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GIS-BASED ASSESSMENT OF THE TRANSPORT ACCESSIBILITY OF THE MATERIAL ANTHROPOGENIC TOURIST RESOURCES IN SOFIA, BULGARIA

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Abstract: The study aims to present a GIS-based assessment of the transport accessibility of the material anthropogenic tourist resources (historical, architectural, religious, and cultural-institutional) in the city of Sofia, Bulgaria. The method used in the study in order to achieve the objective is measuring the walking distance with the use of the ORC tool in QGIS. A vector point layer of all public transport stops was initially added, where the points (bus/tram/trolley stops) served as a starting point for walking distance measurement. The analysis of the pedestrian and transport accessibility to the anthropogenic tourist resources in Sofia Municipality has been conducted using data from the Ministry of Tourism's National Tourism Register, the Integrated Development Plan of Sofia Municipality 2021-2027, and the National Statistical Institute. The results show that the vast majority of the studied sites are concentrated in the historical and modern center of the city, which facilitates their accessibility by public transport. However, most of the sites fall within the hourly-paid, so-called Blue and Green parking zones, which hampers the accessibility by own vehicles, thus signifying the public transport importance for easy access to the tourist sites in discussion. Of the 50 sites examined, only 5 fall in neither the Blue, nor the Green Zone. The situation is further complicated by two services that additionally reduce the number of parking spaces for both city residents and visitors: 1) official subscription and 2) residential parking. Of the 50 sites studied, less than half (23) are suitable for people with disabilities. The analysis of the existing accessibility to cultural and historical sites is the basis for alternative proposals for accessibility improvement. In conclusion, the effect of tourist sites' accessibility on the development of tourism in Sofia Municipality has been determined.

Keywords: transport accessibility, museum, gallery, National History Museum, National History Museum, St. Alexander Nevsky Patriarchal Cathedral

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INTRODUCTION

Tourism is of structural importance for the economic development of the country at national and regional scale. According to Loulanski (2023), the effects of tourism on the economy are divided into three groups: direct, secondary, and induced. Direct effects are expressed by the revenue from consumed tourist products and services (accommodation, food, transport, and additional services), the secondary effects - by the revenue from other tourism-related economic sectors, such as construction, retail sales, financial services, agriculture and many others. The attracted effects represent revenue realized as a result of the strong influence of tourism on the structure, parameters and business characteristics of the regions (additional employment, attraction of additional foreign investments, increased real estate prices and rents, improved infrastructure and living environment, increased opportunities for family planning, career development and active consumer behavior (Loulanski, 2023). Regardless of the differences in their nature, all of these effects reveal the increasing importance of tourism for the socio-economic development of the country. The effects of tourism are even more significant for the regional development of small municipalities and settlements in Bulgaria, the economy of which is highly dependent on the development of tourism as a leading economic activity (Karadzhov et al., 2024). In 2024, Bulgaria was visited by 13,249,456 foreign citizens, which was an increase of 621,909 people compared to 2023, and by 2,361,504 compared to 2022. In 2024, most tourists were from Romania (2,332,357), followed by those from Turkey (2,286,711), Ukraine (1,278,753), Greece (1,190,898), Germany (920,368), Serbia (728,980), etc. (NSI – Visits of foreign citizens to Bulgaria by months and countries).

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The city of Sofia is one of the leading tourist destinations for both Bulgarian and foreign tourists. In 2024, the city was visited by nearly 1.27 million tourists (61%, or some 778 thousand of them - foreign tourists), according to data from the Unified Tourist Information System (USTI) of the Ministry of Tourism. One of the most important prerequisites for visiting a given destination is the tourist sites with their attractiveness (Vodenska & Asenova, 2011; Petrov, 2018). In Sofia, there are many tourist attractions and sites of different nature - natural and anthropogenic (historical, architectural, religious, and cultural-cognitive). Another very important factor is the transport accessibility to the tourist sites (Petrov, 2018). The location of the majority of anthropogenic tourist resources in the central part of Sofia predetermines the relatively good transport accessibility using urban public transport, on foot, or by bicycle.

That is not the case with the other main means of transportation for tourists - in groups by bus, and individually, by car (Marinov et al., 2013; Petrov, 2018). Organized group visits of tourists are of greatest importance for tourism in the capital city, which is why the problem of reaching the tourist sites and the related problems of stopping, staying, and parking buses near them are important (Petrov, 2018). This is especially true for tourists from the so-called "65+" age group, who need to be transported to the very site itself (Petrov, 2018). The present study, therefore, aims to make a GIS-based assessment of the anthropogenic resources for the development of tourism in the city of Sofia in the context of their transport accessibility by various types of transport (cars, buses, and public transport).

