Chapter 99

A look at accessibility in places and parks in the carbon region In Rio Grande do Sul

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Cristiano Leotte de Oliveira
Federal Institute of Rio Grande do Sul (IFRGS)

Kellem Paula Rohãn Araújo
Federal University of Pampa (UNIPAMPA)

Cláudio Gabriel Soares Araújo
Federal University of Rio Grande do Sul (UFRGS)

Carmen Regina Dorneles Nogueira
Federal University of Pampa (UNIPAMPA)

ABSTRACT
This article aims to present the assessment of accessibility in squares and parks designed to meet the demand of tourism and the local demand of visitors in the cities of the Carboniferous Region of Rio Grande do Sul. After identifying the cities and the main squares and parks, the evaluation was carried out in four stages: the first stage was devoted to bibliographical and documentary research on tourism and accessibility; the second stage consisted of field research that used the participant observation method with the application of the questionnaire model presented by the Ministry of Tourism (MTUR) in the Mapping and Planning of Accessibility in Tourist Destinations; the third stage was the analysis of the data obtained by the application of the questionnaires; and, in the final stage, the theoretical construction was carried out in the form of an article containing the research and the results obtained. According to this evaluation, it is possible to state that despite the efforts made to reclassify the infrastructure of the Squares and Parks in the region, concerning accessibility, such efforts remain insufficient to meet the standards established to guide the implementation of accessibility resources for people. with disabilities and reduced mobility. However, even with difficulties, such equipment can receive visitors with disabilities and reduced mobility.

Keywords: Accessibility, Social inclusión, Parks, Squares, Tourism.

1 INTRODUCTION

The Carboniferous Region in Rio Grande do Sul played an important role in the economic development of the State, as the coal mines in the region for a long time supplied the thermoelectric plants and guaranteed the supply of energy to the city of Porto Alegre, the capital of Rio Grande do Sul. South. The geography of the region made river navigation possible and favored the development of the beef jerky industry in the 19th century, leaving as a legacy the history of former cattle drovers and a rich architectural heritage in the cities that make up the region. The main cities in the Carboniferous Region of Rio Grande do Sul are: Arroio dos Ratos, Butiá, Charqueadas, São Gerônimo, General Câmara, and Minas do Leão (RIO GRANDE DO SUL, 2021).

A person with reduced mobility is understood to be one who, temporarily or permanently, has limited ability to relate to and use the environment. Thus, people with disabilities are the elderly, obese people, pregnant women, and children, among others.

The squares, streets, and public sidewalks together with traffic signs, in addition to organizing and ensuring safety for vehicles and people, contribute to promoting the social inclusion of people with disabilities and reduced mobility. However, it is of fundamental importance that the architectural and cultural barriers that mainly prevent people with disabilities from enjoying socializing with other individuals, cultural development, leisure, contact with nature, and the practice of tourism are softened or suppressed. However, it is common for people with disabilities to face structural difficulties that prevent them from enjoying autonomously and safely places such as public administration buildings, municipal legislature, monuments, museums, libraries, cemeteries, and bus and train stations. , squares, and parks.

The streets and squares present the cultural identity of the place, their importance is of paramount importance in building the relationship between people and presenting symbols and values accepted by the local society. Thus, mobility must value the urban space, and provide an easy displacement by interconnecting the elements that tell and represent the history of the place, revealing the tangible and intangible Cultural Heritage of the city and region (ARAÚJO, 2021).

The 2019 National Health Survey (PNS) carried out by the Brazilian Institute of Geography and Statistics (IBGE) points out that 8.4% of the Brazilian population over 2 years of age – which represents 17.3 million people – have some type of disability. Almost half of this portion (49.4%) is elderly (BRASIL, 2019). Thus, it is possible to consider that there is a potential public at the national level formed by people with disabilities and reduced mobility who lack accessibility resources to exercise their full rights as Brazilian citizens by the principles contained in the Federal Constitution (CF), in Law No. 13,146 and other legal diplomas in force in the country.

