analyse, des méthodologies qualitatives et quantitatives ont été utilisées. Le résultat de la recherche souligne la nécessité de réfléchir à la planification de politiques municipales de mobilité et d'accessibilité urbaines efficaces, en tenant compte des spécificités de l'organisation territoriale de la commune de Campos dos Goytacazes.

MOTS-CLÉS : transports en commun ; accessibilité ; Campos dos Goytacazes ; Rio de Janeiro ; Brésil.



Revista do Programa de
Pós-Graduação em Geografia e
do Departamento de Geografia
da UFES

Volume 3, no. 37
July-December, 2023
ISSN: 2175-3709

INTRODUCTION

The issue of urban mobility and accessibility is particularly important in a city with such a fragmented territorial organization as Campos dos Goytacazes-RJ, where public transport is an essential service. By raising this issue, we are highlighting the problems that surround us daily, because, for those who live in districts or localities far from the city center, access to the city is largely using public transport, which has an essential and fundamental role to play in the lives of these citizens.

According to the Cities Statute (Law 10.257/2001), every city with more than 500,000 inhabitants is legally obliged to draw up an integrated urban transport plan, in line with its main urban plan or annex to it as the National Urban Mobility Policy (PNMU), which was introduced by the federal government in 2012 under Law 12.587, which requires municipalities with more than 20,000 inhabitants to draw up urban mobility plans to provide public transport in line with the rapid growth of cities, prioritizing the use of non-motorized means of transport and public transport services.

The role of public transport is to enable people to access essential services and activities such as basic healthcare and education, but we also need to think about making these spaces more democratic. There must also be ways to ensure that people can enjoy these public spaces as places of interaction where they can build relationships and have

access to activities such as the theatre, cinema, parks, etc. The spatial relationships developed through the use of public transport are important tools for the reproduction of the labor force (SILVEIRA; COCCO, 2013).

The big city is the place most likely to attract and retain people living in poverty (SANTOS, 1993) and those excluded from basic services such as health and education. The people most affected by this exclusion are those from the peripheries and places further away from urban centers and hubs. It is, therefore, necessary to think about a fairer and more egalitarian society, especially in terms of basic services for the most disadvantaged populations, which implies the provision of public transport; whenever it is not properly provided, it becomes inaccessible to those who have been most excluded.

The public transport network and spatial interactions in Campos dos Goytacazes reflect not only the intentions of economic and political actors but also the inherited social inertia of the sugarcane era, where there is a notable centrality in certain places, followed by a logic of interests and accumulation that accentuates socio-spatial inequalities and hinders urban accessibility and mobility, especially for those living in areas further away from the historic center.

This article aims to analyze how the inhabitants of the northern neighborhoods of Campos dos Goytacazes have access to

the city center. The scope of the analysis is the processes of urban accessibility and mobility, whether provided by public transport or not. We hope to contribute to the process of thinking about how mobility and accessibility manifest themselves in this medium-sized city, which represents a complex and distinctive issue (CORRÊA, 2007), taking into account the specific characteristics of the neighborhoods in the territorial formation of Campos dos Goytacazes.

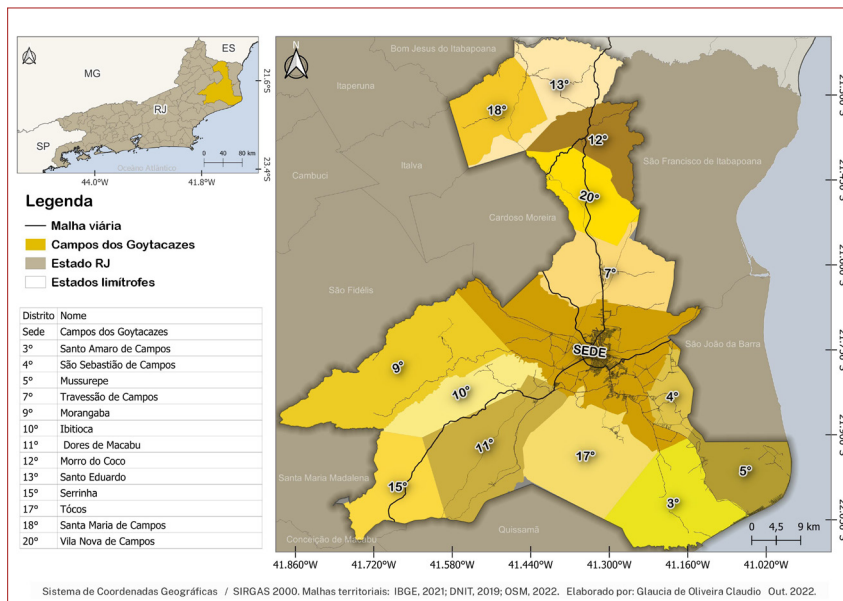
TERRITORIAL FORMATION AND FRAGMENTATION OF THE SPATIAL ORGANIZATION IN CAMPOS DOS GOYTACAZES

The process of territorial formation in Campos dos Goytacazes involves the spatial organization of population groups (districts and locations). Founded on 28 March 1835, Campos dos Goytacazes covers an area of

4,032 km², making it the largest municipality in the State of Rio de Janeiro. In the 2010 census, the municipality had a population of 463,731 inhabitants in 14 districts - IBGE - which, to some extent, surpassed many municipalities in the north and northwest of Rio de Janeiro (Figure 1). The total population of the northern districts in the 2010 Census, for example, totaled 19,809 inhabitants.

The cultivation of sugar cane and the way it was spatially organized had a profound impact on the fragmentation of rural areas, being one of the reasons for the creation of different towns and districts far from the city center (SILVA, 2005). The creation of the northern districts of Santa Maria, Santo Eduardo, Morro do Coco, and Vila Nova is part of this process, as the consolidation of several mills in this vast area has led to the settlement of areas previously devoted to cattle farming.

Figure 1. The districts of Campos dos Goytacazes, Rio de Janeiro



Source: IBGE, 2021; DNIT, 2019; OMS, 2022.

GEOGRAFARES

Revista do Programa de Pós-Graduação em Geografia e do Departamento de Geografia da UFES

Volume 3, no. 37
July-December, 2023
ISSN: 2175-3709

By visiting the area and listening to the stories of some of its inhabitants, it is possible to see how sugar cane played an important role in the creation of the districts, which were organized in a fragmented way throughout the territory, according to the consolidation of the different mills, which took advantage of the most favorable soils for growing the crop. The fragmented territorial organization of Campos dos Goytacazes is part of a process of socio-spatial differentiation (CORRÊA, 2007), in that the work of state and public agents has created settlements far from the central core, while the permanent settlements, such as basic services, means of transport and routes of movement, have been concentrated in the central district.