LITERATURE REVIEW

Research in the field of tourism in Bulgaria covers various topics. The problems and prospects of tourist regions in the country are discussed in the publications of Petrov et al. (2010) and Marinov et al. (2017). Dogramadjieva (2024) studies cultural heritage in the context of tourism in Bulgaria. Vasileva et al. (2024) assess the tourist functions of protected areas in the Shumen Plateau Nature Park. In 2024, Cholakova & Dogramadjieva conducted an online survey of tourist attendance and behavior in a protected area - the Urdini Lakes sample area in Rila National Park. The problems of recreational tourism have also been studied (Naumov et al., 2024; Varadzhakova & Naydenov, 2024; Raykova et al., 2023), as well as cultural ecosystem services in tourism (Prodanova & Varadzhakova, 2022).

Mikova (2024) studies the tourism infrastructure of rural areas in Bulgaria. The topic of COVID-19's impact on tourism has also been widely discussed (Nekova, 2023; Varadzhakova & Genchev, 2022; Varadzhakova et al., 2022; Varadzhakova & Raykova, 2022; Raykova & Naydenov, 2024; Raykova & Poleganova, 2024).

Another important research issue is the classification of anthropogenic resources, considered in numerous publications (Vasileva & Kabakchieva, 2020). Anthropogenic tourism resources are interpreted as objects and events of a non-natural nature, forming motivation for tourism consumption (Vasileva & Kabakchieva, 2020). Carlos & Karadzhov (2025) emphasize integrated tourism packages as a way of improving the image of urban tourist destinations (case study of Blagoevgrad, Bulgaria). The spatial combination of natural and anthropogenic tourist resources in rural and mountainous areas in Bulgaria - as determinants for the development of specialized types of tourism - is the focus of research by Patarchanova (2006), Patarchanov (2012), Nikolova (2015), Patarchanova & Patarchanov (2018).

In scientific literature, great attention is paid to the relationship between tourism and transport, and the role of transport in tourists' satisfaction (Orbasli & Shaw, 2007). The issues of transport access to tourist attractions in the central parts of cities (Popova, 2002), and parking opportunities near tourist attractions, are most often considered in the general context of settlements' transport schemes, and the creation of intelligent parking systems (Álvarez-García et al., 2017; Petrov, 2018). Dimitrova (2019) studies the image of Sofia as a tourist destination. Only a small number of publications, however, examine the transport accessibility of tourist sites in the city of Sofia, while none of those examine the accessibility of tourist sites by car, bus, and public transport. Mitova (2018) examines the tourist accessibility and capacity of the transport system of the Vitosha National Park in the context of challenges to the sustainable development of tourism. Petrov (2018; 2022) studies the transport accessibility by car to anthropogenic tourist sites in the central urban area of Sofia.

MATERIALS AND METHODS

The present study is based on the typology of anthropogenic tourism resources developed by Vasileva & Kabakchieva (2020). According to that typology, anthropogenic tourism resources are divided into tangible and intangible (special events). The tangible ones, in turn, are divided into inherited (archaeological and ethnographic), mixed (religious, architectural, commemorative, cultural-institutional, and economic), and contemporary (sports, entertainment, and business). The intangible tourism resources include bank holidays, festivals, performances, concerts, exhibitions, fairs, sports events, business events, carnivals, processions, reenactments, open-air events, etc.

The research object of the present study is tangible mixed (religious, architectural, and cultural-institutional) anthropogenic resources only. *Religious tourism resources* are a set of significant cultural and historical sites and monuments related to confession and religion, together with the associated religious practices of the population in a given territory, arising from a given confession: archaeological sites (ruins of temples and sanctuaries); modern architectural sites (churches, cathedrals, monasteries, bell towers, synagogues, mosques); religious monuments and memorial sites (cemeteries, crypts, statues, monuments); church museums and collections; secular buildings and sites related to a particular religion (Vasileva & Kabakchieva, 2020). *Architectural tourism resources* encompass various spatial elements of the environment inhabited by humanity throughout the centuries of its civilization.

These resources are of high artistic value and directly related to the history, culture, and way of life of different peoples – buildings, streets, squares, fortresses, towers, bridges, aqueducts, fountains, etc. Regarding architectural tourism resources as a separate group is rather conditional, since architectural artifacts are a basic manifestation and a

prerequisite for all anthropogenic tourist resources. Architectural tourism resources are directly related to and interact equally with archaeological, ethnographic, religious, historical, cultural-cognitive, and other types of resources (Vasileva & Kabakchieva, 2020). *Cultural-institutional tourist resources* regulate the distribution and access to various significant testimonies from the past, artifacts, and creative achievements.

The material base in the field of culture (museums, galleries, libraries, theaters, etc.), its presence or absence, is evidence, above all, of the level of spiritual and creative development of a given society, of its values and its care for what was inherited from its ancestors (Vasileva & Kabakchieva, 2020). In this study, the ArcGIS software (ArcMap 10.6.1) was used to compile the maps: the Buffer and the Near tools were used for measuring the distance of anthropogenic tourist sites from the public transport stops in the city of Sofia.