Seeking to provide equality between people, the projects and works include accessibility resources, providing a better quality of life and social inclusion for people with disabilities and reduced mobility. In 2015, the Brazilian Association of Technical Standards (ABNT) established criteria and technical parameters to be observed regarding the project, construction, installation, and adaptation in both urban and rural areas, requiring the implementation of accessibility resources, through the NBR- 9050. In 2016, through NBR-16537, the criteria and technical parameters to be observed for the elaboration of the project and installation of tactile signaling on the floor were established, whether for construction or adaptation of buildings, spaces, and urban equipment to the conditions of accessibility for people with visual impairments or people with deaf-blindness.

Social inclusion with full and effective participation in society under equal conditions is due to the potential and ability of people with disabilities to study, work, travel, and use public services and even tourist services. For this reason, we sought to assess accessibility in squares and parks in the Carboniferous Region of the State of Rio Grande do Sul by preparing a comparative descriptive guide of these public

spaces to awaken the municipal administration to the need to comply with current legislation, which can be accomplished by disseminating the research and presenting it to the public administration of the covered municipalities.

2 METHODOLOGY

The methodology used in the research sought to explore and describe the theme of accessibility in public spaces intended for tourism and the local demand of visitors through bibliographical and documental research. It is descriptive research that, according to Vergara (2006) exposes characteristics of a given population or phenomenon, and can also establish correlations between variables and define their nature.

Field research was used with the participant observation strategy to evaluate the application of current legislation and the availability of accessibility resources available to people with disabilities and reduced mobility in squares and parks in the Carboniferous Region of Rio Grande do Sul. During the field research, involving visits and technical observations of public equipment and buildings and their urban furniture, direct data collection was carried out through photographic records, diary notes, and the application of the Inspection and Verification Roadmap of the Accessibility of the Building presented by MTUR (2011, p. 18-22).

The choice of cities was due to the possibility of carrying out the field research from the city of Arroio dos Ratos, the place of residence of the author Cristiano Leotte de Oliveira. Thus, the accessibility assessment was carried out between December 2021 and January 2022 in seven cities in the region: Arroio dos Ratos (Praça Naro Pereira da Silva), Butiá (Praça Manoel Braga), Charqueadas (Parque Adhemar de Souza Faria and Valdomiro Martins Square), General Câmara (Praça Ângelo Cetraro), Minas do Leão (Praça Cândido Francisco de Oliveira), São Gerônimo (Praça Júlio de Castilhos) and Triunfo (Praça Bento Gonçalves), covering eight public spaces.

From these spaces, a park and seven squares were chosen to present their main characteristics. During this period, documentary research was also carried out, seeking in laws, decrees, statutes, and norms, a better understanding of the rights and duties of people with disabilities or with reduced mobility, as well as identifying which accessibility resources would be necessary for their mobility and security as citizens with full rights.

According to the present research, it is seen that the current legislation points out that the public manager needs to adopt measures when constructing or renovating the buildings so that they have the minimum accessibility requirements. These criteria must be by ABNT NBR-9050 and ABNT NBR-16537, among other legal statutes. These norms are presented as a reference for the quality standard to be followed and to be used along with other laws that grant rights to people with disabilities.

3 THE GEOGRAPHY AND DEVELOPMENT OF THE REGION

Mineral coal resources already identified in Brazil exceed 32 billion tons and are located in the region covered by rocks in the Paraná Basin, in Rio Grande do Sul and Santa Catarina and, subsidiary, in Paraná and São Paulo. Among the most important Brazilian deposits, one is located in Santa Catariana called Sul-Catarinense, while the others are located in Rio Grande do Sul, which is why it stands out in terms of coal production in the state. They are: Santa Terezinha, Chico Lomã, Charqueadas, Leão, Iruí, Capané and Candiota (SÜFFERT, 1997).

The Rio Grande do Sul has four well-defined relief types: North Rio Grande Plateau (or Southern Plateau), Sul Rio Grande Plateau (or Southeast Mountains), Coastal Plains, and Central Depression Sul Rio Grande. It is precisely in the Central Depression of Rio Grande do Sul that the region addressed by the study is located.