With the subsequent changes brought about by the decline of the sugar cane industry in the 1960s, the economic landscape of Campos dos Goytacazes was transformed by the arrival of the oil and gas industry (P&G),

which brought about changes both inter- and intra-urban. Macaé and, to a lesser extent, Campos dos Goytacazes have stood out in this new scenario.

Municipalities on the outskirts of wealthy municipalities in the north of Rio de Janeiro are doubly penalized: i) by the decline of old economic activities linked to sugar cane and coffee, which have not been replaced by other economic activities capable of meeting labor demand; and ii) by the polarization effect of wealthy municipalities, which makes it difficult to invest outside them (CRUZ, 2007, p. 45).

See Table 1, in 1991 the population of Campos dos Goytacazes was highly concentrated in urban areas, with a consequent decline in the rural population. Instead, the exodus is part of a wider process of migration from rural to urban areas, reflecting both urbanization and the conservative modernization of the countryside. In the case of Campos dos Goytacazes, the collapse of the sugar and alcohol mills has fueled this huge influx of people into the city, most of them in search of work.

Table 1. Population living in Campos dos Goytacazes-RJ (1970-2010)

Territorial level	1970		1980		1991		2000		2010	
	Total	%	Total	%	Total	%	Total	%	Total	%
Urban	176.082	55,23	203.358	58,35	324.667	83,44	364.177	89,48	418.725	90,29
Rural	142.724	44,77	145.184	41,65	64.442	16,56	42.812	10,52	45.006	45,006
Total	318.806	100	348.542	100	389.109	100	406.989	100	463.731	100

Source: Analyses based on IBGE - Demographic Census

The scenario assumes a strong rural exodus in the period 1980-1991. It was not until the late 1990s that the community received its first oil royalties. With the exponential growth in oil exploration, the municipality has seen a significant increase in royalties and special contributions (NETO; NETO, 2006). These shifts in

local economic dynamics have increased the concentration and distribution of goods and services in the city center and exacerbated the problem of access for residents in outlying areas.

In recent decades, Campos dos Goytacazes has experienced strong population growth, especially in the urban area,

which has led to an increase in the need for people living in the neighborhoods and districts to commute to the central area. In this sense, it is imperative to think about an urban mobility policy that provides the necessary quantity and quality of public transport infrastructure in the districts of the municipality, given the enormous territorial fragmentation and the unequal distribution of fixed assets.

Campos dos Goytacazes has a high concentration of goods, services, and opportunities in its central area, so the availability of transport is necessary to provide this mobility. All commuting in the municipality must be done by private bus companies and alternative transport such as vans. The concentration of these services in the central area means that decisions on the organization and distribution of the public transport network are coordinated according to the interests of the state and business owners, as they act simultaneously and jointly to shape the area according to their intentions (BALTHAZAR, 2017).

URBAN SPACE AND PUBLIC TRANSPORT IN CAMPOS DOS GOYTACAZES

Campos dos Goytacazes has a high concentration of different services and activities in the central area, especially in the historic and commercial center, and in adjacent neighborhoods such as Pelinca, Jardim Carioca, etc. Some of the most notable examples are the concentration of supermarket chains, the presence

of public and private universities, etc. The city is also home to several hospitals and specialized healthcare clinics offering medium and high-end health services.

All this concentration meets the needs of people from the surrounding municipalities, as well as those from other states such as Espírito Santo, which means that there is a growing need for efficient mobility throughout the municipality, as the need for movement and commuting increases. Nevertheless, public transport is selective, being concentrated in certain areas of the city, such as the Roberto Silveira bus station and the Gil de Góis street in the city center, while there is no adequate service in the outlying areas, such as the north. The above elements only reinforce the idea that urban space is both unequal and articulated, as the selective concentration of permanent residents means that they have to travel from residential areas to work, to shop, to access public services, etc. In this respect, Corrêa (1994, p. 8) has already warned that “urban space is both fragmented and articulated: each of its parts maintains spatial relations with others, albeit of varying intensity”. This makes it all the more important to take into account places of residence, flows (consumption, work, access to public services) and the role played by transport.

Based on this fragmented and segmented idea of urban space, it is possible to understand it as an area where relationships are developed and experienced by individuals, and these rela-



Revista do Programa de
Pós-Graduação em Geografia e
do Departamento de Geografia
da UFES

Volume 3, no. 37
July-December, 2023
ISSN: 2175-3709

tionships are full of conflicts since social inequalities are produced in urban space, broadly speaking, in terms of access to the main services provided within it. Questions about essential services, including access to them, and the type of resources used are extremely important, given that social space is a reflection of the people who experience the logic of political capitalist organization, which in its concrete form causes segregation that highlights different social classes. As Corrêa (1994, p. 8) argues, the spatial organization “[...] is a reflection of both actions that take place in the present and those that took place in the past and left their mark on the spatial forces of today”.

Exclusion of part of the population from a particular place can occur when people do not have access to essential services, which are concentrated mainly in the center and in commercial centers. This is a problem that needs special attention, and it's an urgent priority to find the means to ensure that this process can be implemented in places far from the centers. Public transport provides access to the city. Mass public transport is an important tool when offered correctly. Silveira; Cocco (2013, p. 1) describe how public transport “[...] is responsible for the production and extended social reproduction of the labor force and its productivity.” However, there are many challenges to this service, partly due to its inadequate provision and the precarious conditions of urban mobility and accessibility.

In the city of Campos dos Goytacazes the public transport system covers a wide range of daily journeys. As for public bus transport, it selectively serves the closest neighborhoods in the central area, but it is not without its problems, such as overcrowding, precarious bus infrastructure and waiting areas, unstable timetables, and the fact that the companies responsible for a particular line are invisible to the public. These problems were noted during the field observation carried out at strategic points in the Roberto Silveira bus station on 28 March. There are also several alternative transport options, with vans or minibuses providing extensive daily services to and from the capital and other localities.

In recent years we have seen the development and implementation of local authority mobility policies, but many of these have been interrupted or discontinued. Mamani (2017) points out that since Rosinha Garotinho took over as city manager, there have been changes in the way transport has been structured. This policy began in 2009 when Rosinha came to power. The policy was published under Legislative Decree No. 8577 of 26 June 2014 and aims to create a transport model that meets public demand and is in line with the city's master plan, particularly in terms of promoting universal mobility and accessibility.