Study area

The study area of this research is the city of Sofia, which is located in the Sofia Plain, between parts of Western Stara Planina Mountain (Murgash, Sofia Mountain, and Tri Ushi ridges) to the north, and the Lyulin, Vitosha, Plana and Lozenska mountains - parts of the Srednogorska mountain system - to the south (Todorov & Todorova, 2023). The city falls within the borders of the Sofia tourist region. The city of Sofia is rich in religious, architectural, and cultural-institutional tourist resources, which are the basis for the development of tourism in the city.

This study examines a small part of the anthropogenic tourist resources (50 sites) by groups, which are of great importance for the development of tourism in the capital city of Bulgaria (Figure 1).

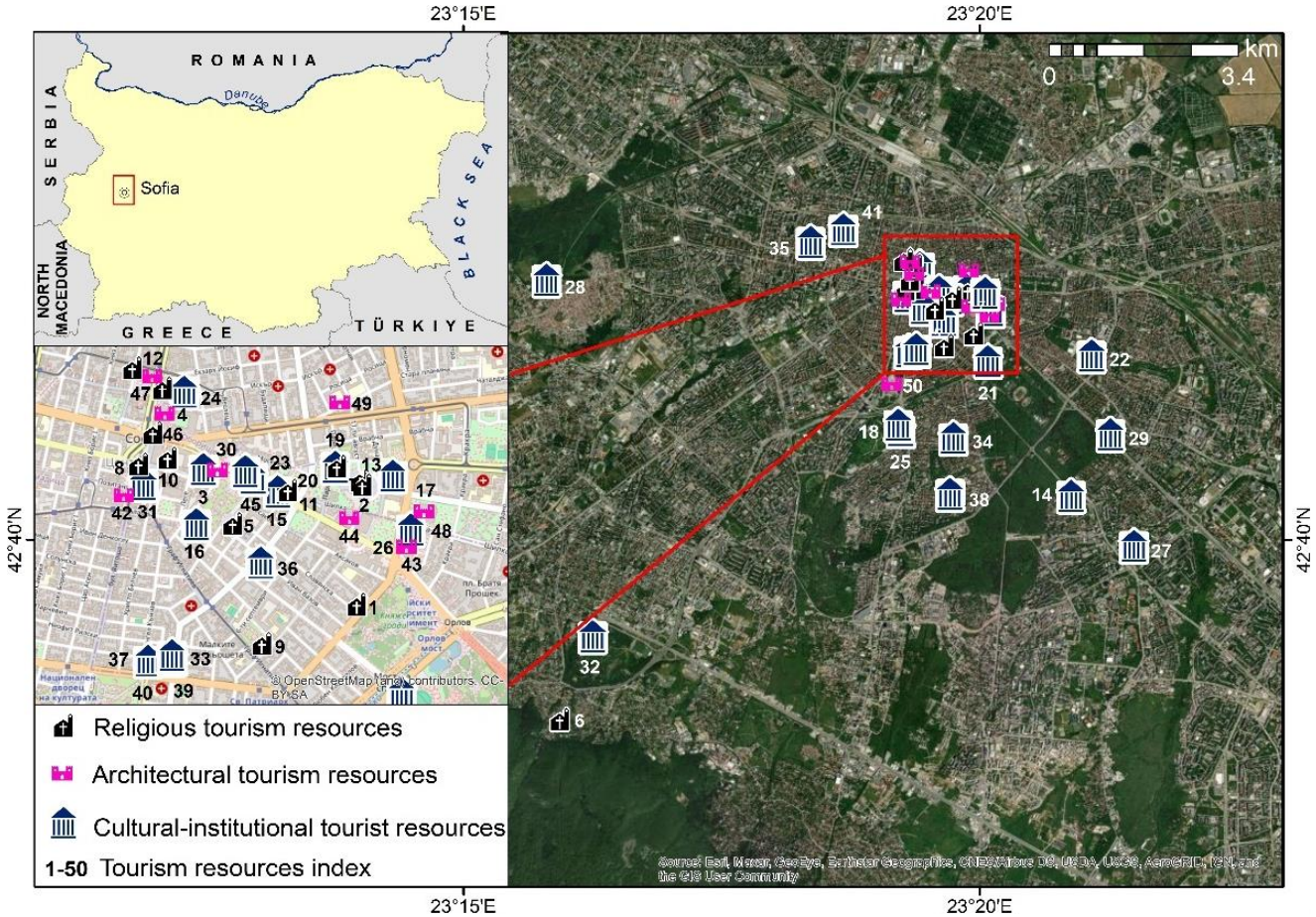

Figure 1. Study area. Anthropogenic tourist resources: 1. Mausoleum-tomb of Prince Alexander Battenberg; 2. St. Alexander Nevsky Patriarchal Cathedral; 3. St. George's Rotunda; 4. Banya Bashi Mosque; 5. Ivan Vazov National Theater; 6. Boyana Church; 7. St. Sophia Church; 8. St. Nedelya Church; 9. St. Sedmochislenitsi Church; 10. St. Petka Church; 11. Russian Temple of St. Nicholas; 12. Sofia Synagogue and Historical Museum; 13. Crypt of St. Alexander Nevsky Patriarchal Cathedral - Branch of the National Museum of Bulgarian Fine Art; 14. "Dechko Uzunov" Gallery-Museum; 15. National Art Gallery; 16. Sofia City Art Gallery; 17. "Square 500" National Gallery; 18. "Earth and People" National Museum; 19. Archaeological Level of St. Sophia Basilica; 20. National Museum of Natural History at the Bulgarian Academy of Sciences; 21. National Museum of Sports; 22. National Military History Museum; 23. National Ethnographic Museum; 24. Sofia History Museum; 25. Museum of Contemporary Art; 26. Museum of Mineralogy, Petrology and Mineral Resources; 27. Museum of Socialist Art; 28. National Agricultural Museum; 29. National Anthropological Museum; 30. National Archaeological Institute and Museum; 31. National Church Museum of History and Archaeology of the Holy Synod; 32. National History Museum; 33. National Literature Museum; 34. "Dimitar Dimov" House Museum; 35. "Hristo Smirnenski" House Museum; 36. "Ivan Vazov" House Museum; 37. "Nikola Vaptsarov" House Museum; 38. "Pancho Vladigerov" House Museum; 39. "Petko and Pencho Slaveykov" House Museum; 40. "Peyo Yavorov" House Museum; 41. National Polytechnic Museum; 42. Courthouse; 43. Sofia University "St. Kliment Ohridski"; 44. Bulgarian Academy of Sciences; 45. Bulgarian National Bank; 46. Central Department Store; 47. Central Sofia Market Hall; 48. National Library; 49. National Opera and Ballet, and 50. National Palace of Culture – NPC (Source: Authors)