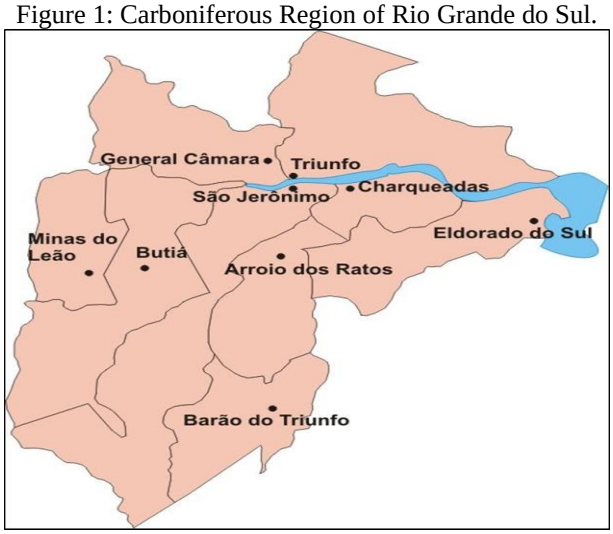
> This geomorphological compartment constitutes an area without major altimetric variations, located between 100m and 200m in altitude and, in almost its entire west-east extension, separates the Rio-Grandense North Plateau from the Rio-Grandense Plateau South (BECKER; NUNES, 2012, p. 123).

The region's climate is predominantly humid subtropical, with abundant rainfall (1,300 to 1,700 mm per year), an average temperature of 25°C, and a minimum average of 15.5°C, during May, June, and July are the rainiest months, and November, December, and January are the least rainy. There are frosts from May to August and occasional dry spells from October to December.

On the border of Charqueadas and Arroio dos Ratos, there is an elevation known as Cerro da Capororoca with 160 meters of altitude, however, the region has soils of the Planossolos type, with poor drainage characteristics, ranging from flat to gently undulating relief, with frequent areas floodplains, rivers, and lakes. It is also possible to find Argissolos in the region, which occurs in gently undulating and strongly undulating reliefs. They are soils generally classified as deep to very deep, ranging from well-drained to imperfectly drained (STRECK et al., 2008).

The Coal Region of Rio Grande do Sul (Figure 1) covers the municipalities of Arroio dos Ratos, Barão do Triunfo, Butiá, Charqueadas, Eldorado do Sul, General Câmara, Minas do Leão, São Jerônimo, and Triunfo. Among these municipalities, Arroios dos Ratos, Butiá, Charqueadas, Minas do Leão, and São Jerônimo (Traditional Region) stand out, where the development of the economy and society took place after mineral coal was discovered and exploited on an industrial scale.

Figure 1: Carboniferous Region of Rio Grande do Sul.



Source: Associação dos Municípios da Região Carbonífera (ASMURC, 2011).

The development of a city or region can be measured through the Human Development Index (HDI) which varies from zero (no human development) to 1.0 (total human development). An index up to 0.499 means low human development. From 0.5 to 0.799 represents medium development and when above 0.8 development is considered high.

According to IBGE (2021), the demographic data of the cities in which the research took place are as follows: the municipality of Arroio dos Ratos has an area of 425.791 km², a total estimated population of 14,201 inhabitants. Its HDI is 0.698. The municipality of Butiá has an area of 752.187 km², its estimated total population is 20,963 inhabitants. Its HDI is 0.689.

The municipality of Charqueadas has an area of 217,362 km² and an estimated total population of 41,705 inhabitants. Its HDI is 0.747. Already, General Câmara has an area of 510,010 km² and a total estimated population of 8,339 inhabitants. Its HDI is 0.686. In Triunfo, the total area of the municipality is 817.625 km² and an estimated total population of 25,793 inhabitants. Its HDI is 0.733.

The city of Minas do Leão, the area of the municipality totals 424,339 km², and its total population is estimated at 8,130 inhabitants. Its HDI is 0.681. Finally, the municipality of São Jerônimo has an area of 935,596 km² and an estimated total population of 24,569 inhabitants. Its HDI is 0.696.

The municipalities in which the research took place have an HDI between 0.5 and 0.799 (considered medium development), attributed to the importance of coal mining in the local and regional economy. The economic development of the region, its historical evolution, its people and natural resources, combined with the proximity to large urban centers, allow us to state that the region has the capacity for the development of historical and cultural tourism as a complementary alternative for regional development.