To integrate the area (CAMPOS DOS GOYTACAZES, 2008), a program called ‘Campos Cidadão’ (Campos Citizen) was adopted, which allowed for a gre-

ater influx into the neighborhood by enabling low-income people to move around more frequently and access more activities and services in the central area. The City Council would pass on the amount corresponding to the difference between the fare and the amount paid by the user, which, as Araujo (2012, p. 49) puts it, '[...] was the equivalent of the difference between the price paid by the user and the cost of the fare (currently R\$1.60)'. But this policy was also riddled with conflict and constant shutdowns.

Another measure related to the planning, implementation, and evaluation of the urban mobility policy came from Decree No. 335/2019, which established the integration of fares between the lines that cross the central area with the conventional bus systems and the bus lines that transfer passengers from the districts outside the central area with vans and minibuses. The project was supported by the population, but the plans of the Municipal Institute of Traffic and Transport (IMTT) were never implemented, and the problems of overcrowding and precarious infrastructure remained the same.

The decree's articles stipulate that: users should travel within a maximum of 120 (one hundred and twenty) minutes between boarding at one point/modal and boarding at another type of sector; to access the R\$ 2.75 ticket, users would have to obtain the Electronic Ticket Card (Rio Card); with this card, users would only pay for the ticket in one type of sector and would be able to use

buses against vans and minibuses and vice versa. The program was also equipped with an app called Mobi Campos, which monitors public transport in the city.

But the initiative has been suspended nothing has been done about it, apart from the removal of vans from the central area as they have been given unsafe temporary places in tents, flexible timetables and integration between different modes of transport, as well as a lack of supervision, security, and timetables after 7 pm. From March 21, 2022, the cost of an electronic ticket card was raised from R\$2.75 to R\$3.50. During this period, all the problems were exacerbated, mainly due to the return of several activities after the pandemic: the increasingly crowded bus stops during rush hours, the overcrowded vans, the large number of students and elderly people waiting at bus stops, etc.

During the election campaign, the current mayor, Wladimir Garotinho, often mentioned the idea of bringing the vans back to the city center. This was a self-serving political speech to gain the support of a particular category of workers, but unfortunately, the service provided has not changed. There is overcrowding, precarious infrastructure, high ticket prices while the funds are not paid - which happens all the time - and the inevitable strikes, along with the lack of night services. All of this is now the reality.

On 21 March 2022, a Sustainable Urban Mobility Plan was presented at City Hall, with the



Revista do Programa de
Pós-Graduação em Geografia e
do Departamento de Geografia
da UFES

Volume 3, no. 37
July-December, 2023
ISSN: 2175-3709

PlanMobs' "general objective being to incorporate the principles of sustainable mobility by focusing on public transport and non-motorized transport through the implementation of guidelines to promote a safer, more efficient and accessible transport system". Although this mobility plan has been approved, it is hoped that it will incorporate the guidelines of the National Urban Mobility Policy, i.e., that it will go beyond technical mobility based on traffic fluidity and consider the social issues of those seeking access to the city. So far, there has been no change in the service or organization of public transport in the northern districts of Campos dos Goytacazes.

MOBILITY AND URBAN ACCESSIBILITY

The changes triggered by the progress of industrialization - the intensification of new economic functions and new socio-spatial patterns - have led to a reconfiguration of urban space and an increasing need for people to move around freely, highlighting the importance of urban accessibility and mobility (CARDOSO, 2007, p. 2). Furthermore, the value of an individual is given by the space he or she occupies (SANTOS, 2007), as it relates to his or her socioeconomic reality and his or her condition and capacity to occupy spaces. The value of an individual is in flux and may change depending on several reasons. Santos (2007) sees the issue of differential accessibility as central to this discussion, as it involves time, frequency, price,

etc.

Vasconcellos (2001, p. 40) points out that urban mobility can be understood as the ability to move around, in terms of physical and economic circumstances. Urban mobility is thus about moving people and goods around a place. In this respect, people with limited economic means or those who commute long distances tend to have worse conditions for urban mobility. The most vulnerable people in large urban centers are currently those who have to use public transport to commute for various purposes such as work, study, leisure, etc.

Mobility is a social product embedded in space, which is also a social production (LEFEBVRE, 1991). This means that we are faced with inequalities in the use of and access to urban space. In this sense, Araújo (2012, p. 16) states that mobility

[...] goes beyond the definitions of commuting and the use of means of transport, as it also translates the relationship of individuals with the space, objects, and resources used for their journey and with other individuals (ARAÚJO, 2012, p. 16).

Vasconcellos (2001, p. 40) states that mobility "in isolation is meaningless for the evaluation of transport policies, since it does not define why and how people use (or stop using) it". From this observation, it is necessary to think about the development of public policies that take into account mobility and accessibility as a whole, as they relate to the socio-economic aspects of the people involved.

In other words, accessibility is the equalization of opportunities

to access all that life has to offer education, work, leisure, social and economic well-being, and, in short, the pursuit of what are universal human rights. Lessa, Lobo, and Cardoso (2019) and their extensive literature review highlight that the concept of accessibility is both complex and difficult to measure, which is why it is widely used and has led to several misconceptions. For them, “accessibility is assessed by the spatial distribution of the destination, the ease of reaching it, and the quality and characteristics of the activities encountered” (LESSA; LOBO; CARDOSO, 2019, p. 2). The transport network would also affect access to activities.

The infrastructure-based measures are based on the characteristics of the road and transport network and are not sensitive to the location of activities in space. In this respect, accessibility can be assessed as the combined effect of the weight of opportunities and the impedance of displacements (LESSA; LOBO; CARDOSO, 2019, p. 2).

A study carried out by FGV (2014, p. 7) identifies the main problems of public transport systems as being insecurity, unplanned behavior, lack of transparency and low levels of public and private investment. For daily commuting and the movement of goods, public transport is an important factor. A transport policy that is inclusive and integrated into the urban planning process is needed to effectively reconcile mobility and accessibility. This is only possible through the creation of public policies aimed at improving the quality of public transport and the popula-

tion’s access to facilities for mass use and areas where flows are concentrated and have a central location (ARAÚJO, 2012).