Sofia is the largest city in the country with a population of 1,183,334 inhabitants (NSI, 2022). The city is characterized by the best educational structure of the population in Bulgaria: 57.3% of the city's population between 25 and 64 years old is of higher education, 38.7% of secondary education, and 4% of primary or lower education (Raikova et al., 2024). Evidence of the settlement's existence where Sofia's current city dates back to the Neolithic period – 6th -5th centuries BC, then known as Serdika (after the Thracian tribe "Serdi"). After the Liberation (1878), in 1879, Sofia was declared the capital of the Principality of Bulgaria by the first Constituent National Assembly. The city underwent rapid development only a decade after the Liberation under Mayor Dimitar Petkov and gradually became a city with a modern European appearance. A new urban plan was developed by the German architect and urbanist Adolph Muesmann (the "Muesmann" plan). The main goal of this plan was to transform Sofia into a modern and "green city", with clearly separated residential and industrial zones, developed transport infrastructure, etc. (Poleganova, 2025). In the 1920-1934 period, the population of Sofia almost doubled, increasing from 154,000 to 287,000 inhabitants (Tsvetkov, 2025).

In 1957, a new urban development plan for Sofia was created by Prof. Lyuben Tonev, replacing the unimplemented Muesmann plan. The appearance of numerous monuments typical of communist ideology characterized that period. Another typical feature of that period was the extremely rapid population increase due to industrialization. In the period after 1957, the densification of the old city parts and the construction of new residential complexes with panel apartment buildings (Mladost, Lyulin, Nadezhda, Druzhba neighborhoods, etc.) began (Poleganova, 2025; Tsvetkov, 2025).

For the first time in the history of the capital, the idea of building an underground was discussed (Poleganova, 2025). The period after 1989 is characterized by the fragmentation of the urban space and the appearance of new elements in urban planning, accompanied by the intensification of the processes of suburbanization and spatial expansion of the city. The city's development is featured by three simultaneously occurring processes – suburbanization, transition to a market economy, and fragmentation of the urban space. Suburbanization has been accelerating in the surrounding municipalities, and is particularly intense after the end of the COVID-19 pandemic (Tsvetkov, 2025; Poleganova, 2025).

RESULTS AND DISCUSSION

Assessment of transport accessibility by cars and tourist buses

The Ordinance regulates street parking in Sofia on the organization of traffic on the territory of Sofia Municipality. The documents provide that an hourly-paid parking regime is introduced on streets, boulevards, squares, and parking lots, which represent public municipal property, per the location and spatial scope schemes adopted by the Sofia Municipal Council, by order of the Mayor of Sofia Municipality. An hourly-paid parking regime is introduced for vehicles with a maximum permissible mass of up to 2.5 tons, and for minibuses and buses of up to 12 passenger seats. The price for an hour of parking in the so-called Blue Parking Zone is 2 BGN, where the maximum stay is up to 2 (two) hours. The zone operates on weekdays and Saturdays, from 8:30 to 20:00 (Figure 2).