4 TOURISM AND ACCESSIBILITY

The MTUR, through the Novos Rumos Project, intending to promote accessible Brazilian destinations, launched the “Very Special Guide”. Even without any glimpse of the pandemic caused by COVID-19 – severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) which drastically reduced

tourist activity from the beginning of 2020 – the document presented in 2011 the prospect of a rising tourism market for 2020, with approximately 1.6 billion people traveling worldwide, based on UNWTO reports.

In 2011, these perspectives made sector entrepreneurs reflect on hospitality, infrastructure, and service when receiving tourists and visitors, of which part of this population would be potential clients with disabilities or reduced mobility. By providing such a survey, the guide enabled the businessmen involved in the research to commit to the development of tourism in Brazil. The use of this information would contribute to the generation of an offer of products and services that include accessibility features, which would represent a competitive advantage in the foreseen scenario (MTUR, 2011).

Tourism occurs when people leave their homes for leisure, recreation, sports, entertainment, education, culture, and business, among others. In this context, the acquisition of tourist products and services starts at the starting point when purchasing tourist packages, transport services, or accommodation services. From the origin to the destination of the trip, tourist products and services are added, for example, food and drinks, tourist equipment, and guide services.

Currently, tourism is understood as a social phenomenon generated from human mobility in search of positive experiences involving, in most cases, cultural and recreational processes. Paiva (2016) states that tourism is a contemporary socio-spatial phenomenon that interferes with the urbanization process of cities, as it modifies and transforms the urban territory.

According to current legislation, it is up to the government to implement accessibility resources in public spaces and to supervise the implementation of accessibility resources in private spaces for public use. As a result of investments in tourism, economic and social development is generated, as well as environmental preservation at the local and regional levels.

The development of tourist activity reaffirms the local culture as an attractive tourist offer capable of generating work and income for the local population. An example of this is the trade in craft products involving the indigenous population and the knowledge of their ancestors.

In addition to implementing accessibility resources, it is necessary to remove architectural and cultural barriers that hinder the integration and social inclusion of people with disabilities and reduced mobility. According to the Tourism and Accessibility Guidelines Manual, these barriers are classified as:

> a) urban barriers: those existing on public roads and spaces for public use;
> b) barriers in buildings: those existing around and inside public and collective use buildings and in common use internal areas in multifamily private use buildings;
> c) transport barriers: those existing in transport services that prevent or make it difficult for public and private transport vehicles to enter the interior of terminals, stations, and stops;
> d) barriers in communications and information: any impediment or obstacle that makes it difficult or impossible to express or receive messages through devices, means, or communication systems, whether mass or not, as well as those that make it difficult or impossible to access the information (BRASIL, 2006, p.10).

The implementation of accessibility resources combined with the removal of architectural barriers promotes the scope of Universal Design, which provides for the design of spaces capable of serving all people, including people with disabilities and reduced mobility. Thus, the application of Universal Design aims to meet the widest possible range of variations of the anthropometric and sensory characteristics of the population, in an autonomous, safe, and comfortable way, constituting the elements or solutions that makeup accessibility (BRASIL, 2006; ABNT, 2015).

5 EVALUATION OF THE ACCESSIBILITY OF PLACES AND PARKS IN THE COAL REGION OF RIO GRANDE DO SUL

In Tables 1, 2, and 3, the accessibility assessment will be presented following the Inspection Roadmap – Accessibility Mapping, in a reduced form, but allowing the interpretation of the existence of accessibility resources as presented by the MTUR. The evaluation also makes it possible to make comparisons between the squares and parks under study, as well as obtain a comprehensive view of the reality and the necessary investments.

Table 1: Access to the Building.