Vasconcellos (2001, p. 61) describes the actors involved in the transport decision-making process. The State plays an essential role, working together with the executive, State experts, consultants, politicians, and their interests, those affected by the organization of transport networks, activities that may be affected by the decisions of agents, both public and private operators linked to the transport system, trade unions working in transport systems, the media, and social and environmental organizations. These actors are directly responsible for decisions on public transport policy and studying them will reveal different intentions and conflicts. There is not the same level of active participation in the planning and decision-making process among these different actors, mainly because the distribution of power and influence among them is different.

Cardoso (2007) points to the divergence between the progress of urbanization and the (in)competence of the state as the representative body for the planning and implementation of urban mobility policies. Cardoso (2007, p. 8) sees the lack of urban accessibility as a result of several factors, including inadequate installed capacity; inefficient operation of services; and poor urban land use and occupation patterns. These key factors are responsible for the



Revista do Programa de
Pós-Graduação em Geografia e
do Departamento de Geografia
da UFES

Volume 3, no. 37
July-December, 2023
ISSN: 2175-3709

social problem of the vulnerability of the population, which relies solely on public transport to access all the other services and activities organized in the urban space. If public transport is inadequate, it will worsen the accessibility of the city.

In the city of Campos dos Goytacazes, there is a very unequal level of accessibility and mobility, which is reflected in the time it takes to travel between localities/neighborhoods and the central area of the main district, due to the low frequency of this service and the prices charged. Intercity bus services to districts in the far north, with a single fare from start to finish, are just one example.

In order to make commuting more efficient, it is essential that local transport policies ensure people's mobility and accessibility. These rights are guaranteed by federal laws (Statute of Cities and PNMU). Designing and implementing urban mobility and accessibility policies requires an understanding of how economic and social activities are spatially organized to identify where essential services are concentrated. We are then talking about spatial and territorial policies, rather than place and territory policies (COSTA, 1988; STEINBERGER, 2017). This means that we need to develop urban mobility and accessibility policies with the reality of all individuals in mind, rather than a utilitarian and technical vision that focuses solely on circulation and fluidity in urban space.

Silveira and Cocco (2010, p. 67) state that it is not only

about movement and dislocation in space, but also about the subjects' own relationships with the space and the objects arranged in it. Under the logic of capitalism, these forms of spatial interaction have taken on other purposes. This is also true of the transport networks in Campos dos Goytacazes, where there is a remarkable centralization in certain places, according to a logic of interest and accumulation that accentuates social, economic, and cultural inequalities, to the extent that it hinders accessibility and mobility, especially for those living in districts far from the main area.

Owing to the great territorial fragmentation, a reflection on urban mobility and accessibility in Campos dos Goytacazes requires consideration of commuting and circulation considering all the physical infrastructure that goes into bus stops and transportation, but it also involves the values of commuting as this is a whole social issue and a question of granted rights such as access to education and health.

MATERIALS AND METHODS

Moraes; Costa (1987) make a pertinent distinction between methods of interpretation and methods of research. The first relates to the way in which the world (phenomena) is structured (signified). "It is the systematic way of seeing reality, the logical and rational representation of one's understanding of the world and of life itself" (MORAES; COSTA, 1987, p.

27). Meanwhile, the second concerns the techniques used to carry out such studies. The choice of techniques is closely related to the operational problems of the research, the object to be analyzed, and the technical resources available. Venturi (2012) claims that this technique makes it possible to prove or disprove theories. In this way, method, theory, technique, and tools are different aspects of the same process of knowledge production.

This research adopts historical materialism as a method of philosophical interpretation, as there is a direct relationship between the subject and the object, which acts by interacting and being transformed (ANDRADE; SCHMIDT, 2015). This method was also used as the fieldwork process became indispensable to the researcher's commitment to the subject of this study. A systematic literature review was carried out to gather information and data selected on the basis of pre-established criteria, as this is a specific case study with a wide range of sources.

The research method uses qualitative and quantitative techniques, as the author Santos (2009, p. 120) points out, "the combination of different research techniques makes it possible to develop more accurate and interesting social research". The same author goes on to point out that the combination of techniques and research strategies is an element that "seems" to facilitate a more detailed and factual character than those carried out in isolation, using only a single approach.

The tools used to collect the data used both approaches, i.e., a single method (qualitative-quantitative) to understand the events and then later to analyze the data. As for the design of the instrument, we used multiple-choice and open-ended questionnaires with residents who are users of the public transport network in the far north of the municipality of Campos dos Goytacazes, as well as semi-structured interviews with government agencies (IMTT, Municipal Department of Urban Planning, Mobility and Environment). Data and information on outward and return journeys from the Far North districts were collected from the websites of bus and coach companies.

The responses were captured using a combination of techniques such as: pre-set alternative answers in the questionnaires, narrative texts, recordings of semi-structured interviews in the respective institutions, photographs of flows and fixed points (mainly in areas of concentration in the transport network), and the theoretical framework discussing the issue.

The criteria used to process these data were presented in the form of tables, graphs, maps, figures, and narrative texts, based on our field observations of the outward and return flows to the districts of the Far North, both according to where they live and the means of transport they use to get to the district of Campos dos Goytacazes. We have also prepared files of reading sheets to help guide readers and give them a better unders-



Revista do Programa de
Pós-Graduação em Geografia e
do Departamento de Geografia
da UFES

Volume 3, no. 37
July-December, 2023
ISSN: 2175-3709

tanding of our subject. Finally, we have integrated the qualitative-quantitative procedures using a theoretical and methodological framework in the data analysis and interpretation phase.

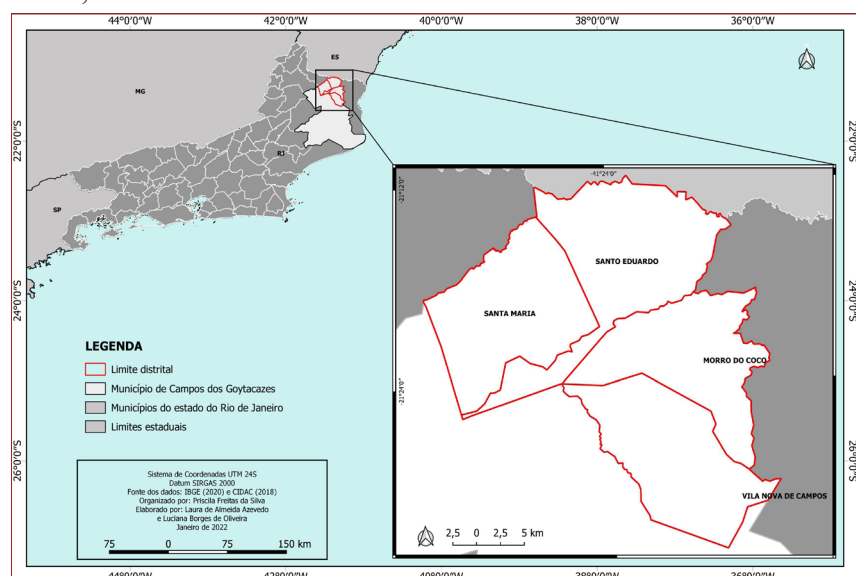
PUBLIC TRANSPORT AND ACCESS TO THE CITY IN THE FAR NORTHERN DISTRICTS OF CAMPOS DOS GOYTACAZES