Figure 2. Blue Parking Zone in the central part of Sofia: A – Vasil Levski Blvd.;
B – Graf Ignatiev Str.; C – General Skobelev Blvd.; D – Tsar Kaloyan Str (Source: Authors)

The so-called Green Parking Zone (Figure 3) operates on weekdays from Monday to Friday, from 8:30 to 19:30, and from 10:00 to 18:00 on Saturdays. The maximum allowed parking time is 4 (four) hours, and the price is 1 BGN per hour (Sofia Municipality, https://www.sofia.bg/parking).

Figure 3. Green Parking Zone in the city of Sofia: A – Plachkovitsa Str.; B – Galichitse Str. (Source: Authors)

Of the 50 sites examined, only 5 fall in neither the Blue or the Green Zone (14 – "Dechko Uzunov" Gallery-Museum; 27 – Museum of Socialist Art; 28 – National Agricultural Museum; 29 – National Anthropological Museum, and 32 – National History Museum); 7 sites fall into the Green Parking Zone (18 – "Earth and People" National Museum; 22 – National Military History Museum; 25 – Museum of Contemporary Art; 34 – "Dimitar Dimov" House Museum; 35 – "Hristo Smirnenski" House Museum; 38 – "Pancho Vladigerov" House Museum, and 41 – National Polytechnic Museum), while the remaining 38 sites fall into the Blue Parking Zone (Figure 4).

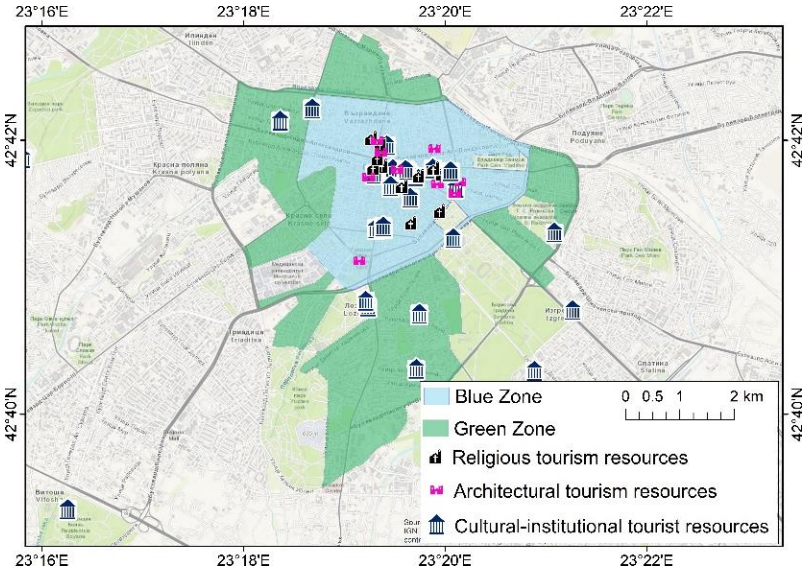

Figure 4. Spatial scope for hourly-paid parking in the Blue and Green zones in Sofia, Decision No. 704 under Protocol No. 42 of 28.10.2021, in force since 1.12.2021 (Source: Authors)

As it can be seen from Figure 2, the possibilities for parking vehicles in the center of Sofia around anthropogenic tourist sites are severely limited due to both time limits and limited parking spaces. The situation, especially in the central part of the city, is further complicated by two services that additionally reduce the number of parking spaces for both city residents and visitors: 1) official subscription and 2) residential parking. The first service applies to streets and squares, parking lots, and other parts of the road infrastructure, providing specially designated places for subscribers only. The regime is divided into day and night. The day regime covers both the Blue and the Green zone, and the night regime only applies to the Blue zone. The second service is for residents within the spatial scope of hourly-paid parking zones, who have preferences for issuing a vignette sticker, which, however, does not guarantee a parking space (Petrov, 2022). For easier parking, municipal buffer parking lots have been created at metro stations, which are managed by the Urban Mobility Center EAD. There are five operating parking lots at metro stations: Vasil Levski Stadium (193 spaces); Beli Dunav - Nadezhda (349 spaces); Tsarigradsko Shosse (1253 spaces); James Boucher (577 spaces); Beli Dunav - Vrabnitsa (118 spaces). These five parking spaces have a total of 2490 parking spaces.