Cities		**Charqueadas**	**São Gerônimo**	**Triunfo**	**Arroio dos Ratos**	**General Câmara**	**Charqueadas**	**Butiá**	**Minas do Leão**
Squares and Parks		**Parque Adhemar de Souza Faria**	**Praça Júlio de Castilhos**	**Praça Bento Gonçalves**	**Praça Naro Pereira da Silva**	**Praça Ângelo Cetraro**	**Praça Valdomiro Martins**	**Praça Manoel Braga**	**Praça Cândido Francisco de Oliveira**
External accesses to the building - sidewalks	**Conservation**	Regular	Regular	Regular	Regular	Muito bom	Regular	Regular	Very good
	Type of floor	Non-slip and shaking	Non-slip and shaking	Non-slip and shaking	Non-slip and shaking	Non-slip and shaking	Non-slip and shaking	Non-slip and shaking	Non-slip and shaking
	Guides	Has recessed guides	Has recessed guides	Does not have recessed guides	Does not have recessed guides	Has recessed guides	Does not have recessed guides	Does not have recessed guides	Does not have recessed guides
	Ramps	Accessible	Partially accessible	Does not have ramps	Does not have ramps	Does not have ramps	Partially accessible	Partially accessible	Partially accessible
	tactile floor	Partially accessible	Does not have	Does not have	Does not have	Does not have	Partially accessible	Partially accessible	Does not have
Private access to the building	**Conservation**	Regular	Regular	Regular	Regular	Very good	Regular	Very good	Very good
	Circulation and accesses	Not accessible	Partially accessible	Partially accessible	Partially accessible	Partially accessible	Partially accessible	Not accessible	Partially accessible

Source: elaborated by the author (2022).

Table 2: Evaluation of Public Toilets.

Cities		**Charqueadas**	**São Gerônimo**	**Triunfo**	**Arroio dos Ratos**	**General Câmara**	**Charqueadas**	**Butiá**	**Minas do Leão**
Squares and Parks		**Parque Adhemar de Souza Faria**	**Praça Júlio de Castilhos**	**Praça Bento Gonçalves**	**Praça Naro Pereira da Silva**	**Praça Ângelo Cetraro**	**Praça Valdomiro Martins**	**Praça Manoel Braga**	**Praça Cândido Francisco de Oliveira**
Sanitary	**accessible toilets**	Does not have	Does not have	Does not have	Does not have	It has	It has	Does not have toilets	Does not have toilets
	Location	Route not accessible	Route not accessible	Route not accessible	Route not accessible	Accessible route	Accessible route	-	-
	Accessories	There is not	There is not	There is not	There is not	Partially accessible	Partially accessible	-	-
	grab bars	Partially accessible	Does not have	Does not have	Does not have	Partially accessible	Partially accessible	-	-
	door width	Between 70 cm and 80 cm	Between 70 cm and 80 cm	Between 70 cm and 80 cm	Between 70 cm and 80 cm	Between 70 cm and 80 cm	Between 70 cm and 80 cm	-	-
	door accessories	Does not have	Does not have	Does not have	Does not have	Does not have	Does not have	-	-
	Autonomy and security	Not accessible	Not accessible	Not accessible	Not accessible	Partially accessible	Partially accessible	-	-
	tactile floors	Does not have	Does not have	Does not have	Does not have	Does not have	It has	-	-

Source: elaborated by the author (2022).

Table 3: Signaling of equipment and treatment of unevenness.

Cities		Charqueadas	São Gerônimo	Triunfo	Arroio dos Ratos	General Câmara	Charqueadas	Butiá	Minas do Leão
Squares and Parks		Parque Adhemar de Souza Faria	Praça Júlio de Castilhos	Praça Bento Gonçalves	Praça Naro Pereira da Silva	Praça Ângelo Cetraro	Praça Valdomiro Martins	Praça Manoel Braga	Praça Cândido Francisco de Oliveira
Braille signage	Signaling on stops	Does not have	Does not have	Does not have	Does not have	Does not have	Does not have	Does not have	Does not have
	handrail signage	Does not have	Does not have	Does not have	Does not have	Does not have	Does not have	Does not have	Does not have
	on tactile maps	Does not have	Does not have	Does not have	Does not have	Does not have	Does not have	Does not have	Does not have
equipment signaling	Regarding the use of SIA	Does not have	Does not have	Does not have	Does not have	Does not have	Does not have	Does not have	Does not have
Depth treatment	Use of ramps and stairs	Has ramps and steps	Has ramps and steps	Has ramps and steps	Has ramps and steps	Has ramps and steps	Has ramps and steps	Has a ramp with a handrail	It has no unevenness

Source: elaborated by the author (2022).