The territorial formation of Campos dos Goytacazes is inextricably linked to the development of the sugar-alcohol industry, which led to the creation of towns and neighborhoods away from the central area. Its organization is linked to the activities of the old mills, almost all of which have now closed. The establishment of the mills was a factor in attracting a large number of people to work in this activity, creating and forming the districts that were gradually structured and organized by the territorial formation of the municipality over time (Figure 2).

The town of Santo Eduardo used to be called Morro do Coco, while the town of Morro do Coco used to be called Vila Nova. During the fieldwork, local people had noticed what was going on in the sugar cane mills. Older residents say they were involved in the development of this agricultural activity, and there is now a local sugar mill called “Usina de Santa Maria”.

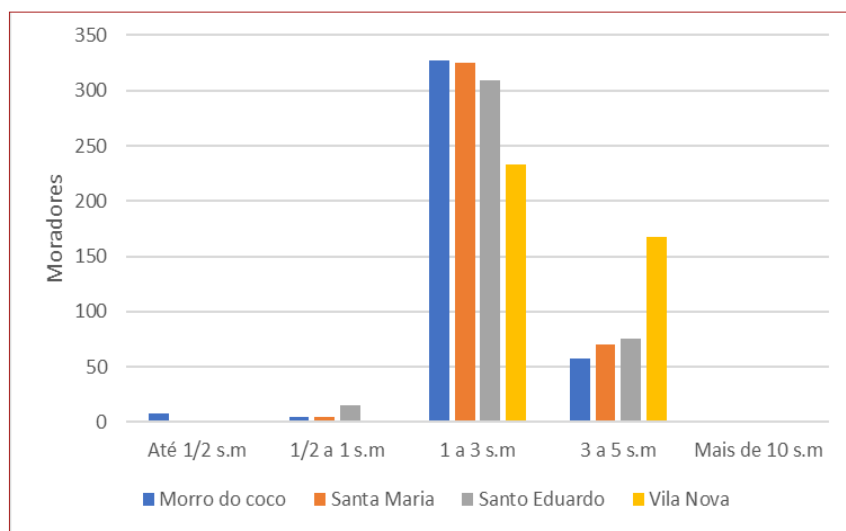
The districts of Morro do Coco, Santo Eduardo, Santa Maria de Campos and Vila Nova de Campos are respectively 46 km, 75.2 km, 69.5 km and 42 km away from the city center of Campos dos Goytacazes via the BR 101. 400 questionnaires were distributed to households in each district, as these are districts with a large number of households. Households without occupants who were using public transport at the time of the fieldwork were not included in the application of the questionnaire.

Figure 2. District locations in the far north of Campos dos Goytacazes, Rio de Janeiro



Source: IBGE, 2020; CIDAC, 2018.

Figure 3. The income of the residents interviewed in the far north districts of Campos dos Goytacazes in 2022



Source: Organized by the authors.

We chose certain days to administer the questionnaires, such as weekends, because they are more likely to be used by people who work, study or commute on a weekly basis. It was also an appropriate strategy as we were in the midst of the Covid-19 pandemic. For the sampling methodology and the administration of the questionnaires, we established the following procedure: in a given street with a certain number of houses, we would apply to one house and then skip two to achieve a proportional selection of the number of households and also to avoid concentrating the population sample. The respondents are mainly families with an income of between 1 and 3 and between 3 and 5 minimum monthly wages (Figure 3), which makes us wonder about the need for public transport to access activities and services in certain parts of the city, such as the historic and commercial center of Campos dos Goytacazes.

Access to work opportunities in the host city may also affect

their income. Many have found it difficult to apply for jobs precisely because of the problem of commuting, which makes it impossible to arrive on time, and there are also reports of how difficult it is to access primary and secondary education. In all of these districts, primary and secondary school students struggle to get around on a daily basis due to the lack of public buses. There have been several complaints about long queues and the refusal of student passes; in fact, many vans don't even stop in certain places for students. This situation has been exacerbated by the return of face-to-face teaching in the community.

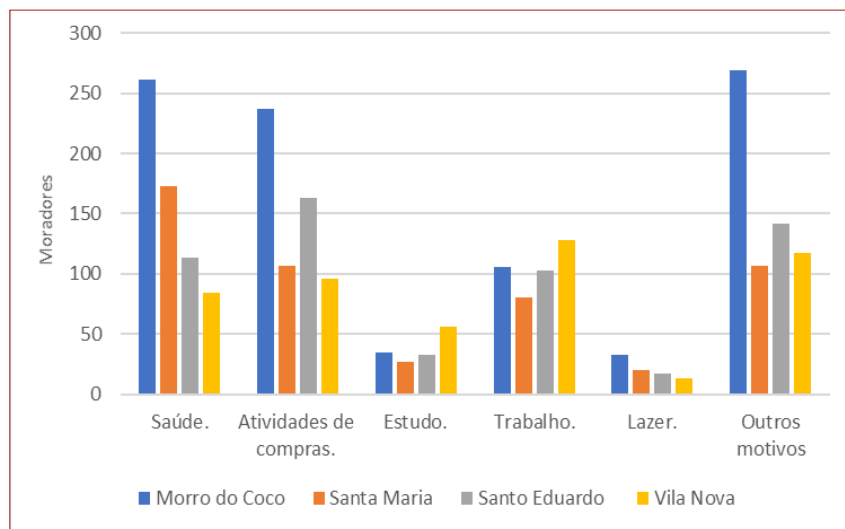
Activities used by residents of the districts include health services, shopping, education, work and many other reasons (Figure 4). These routes tend to vary by age group, with young people traveling to study, heads of households traveling to work or shop, and older people traveling to access the city's health services.