The Ordinance on the organization of traffic on the territory of Sofia Municipality regulates the stopping, staying, and parking of tourist buses. Article 42 of the Ordinance states that "Occasional transport of passengers for tourist visits and tourist tours of the city of Sofia is carried out according to schemes approved by the Transport Directorate of Sofia Municipality, which indicate the route of the bus and the places for staying and parking". The stopping, stay, and parking regime of tourist buses has been changed several times over the last 10 years. Tourist buses can be parked for a long stay at: The southern local lane of "Knyaginya Maria-Luiza" Blvd., opposite the Central Railway Station - up to 2 hours of stay; parking between "Knyaz Boris I" Str., "Bratya Miladinovi" Str., the southern local lane of "Knyaginya Maria-Luiza" Blvd., and "Struga" Str. - up to 4 hours of stay (Petrov, 2022). Regarding the new organization of parking and stay at "Vasil Levski" Airport - Sofia, free access to Terminal 2, bus parking lot P8, has been agreed for the entire winter season 2024/2025 for tour operator buses and coaches (Ministry of Tourism of the Republic of Bulgaria). In addition to free access until the end of the winter period, an extension of the free stay time for tour operator buses and coaches from 15 to 30 minutes, up to three times a day, has also been agreed, after the end of the grace period in March.

Assessment of transport accessibility to tourist sites from public transport stops

A joint-stock company of Sofia Municipality - Urban Mobility Center EAD - carries out the organization of public transport in Sofia. There are four types of public transport in the city: underground, trams, trolleybuses, and buses.

The Sofia underground is the only underground in Bulgaria. It was put into operation on January 28, 1998. The underground system has 52 km of railway with 47 metro stations (as of 2025), operating along 4 routes: Line M1 - Slivnitsa - Business Park (Lyulin - Mladost) was opened in 1998, and has a length of 17.6 km, and 16 stations (13 in common with M4); Line M2 - Obelya - Vitosha (Nadezhda - Lozenets) was opened in 2012 with a length of 11.7 km, and 12 stations; Line M3 - Hadzhi Dimitar - Gorna Banya (Hadzhi Dimitar - Ovcha Kupel) was opened in 2020 and has a length of 11.2 km, and 12 stations; Line M4 - Obelya - Sofia Airport was opened in 2020, and has 20 stations (13 in common with M1) (Figure 5).

Figure 5. Metro stations in the city of Sofia (Source: Authors)

The first tram in Sofia was put into operation on January 1, 1901. The total length of tram routes in Sofia today is 286 km. Two types of lines are used: narrow gauge (1009 mm) and standard gauge (1435 mm). As of April 6, 2025, 17 tram lines operate on the territory of Sofia (Figure 6). The first trolleybus in Sofia was put into operation on February 14, 1941. The length of trolleybus routes in Sofia today is 112.5 km. As of April 6, 2025, trolleybuses operate on a total of 10 lines (Figure 7). Bus transport in Sofia began operating on April 20, 1935. As of April 6, 2025, 102 bus lines operate in Sofia.

Figure 6. Tram lines in the city of Sofia (Source: Authors)

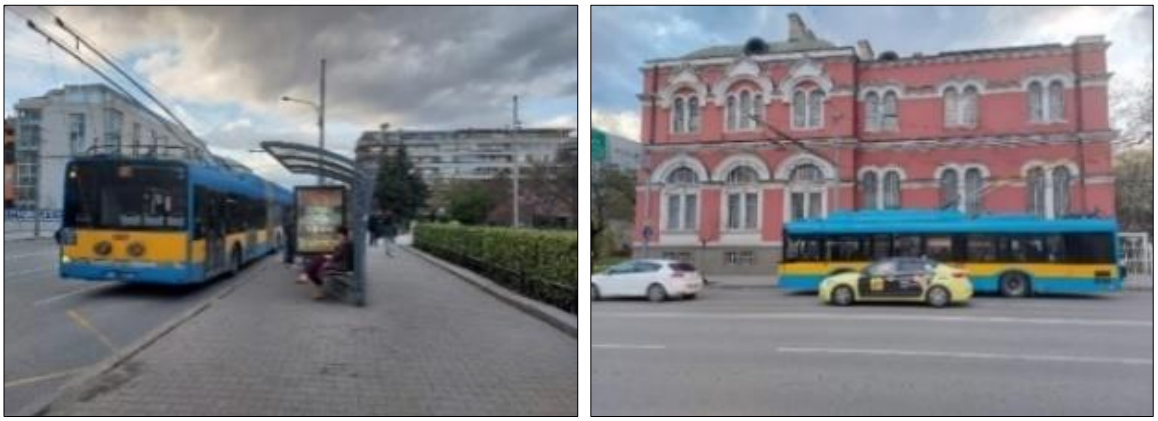

Figure 7. Trolleybus lines in the city of Sofia (Source: Authors)

Figure 8. Bus lines in the city of Sofia (Source: Authors)

Maps were created with a 100 m buffer around the stops, while the exact distance between the stops and the tourist sites was calculated in ArcGIS Desktop (Figure 9).