The Adhemar de Faria Municipal Park, in Charqueadas, was created in an old area degraded by coal waste, ash, and metallurgical slag. It currently has a track with skate ramps, a popular gym with a variety of equipment, and a playground. In this recreation place for children, there is a children's swing adapted for wheelchair users (Figure 2), the equipment was sponsored by people and civil society organizations in the city.

Figure 2: Adapted children's swing.

Source: author's collection (2022).

The site also houses the Municipal Public Library Professora Vera Maria Gauss, inaugurated in 1998 and the Memorial do Mineiro, inaugurated in 1998. The space is part of the cultural heritage of the municipality, hosting exhibitions, artistic presentations, lectures, courses, and other manifestations of character artistic-cultural and rescue of local memory.

Inside the park, most accessibility resources are non-existent. The toilets are not on non-accessible routes and only the use of a sidebar next to the toilets was identified, which does not even meet the standard.

However, in the external access, sidewalks were built using tactile floors, lowered curbs, and access ramps. There are two parking spaces for people with disabilities and two spaces for the elderly. Such vacancies are indicated by the use of the International Symbol of Accessibility (SIA) (Figure 3) and by the inscription “ELDERLY” on the floor and the use of vertical signs. It also identified the existence of security lanes without the presence of access ramps connecting the park to its surroundings.

Figure 3: SAI.

Source: author's collection (2022).

Praça Júlio de Castilhos, in the city of São Jerônimo, is located in the center of the city and has access ramps, some of which are in good condition and under the standards established by ABNT NBR-9050 and others need requalification to better serve people. with disabilities and reduced mobility. There are spaces reserved for people with disabilities and spaces for the elderly. Such vacancies are indicated by the use of the SAI and the inscription “ELDERLY”, both painted on the floor. There are traffic signs that include safety strips and vertical signage that contribute to urban mobility.

The monuments and the “Bandstand” built in the square allow for approximation through the use of sidewalks and floors covered with white and black stone, but these do not have tactile floors and accessible routes. The main access to the public toilets has steps that do not have accessibility features inside (Figure 4).

Figure 4: Public toilets.

Source: author's collection (2022).

Bento Gonçalves Square, in the city of Triunfo, known as Praça da Matriz due to the existence of the Church of Bom Jesus do Triunfo (Figure 5), built in 1754, headquarters of the third oldest parish in the state of Rio Grande do Sul. Due to the construction period of the building, there are no accessibility features, highlighting the existence of stairs in its main access. However, one of its side accesses has a small wooden ramp deposited on the floor of the property that allows access even by people in wheelchairs or people with reduced mobility.

Figure 5: Church of Bom Jesus do Triunfo.

Source: author's collection (2022).

There is no indication of reservation of parking spaces for people with disabilities or the elderly. However, there are access ramps that, despite not having the characteristics and dimensions indicated by ABNT NBR-9050, are likely to be used by people with disabilities.

The relief of the square presents unevenness, which required the construction of stairs (Figure 6). This characteristic requires the treatment of unevenness through access ramps as indicated in ABNT NBR-9050, containing appropriate handrails, and resources that are necessary for the autonomy and safety of

people with disabilities and reduced mobility. The floors mostly feature stone slabs and bricks forming geometric figures and contours that harmonize the place.

Figure 6: Stairs on slopes.

Source: author's collection (2022).

Praça Naro Pereira da Silva in the city of Arroio dos Ratos has a popular gym, wooded areas, and the building of the Chamber of Directors of Shopkeepers (CDL).

The building where the public toilets are located has stairs in its main access, which makes it difficult for people with disabilities or reduced mobility to use them. Inside, there are also no accessibility features next to the toilets, sink, or toilet.

The square has sidewalks built with interlocking floors without tactile floors or accessible routes. The ramps are built without the dimensions and indications of ABNT NBR-9050 and require requalification.

In the city of General Câmara, Praça Ângelo Cetraro has interlocking floors and access ramps that lead directly to security lanes. Unlike the construction of a lowered curb, the vehicle track was raised (Figure 7) to the level of the sidewalks, making this path accessible and safe due to the indication of the safety lane and the absence of a difference in level between the sidewalk on both sides. sides of the track.

Figure 7: Elevation of the vehicle lane.

Source: author's collection (2022).