Revista do Programa de Pós-Graduação em Geografia e do Departamento de Geografia da UFES

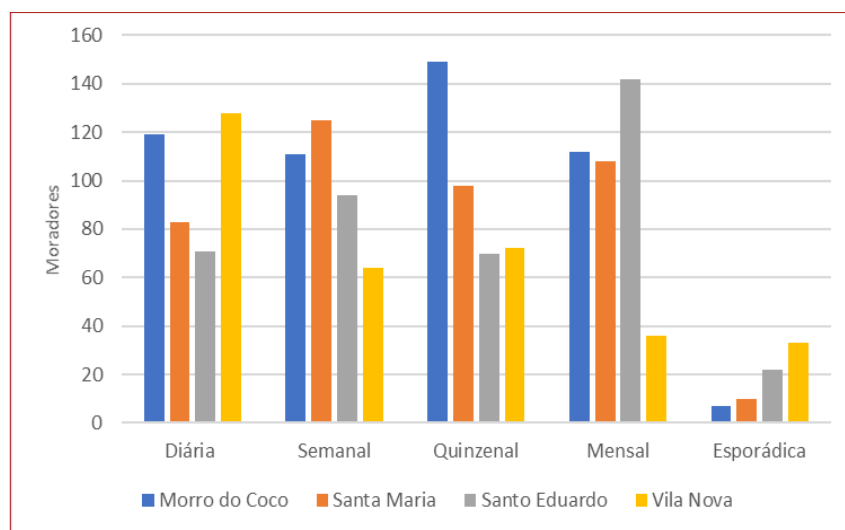
Volume 3, no. 37
July-December, 2023
ISSN: 2175-3709

Figure 4. Facilities and activities accessed by the residents of the Far North districts in the city of Campos dos Goytacazes



Source: Organized by the authors.

Figure 5. Commuting frequency of residents from the Far North districts to the city of Campos dos Goytacazes in 2022



Source: Organized by the authors.

In these neighborhoods, we can find a range of activities and facilities such as pharmacies, local supermarkets, basic health units, primary, secondary, and primary schools, SICOOB (credit cooperative), and CRAS (Social Assistance Reference Centre). But when it comes to access to certain services and activities, e.g. technical or higher education, specialized medical care, shopping in a particular supermarket

chain, banking services or simply some leisure activities - shopping malls, museums, theatres, parks, etc. - it is necessary to head to the city of Campos dos Goytacazes.

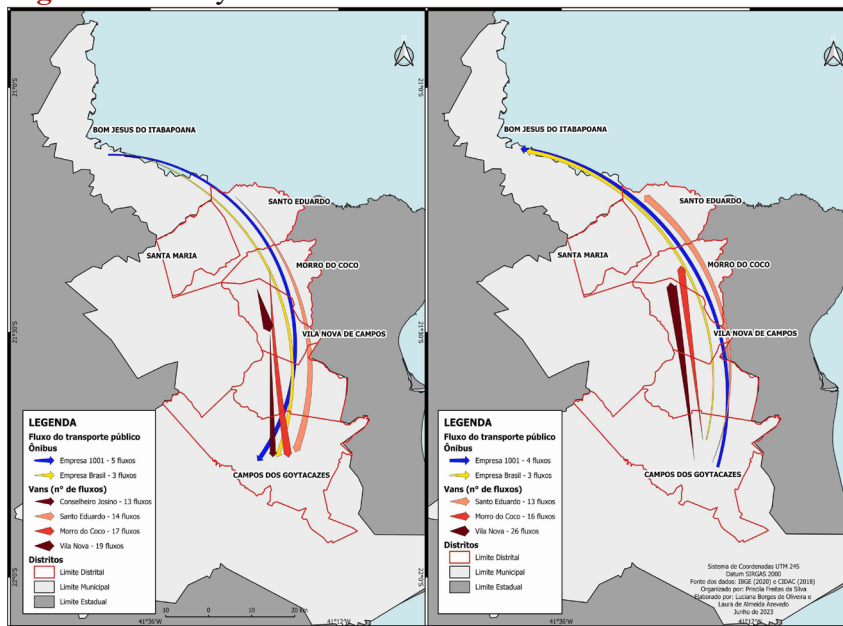
Commuting is mainly related to labor market flows. The numbers of those who travel to the city for work and those who commute daily are about the same (Figure 5). Students have now returned to face-to-face teaching and, as some courses are only offered in the

district where they live, they also have to commute. Some of the fieldwork was carried out during the pandemic, so this may have had some influence on these data.

The rest of the sample access the city on a weekly, fortnightly, and sporadic basis when they need to use commercial facilities and activities such as supermarkets, banks, and shops

in general. As noted in the section on reasons for accessing the city, there are few opportunities to travel to the city for leisure and entertainment. This means that in the city of Campos dos Goytacazes there is a degree of unequal access to everything. The most common means of transport to the city center are pick-up vans (Figure 6).

Figure 6. Weekly traffic flows - Far North districts vs. main district

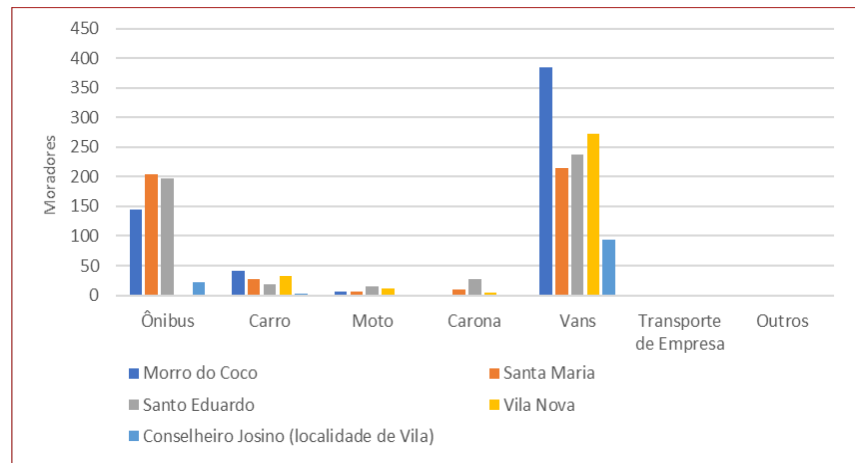


Source: IBGE, 2020; CIDAC, 2018.