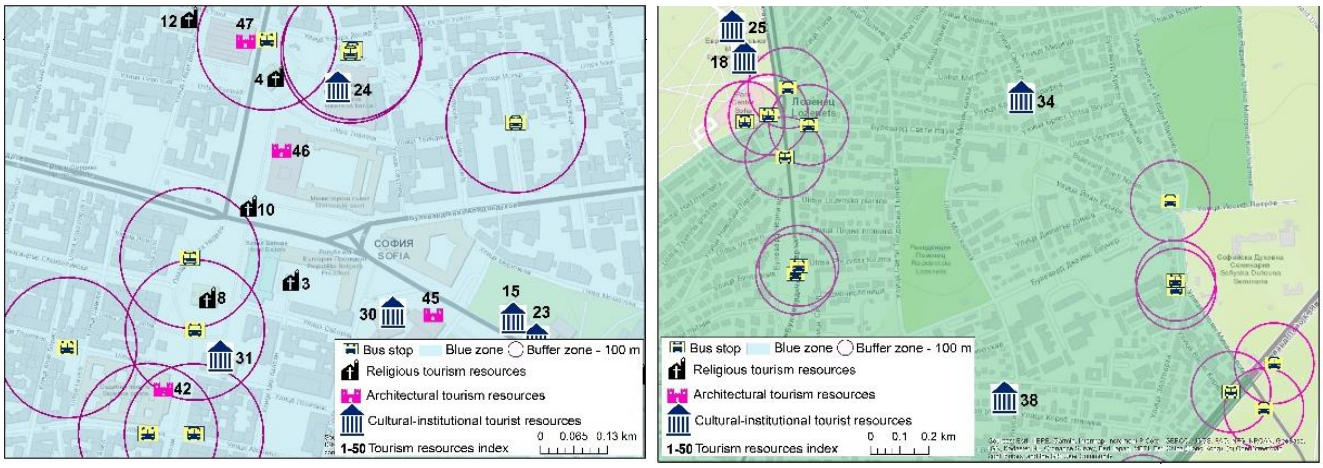

Figure 9. 100 m buffer around the public transport stops in the city of Sofia (Source: Authors)

Figure 10 presents the distance of anthropogenic tourist resources from public transport stops. Fifteen of the resources are within 100 m, nineteen from 100-200 m, thirteen from 200-300 m, 1 from 300-400 m, and 2 over 400 m. All fifteen sites (less than 100 m) fall into the "Blue Zone" for parking.

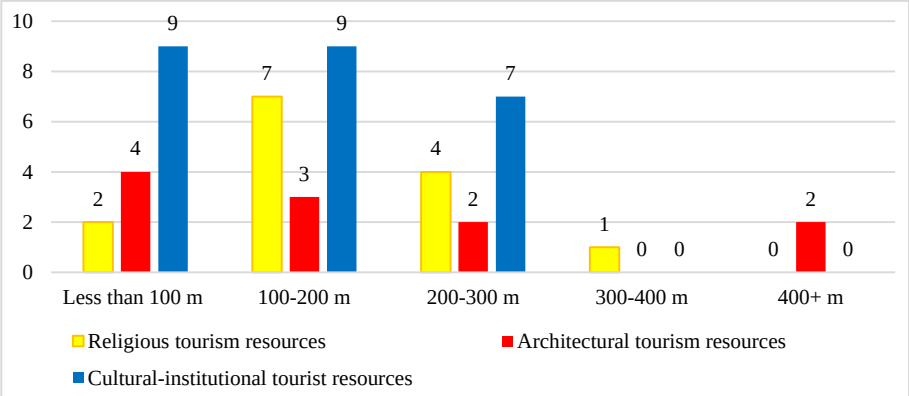

Figure 10. Grouping of material anthropogenic resources, according from the nearest public transport stop in the city of Sofia (Source: Authors)

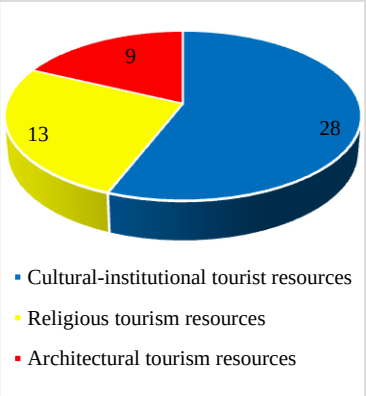

Figure 11. Number of considered material anthropogenic tourist resources by groups in the city of Sofia

Summarized assessment of transport accessibility to selected material anthropogenic resources