In the surroundings of the square, parking is not allowed and the prohibition is indicated through the use of traffic signs. This distancing of vehicles allows a better view of the square and traffic flow. In the surroundings of the square, even on the opposite side, no parking spaces were identified for people with disabilities or the elderly.

To better receive tourists and visitors, a “Chimaródromo” was installed with water heating equipment for the preparation of chimarrão. Toilets are accessed through sidewalks in good condition and use, but the square does not have tactile floors forming accessible routes.

In the main access to the toilets, there is a ramp without the presence of handrails and guardrails (Figure 8) which, according to ABNT NBR-9050, should be built and fixed in the place of the slope, offering safe conditions of use. Inside the toilets, there is only one lateral support bar next to the toilet bowl.

Figure 8: Access ramp to the restrooms.

Source: author's collection (2022).

Praça Valdomiro Martins, in the city of Charqueadas, has two bus terminals, one of which is intercity and the other municipal. Both terminals have covered departure and arrival areas, and the sidewalks have tactile and directional floors (Figure 9), but they are not arranged under ABNT NBR-16537 concerning positioning and the recommended contrast that benefits people with disabilities. low vision or deaf-blindness.

Figure 9: Tactile and directional floors.

Source: author's collection (2022).

Existing ramps do not have the format and measurements by ABNT NBR-9050, but are normally used by people with disabilities or reduced mobility. The sidewalks use interlocking floors, giving the anti-slip and shaking characteristics.

Parking is allowed next to the guide without having spaces reserved for people with disabilities and the elderly. Inside the bus terminal, there are toilets in good condition, with grab bars next to the toilet bowls and next to the sink or toilet.

In the city of Butiá, an evaluation was carried out at Praça Manoel Braga, which received investments worth R$ 192,467.54 used in the revitalization of the public space. Works were carried out on the multi-sports court and bleachers, a covered area was built with concrete tables and chairs, and recreation and board games, which were painted on the tables, providing visitors with an option for sports and leisure. The square also contains a track with skate ramps.

The site has security lanes with the use of access ramps at just two points. Such ramps do not have the specifications of NBR 9050 and can be used under current conditions. Only in part of the external sidewalks of the square were inserted tactile floors in the vicinity of Casada Cidadania, which houses the Fundação Gaúcha do Trabalho e Ação Social. Inside there are restrooms for the restricted use of employees and users of the space. The site was not evaluated because it is not available to the public continuously.

Praça Cândido Francisco de Oliveira in the city of Minas do Leão was refurbished using interlocking floors, improvements to the playground, provision of concrete benches, construction of a pergola, and installation of a “Chimaródromo” with water heating equipment for the preparation of chimarrão. The construction of access ramps was carried out, but so far there has been no connection between them and the sidewalks inside the square.

On Avenida Getúlio Vargas in front of Praça Cândido Francisco de Oliveira, the vehicle lane was raised and the safety strip was painted, favoring access from the interior of the square to the rear edge of the road. The use of grids allows the passage of rainwater without losing the accessibility of the slope treatment.

6 FINAL CONSIDERATIONS

The assessment of accessibility in squares and parks in the Carboniferous Region revealed the need for investments in such public spaces, which, if carried out, could contribute to the social integration, social inclusion, and educational and cultural inclusion of people with disabilities. It is also believed that this research can contribute to public administration in the sense of alerting about the need to comply with the CF of 88, with the Statute of Persons with Disabilities, NBR 9050 and 16537, and other legal systems that grant rights and duties to people with disabilities.

It is also possible to point out that despite the requalification of these public spaces and other investments in urban mobility, the implementation of accessibility resources is essential for people with disabilities and reduced mobility. It is necessary to overcome the lack of accessibility in the structure of

squares and parks, improve access and public sidewalks, and build and renovate accessible public restrooms to better serve tourists and the local community.

Finally, promoting actions that encourage the removal of architectural and cultural barriers that prevent people with disabilities from practicing tourism, recreation, and leisure with autonomy and safety must be a constant search for the society in which we live and not just for public administration. This research paves the way for a careful assessment of the application of the legislation relevant to accessibility in public spaces represented here by squares and parks in the Carboniferous Region of the State of Rio Grande do Sul. However, it is necessary to disseminate the research and present it to the public administration of the municipalities covered.

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