The vans play an almost unique role in providing transport to remote areas, but there are many problems with their operation. These findings were acknowledged in the questionnaires and during the field trips. The testimonials are also a testament to the performance of public transport in Campos dos Goytacazes. The work of the vans is extremely important in these districts, as the public buses are intercity and the cost is high for those who need to travel to the main district every day, restricting their mobility. Other means of transport such as cars and motorbikes are less

popular (figure 7). However, this type of transport needs to be properly planned and its performance monitored to ensure the best level of quality, safety and stability. According to local media, there have been several problems between the permit holders - the van drivers - and the local authorities, the Urban Planning Secretariat and the IMTT, which have caused instability and disruption for users. The drivers stopped shortly after the start of the program, which was run by former mayor Rafael Diniz. As such, this matter has already been long internalized.

Figure 7. Transport modes most used by residents of the far north districts to access commercial outlets and services in the city of Campos dos Goytacazes in 2022



Source: Organized by the authors.

The riders held rallies at various points around the city and then went to the City Hall to try to start a dialogue with the former mayor, Rafael Diniz. The local government could not fulfil the subsidies and the concessionaires, who had invested in the new transport system, could not fulfil their budgets (VIGNERON; ALENCAR, 2019). There was also a demand for buses to run in districts and localities that were completely covered by alternative transport.

The Viu Online website (2021) provides an example of the current instability in the organization of the public transport system:

This Friday morning (17th), the inhabitants of the northern region of the municipality woke up without transport, after a court decision forced the removal of the vans operating on these routes, as reported live by journalist Roberto Barbosa in the Direto da Redação program, broadcast in Campos by D+ TV, channel 19 of VER TV.

In the absence of the vans, users are at the mercy of the intercity bus companies (1001 and Brazil), which charge extremely

high prices for single tickets. When transport users were asked about the weekend service, only 11 of the 1,600 respondents said they were satisfied with the service, describing it as “good”, while the rest described it as “poor” or “terrible”, complaining about a lack of services, reduced timetables and no fixed timetable. It was also noted that there is constant congestion on users’ journeys, which tends to occur at certain times, particularly in the morning when they travel to the main district - from 5.00 to 7.30am - and on their way back in the afternoon - from 4.30pm to 7.00pm. There are long gaps in the traffic, which explains the overcrowding at certain times of the day when there is no clear timetable, and everyone has to wait and queue in the open air.

Unfortunately, there is no control from the relevant body (IMTT). They would be responsible for ensuring that the timetables and routes granted were properly adhered to. This overcrowding occurs at peak times

rather than throughout the day, and it's a question of ineffective planning and a lack of concern on the part of the authorities who should be enforcing the provisions of the city's current master plan. The lack of an adequate and efficient transport system in the northernmost districts of Campos dos Goytacazes also violates citizens' rights, if transport is considered a social right.

Despite public measures to regulate and develop the system, it is still fragile and shaky, with users experiencing moments of insecurity and uncertainty every day when it comes to public transport. Although public transport is available in some places in the municipality, it must be planned with sufficient quality vehicles; it is also necessary to think about the social issues of the people, promoting vehicles that are accessible to them if they want to be able to move around the city.

Residents of areas far from the city center can only access the city and all it has to offer by public transport, so it is necessary to develop and enforce policies that are both inclusive and effective in terms of people's journeys. Faced with such an unequal context of access to the city in Campos dos Goytacazes, the participation of the population in the development of the city's mobility policy is essential, because, in addition to the context of technical urban planning, there must be an understanding of the social concerns of those involved, including where they are located and what tools will facilitate their access to mobility.

FINAL THOUGHTS

We have seen that efforts are being made to promote an adequate urban mobility policy at the municipal level, but that these efforts are permeated by conflicts that have led to their discontinuity and selective access to the city. The fieldwork was also important in verifying that the provision of public transport in the districts of the far north is at odds with what has earlier been established in the municipality's current master plan for universal mobility and accessibility, territorial integration, etc.

On reflection, we would like to present a recent report on some of the problems following the court ruling in favor of the Rogil company, which had claimed exclusivity on the routes. As a result of the court's decision, transport services were suspended in several places, and this situation was witnessed by agents of the Municipal Institute of Traffic and Transport (IMTT) and the Municipal Civil Guard.

Agents from the Municipal Institute of Transport and Transit (IMTT) and the Municipal Guardia Civil inspected several sites in Campos on Wednesday (22nd) and found that the bus companies that were supposed to replace the vans on the routes to sectors C, D, E and F had not lived up to their end of the bargain. As a result, many camp residents, such as those in the Santo Eduardo and Santa Maria neighborhoods, had to go to work without public transport (JORNAL TERCEIRA VIA, 2021).

The presence of transport to provide this mobility is essential as the city of Campos dos Goytacazes has concentrated its supply of goods, services, and oppor-



Revista do Programa de
Pós-Graduação em Geografia e
do Departamento de Geografia
da UFES

Volume 3, no. 37
July-December, 2023
ISSN: 2175-3709

tunities in the central area. Furthermore, when planning urban mobility policies, it is necessary to involve the neighborhoods far from the main center in their development and implementa-

tion, considering that Campos dos Goytacazes is not only the largest municipality in the State of Rio de Janeiro but also has a highly fragmented territorial organization. ●

REFERENCES

- ANDRADE, Aparecido Ribeiro; SCHMIDT, Lisandro Pezzi. *Metodologias de pesquisa em Geografia*. 2015, disponível em: <<http://repositorio.unicentro.br:8080/jspui/handle/123456789/929>> . Acesso em: 25 de junho de 2023.
- ARAUJO, Isroberta Rosa. *Mobilidade urbana e políticas públicas no município de Campos dos Goytacazes: um estudo da Política dos Transportes a Um Real*. 2012. 84 f. Dissertação (Mestrado em Políticas Sociais), UENF - Universidade Estadual do Norte Fluminense, Campos dos Goytacazes, 2012.
- BALTHAZAR, Bruno da Silva. *A Espacialidade da rede de transporte público e a centralidade em Campos dos Goytacazes*. 2017, 54 f. Trabalho de Conclusão de Curso (Bacharelado em Geografia), UFF - Universidade Federal Fluminense, Campos dos Goytacazes, 2017.
- BRASIL. *Constituição Federal (1988)*. Presidência da República Casa Civil - Lei no 10.257, de 10 de julho de 2001. Brasília. DF: Planalto, 2001.
- BRASIL. *Constituição Federal (1988)*. Presidência da República Casa Civil - Lei no 12.587, de 3 de janeiro de 2012. Brasília, DF: Planalto, 2012.
- CAMPOS DOS GOYTACAZES. *Plano diretor de Campos dos Goytacazes*. Diário Oficial de Campos dos Goytacazes: Campos dos Goytacazes, (2022).
- CORRÊA, Roberto Lobato. Construindo o conceito de Cidade Média. In: SPOSITO, Maria Encarnação Beltrão (Org.). *Cidades Médias: espaços em transição*. 1.ed. São Paulo: Expressão Popular, 2007, p. 23-33.
- CORRÊA, Roberto Lobato. *O espaço urbano*. São Paulo: Ática S.A., 1989.
- CRUZ, José Luis V. Os desafios do Norte e do Noroeste Fluminenses frente aos grandes projetos estratégicos. *Vértices*, v. 9, n. 1/3, p. 44-50, Jan./Dez. 2007.
- IBGE – INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA. *Censo Demográfico*. Disponível em: <https://www.ibge.gov.br/estatisticas/sociais/trabalho/22827-censo-demografico-2022.html?=&t=o-que-e>. Acesso em: 04 de abril de 2021.