Figure 11 presents the number of considered material anthropogenic tourist resources by groups. Religious tourist resources: *"St. Alexander Nevsky" Patriarchal Cathedral* (object No. 2 on the map) is in the center of Sofia, on "St. Alexander Nevsky" Square. It is the second-largest Orthodox church on the entire Balkan Peninsula. The foundation stone of "St. Alexander Nevsky" Patriarchal Cathedral was laid on February 19, 1882. The official consecration of the church, however, only took place in September 1924. "St. Alexander Nevsky" Patriarchal Cathedral is characterized by very good transport and pedestrian accessibility. It is located in the central part of the city, within the Blue Parking Zone, just a 2-minute walk from the nearest public transport stop. It is located 600 m, or about an 8-minute walk, from the Sofia University metro station (Figure 12). Banya Bashi Mosque (object number 4 on the map) is in the center of Sofia on Princess Maria Luisa Blvd. It is the only surviving functioning medieval mosque in the city. It was built by the famous Ottoman architect Sinan, who designed over 300 buildings, including the Suleiman Mosque in Istanbul and the Selimiye Mosque in Edirne. The mosque is only a 1-minute walk from the nearest public transport tram stop and from Serdika metro station, which is 70 m away (Figure 13).

Figure 12. "St. Alexander Nevsky" Patriarchal Cathedral, St. Alexander Nevsky Square (Source: Authors)

Figure 13. Banya Bashi Mosque, 18 "Princess Maria Luisa" Blvd. (Source: Authors)

Figure 14. The Sofia Synagogue, 16 Exarch Yosif Street (Source: Authors)

The Sofia Synagogue (object No. 12 on the map) is also located in the center of Sofia, at 16 Ekzarh Yosif Street. It was built in 1909 according to a design by the famous Austrian architect Friedrich Grünanger, who used the old Leopoldstadt Synagogue as a model. In 1956, the Sofia Synagogue was declared a cultural monument of national importance. The synagogue is 200 m, or a 3-minute walk, from the nearest public transport stop - Serdika metro station (Figure 14).

Architectural tourist resources: Sofia University "St. Kliment Ohridski" (object No. 43 on the map) is located in the center of Sofia, on Tsar Osvoboditel Blvd. It is the oldest and largest higher education institution in Bulgaria. The university was established on October 1, 1888, as the Higher Pedagogical Course. The university is just a 1-minute walk from the nearest public transport stop. It is located 50 m from the Sofia University metro station (Figure 15). The Bulgarian Academy of Sciences (BAS) (object No. 44 on the map) is located in the central part of Sofia, on Fifteenth of November Street. The BAS building is an architectural and artistic cultural monument of national importance, designed by architects Ovcharov and Yordanov. It is located 300 m (about a 4-minute walk) from Sofia University metro station (Figure 16).

Figure 15. Sofia University "St. Kliment Ohridski", 15 Tsar Osvoboditel Blvd. (Source: Authors)

Figure 16. Bulgarian Academy of Sciences (BAS), Fifteenth of November Street (Source: Authors)

Cultural-institutional tourist resources

The National History Museum (site No. 32 on the map) is located outside the city center of Sofia, in the Boyana district, on Vitoshko Lale Street. Despite being outside the city center, the transport accessibility of the museum is good, both by car and public transport. A large parking lot has been built in front of the museum, convenient for tourist buses. The National History Museum was established on May 5, 1973. Through over 10,000 exhibits on an area of about 6,000 m², the history of today's Bulgarian lands is presented there (from the 7th millennium BC to the mid-20th century).

CONCLUSION

The research can be valuable for both Bulgarian and foreign travel agencies and visitors to Sofia. The study presents a GIS-based assessment of the transport accessibility of the 50 material anthropogenic tourist resources in the city of Sofia, Bulgaria. An analysis of the pedestrian and transport accessibility to anthropogenic tourist resources in Sofia Municipality. The present study is based on the typology of anthropogenic tourism resources developed by Vasileva & Kabakchieva (2020): Religious tourist resources (13 pieces), Architectural tourist resources (9 pieces), and Cultural-institutional tourist resources (28 pieces).

Several conclusions can be drawn from the study:

1. Anthropogenic tourist resources are territorially concentrated in the historical and modern center of the city of Sofia, which facilitates their accessibility by public transport.

2. Only five of the tourist sites, or 10% of those covered in this study, are located outside the Blue and Green parking zones. For the remaining 90% of the sites, the Blue and Green parking zones hurt the organization of tourist visits, regardless of their nature, group, or individual.

3. Of the 50 sites studied, only 23 are suitable for people with disabilities. Therefore, it is necessary to improve the accessibility of those sites for visitors with special needs.

4. Anthropogenic tourist resources play a pivotal role in the formation of tourist attractiveness and are of paramount importance for Sofia's function as a tourist destination. Those resources are important for the overall development of the Sofia region. The research exhibits limitations related to the lack of data (sociological survey) regarding the correlation between transport accessibility on the one hand, and number of visitors, on the other, i.e. – to what degree the number of visitors is dependent on public transport accessibility – if at all.

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