Revista do Programa de
Pós-Graduação em Geografia e
do Departamento de Geografia
da UFES

Volume 3, no. 37
July-December, 2023
ISSN: 2175-3709

LEFEBVRE, Henri. *O direito à cidade*. São Paulo: Centauro, 2001.

LESSA, Daniela Antunes; LOBO, Carlos; CARDOSO, Leandro. Accessibility and urban mobility by bus in Belo Horizonte/ Minas Gerais – Brazil. *Journal of Transport Geography*, n. 77, p. 1–10, 2019.

MAMANI, Hernán Armando. Usuário: Ator Ausente da Política de Transporte Fluminense. Estudo das Políticas e dos Conflitos nas Cidades do Rio de Janeiro e de Campos dos Goytacazes. In. Seminário de integração, 16, 2017, {S.I}. *Anais...*, Campos dos Goytacazes: UFF, 2017, p. 1-22.

MORAES, Antonio Carlos R.; COSTA, Wanderley Messias. *Geografia crítica. A valorização do espaço*. São Paulo: Hucitec, 1987.

NETO, Jayme Barral; NETO, Romeu e Silva. Reestruturação Produtiva e Interiorização da Economia no Estado do Rio de Janeiro: Uma nova dinâmica para a Região Norte Fluminense. In: Encontro Nacional de Estudos Populacionais, 15, 2006, Caxambu – MG. *Anais...*, Campos dos Goytacazes: CEFET, 2006, p. 1-20.

SANTOS, Milton. *A natureza do espaço - Técnica e Tempo. Razão e Emoção*. São Paulo: Edusp - Editora da Universidade de São Paulo, 2006.

SANTOS, Milton. *O espaço cidadão*. São Paulo: Edusp - Editora da Universidade de São Paulo, 2007.

SANTOS, Tania Steren. Do artesanato intelectual ao contexto virtual: ferramentas metodológicas para a pesquisa social. *Sociologias*, Porto Alegre, ano 11, nº 21, p. 120-156, 2009.

SIDRA - SISTEMA IBGE DE RECUPERAÇÃO AUTOMÁTICA. *Banco de Tabelas Estatísticas*. Disponível em: <<https://sidra.ibge.gov.br/home/pmc/brasil>>. Acesso em: 04 de abril de 2021.

SILVA, Leonardo de Carvalho. *Reconfiguração do Norte Fluminense a partir dos anos 70: a chegada do petróleo e suas consequências na dinâmica de crescimento regional*, Campos dos Goytacazes: 2005.

SILVA, Priscila F. *Transporte público coletivo e desigualdade de acesso à cidade no Distrito de Morro do Coco, Campos*

dos Goytacazes-RJ. 2022. 79f. (Monografia em Geografia)
– Instituto de Ciências da Sociedade e Desenvolvimento
Regional, Universidade Federal Fluminense, Campos dos
Goytacazes, 2022.

SILVEIRA, Márcio Rogério; COCCO, Rodrigo Giraldi.
Interações espaciais, transporte público e estruturação do espaço
urbano. *Revista Brasileira de Estudos Urbanos e Regionais,*
Brasil, v.12, n.1, p. 63-81, maio de 2010. Disponível em:
<<https://doi.org/10.22296/2317-1529.2010v12n1p63>>. Acesso
em 20 de maio de 2021.

SILVEIRA, Márcio Rogério; COCCO, Rodrigo Giraldi.
Transporte público, mobilidade e planejamento urbano:
contradições essenciais. *Estudos avançados, Santa Catarina/*
SC, v. 27, n. 79, p. 41-53, 2013. Disponível em: <<https://doi.org/10.1590/S0103-40142013000300004>>. Acesso em 20 de
maio de 2021.

STEINBERGER, Marília. Introdução. In. _____ (Org.).
Território, agente-atores e políticas públicas espaciais. Brasília:
Ler Editora, 2017, p. 19-26.

VASCONCELLOS, Eduardo A. *Transporte urbano, espaço
e equidade: Análise das Políticas Públicas*. São Paulo:
Annablume, 2001.

VASCONCELLOS, Eduardo A. *Transporte urbano, espaço
e equidade: Análise das Políticas Públicas*. São Paulo:
Annablume, 2001.

VENTURI, Luis Antonio B. A técnica e a observação na
pesquisa. In. _____ (Org.). *Geografia*. Práticas de campo,
laboratório e sala de aula. São Paulo: Sarandi, 2011, p.
11-28.152, Jul./Dez. 2012.

VIGNERON, Paula; ALENCAR, Virna. *Motoristas de vans
em mais um dia de manifestação em vários pontos de Campos*.
Campos dos Goytacazes: 2019. Disponível: https://www.folha1.com.br/_conteudo/2019/10/geral/1253968-motoristas-de-vans-em-mais-um-dia-de-manifestacao-em-varios-pontos-de-campos.html. Acesso em 20 de maio de 2021.

VIU. *Crise se agrava no transporte de passageiros de Campos*.
Campos dos Goytacazes, 2021. Disponível em: <https://www.portalviu.com.br/cidades/crise-se-agrava-no-transporte-de->



Revista do Programa de
Pós-Graduação em Geografia e
do Departamento de Geografia
da UFES

Volume 3, no. 37
July-December, 2023
ISSN: 2175-3709

passageiros-de-campos#:~:text=Na%20manh%C3%A3%20
desta%20sexta%2Dfeira,em%20Campos%20pela%20
D%2B%20TV%2C. Acesso em: 20 de junho de 2022.

GEOGRAFARES 

Revista do Programa de
Pós-Graduação em Geografia e
do Departamento de Geografia
da UFES

Volume 3, no. 37
July-December, 2023
ISSN: 2175-3709