

PEDESTRIAN ZONES AS IMPORTANT URBAN STRATEGIES IN REDEVELOPING THE COMMUNITY – CASE STUDY: ALBA IULIA BOROUGH PARK*

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Abstract

The pedestrian zone issue is by far an important matter in the context of urban regeneration. Cities which adopted this strategy – the pedestrian zones – have recorded better urban attitudes regarding the urban environment, a continuous growth of the urban quality, an improved urban ecosystem and continuous attractiveness for investment and tourism.

This article explores the evolution of the pedestrian zones as ideas in utopian urban models in the early 1900 and later as efficient environmental friendly strategies adopted by cities. After identifying the path this concept followed, from a simple idea to an important strategy of urban development, the paper focuses on the major characteristics and benefits of the pedestrian precincts. Next, the article focuses on the newest pedestrian zone in one of the Romanian cities, Alba Iulia and it tries to identify the types of impact this area has so far on the community and entire city.

Keywords: pedestrian zone, pedestrians, rehabilitation, urban development, social impact.

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1. Introduction

Since the construction of automobile, cities and towns have experienced major challenges. This new invention, the car, brought some advantages such as: covering long distances in a short period of time, comfort of its users, the expansion of the city (sub-urbanization, urban sprawl) and the possibility for individuals to live in private houses.

Nevertheless, the automobile era had some disadvantages for these living organisms, cities. To name a few: pollution, crowded cities, lack of parking places, inner city degradation or car-dependent communities. In consequence, the city lost its inherited character of walking. From this perspective urban planning became a very intriguing method for planning the city. On the one hand, once, the automobile conquered the city, the latter had to be (re)designed to function properly with the new requirements. On the other hand, Garden City or Radburn models and later, the necessity to create more livable, safe, transit-oriented and compact cities, redefined the importance of the pedestrian zones and pedestrians.

In my opinion, well designed pedestrian zones (squares, plazas, streets) are a good indicator not only for urban quality, but also for the capacity of attraction of an urban center. The present study is concerned with these developments and their growing importance, not only at the international level, but also in Romania after the fall of the communist regime. In consequence, the first section briefly focuses on the literature concerning the evolution of the pedestrian zones concept, their main characteristic and their benefits, which ensue from social, health, transport and environmental oriented studies.

The next section – section three – presents the new pedestrian area from Alba Iulia, highlighting its transformation from a poorly valorized historical area into a touristic zone with high standards. The motivations of the local authorities in developing the area and the stages undertaken are also presented in this section. Using the data available from the Alba Iulia City Hall, from National Statistics Institute regarding the number of tourists' arrivals and nights spent in touristic structures and the direct observation at the site, the next subsection is concerned with analyzing the social, economic and touristic impact of the new pedestrian zone. Section four concludes the paper and considering the data and information presented earlier, it highlights the new stage the Romanian cities of this level experience today and the importance of the pedestrian areas in improving the urban quality.

Therefore, the objective of this paper is twofold. Firstly, it discusses the main advantages of the pedestrian areas in general. Secondly, it rigorously examines the outcomes of the redevelopment of the citadel moats into the today Borough Park project.

2. The evolution of pedestrian zones

Pedestrian zones, named also pedestrian precincts are defined as 'squares, plazas, streets or streets networks reserved solely for pedestrian use' (Button, 2010, p. 302). From the perspective of walking ability they are seen as the places where the highest intensity of walking is reached (Monheim, 2003).

Their evolution in time is dependent upon people self-motivation for walking. Indeed, at the beginning of human existence walking was a fundamental necessity for survival (food and shelter). Later, with the evolution of humankind and the appearance of urban settlements it became a mode of relaxing and interacting with people. Its evolution registered a downward path with the debut of motorized transport. It regained its importance especially in the last 20-30 years, when urban and city planners were challenged to create new pedestrian places in a car-oriented city, because of their environmental, recreational and social benefits. Therefore, walkable environments needed to be integrated in urban planning, not solely as urban architectural and design exponents, but also as interaction and meeting places, as determinants of human mobility in a car-dependent society.

Since local authorities and experts became aware of the necessity to create these urban developments, walking, as transport mode, and pedestrians received a lot of attention in studies centered on traffic or transport, on the quality of urban life or on the extension of urban sprawl. Moreover, there is a growing literature attesting to the benefits of non-motorized transport modes, including cycling and skating, and the advantages of reducing the motorized traffic.

At large, the evolution of pedestrian zones shows how cities adapted in time to different transportation modes and the manner in which they became more attractive for possible investors and tourists. The image of an active and environmental friendly city is always more convincing than that of a noisy and agglomerated one.

2.1. The literature concerning the pedestrian zones

The literature focusing on pedestrian zones and pedestrians is extremely vast. Since these developments began to call the attention of urban planners and urbanites many studies have centered their attention on pedestrian precincts. Mostly, the concept of pedestrian precinct is related to topics such as: the reduction of traffic congestion, the reconstruction and the transformation of the city centers (especially after the World Wars) in shopping arterials that attracted tourists; historic preservation, main street revitalization; the reorganization of the built environment and the improvement of urban quality or the reduction and control of the urban sprawl.

The first studies regarding the pedestrian areas appeared with the development of the automobile era, when the city became more and more car-oriented. This called the attention of different specialists and some urban planning models concerned with both adapting the city for the automobile and for the pedestrians were proposed.

Generally, the idea these new models promote is the separation of pedestrian areas from motorized transportation, in order to create a safe environment for pedestrians. The first such idea evolves with the Garden City Movement initiated by Sir Ebenezer Howard in 1898. The Garden City model Howard proposes tries to offer a better planning of the industrial city with important consequences on the quality of urban life. The model perfectly divides the pedestrian zones (parks, gardens, green spaces or spaces pertaining to public buildings) from the transportation ones (boulevards).

Much attention to the separation of traffic and the emergence of pedestrian areas was given especially beginning with 1920s. One of the most revolutionary models in this regard was Radiant City, elaborated by the French architect Le Corbusier. The model promotes the multi-level freeways for automobile traffic, which would offer the ground for pedestrian use. It is not only the pedestrian and automobile traffic that is divided, but the trucks are proposed their own pathways. The 60-story towers he designs for the residents would create great densities of people on a small surface with great opportunities for the free land to be transformed as recreational and landscaping space. Le Corbusier 'pillar' city – the buildings and the freeways are constructed on pillars – is conceived in such a way that manages to fulfill both the pedestrian and auto requirements.

The pedestrian areas and safety are a further preoccupation in the post-war planning, especially with the emergence of Radburn model, designed by Clarence Stein and Henry Wright. Radburn proposes the separation of vehicular traffic from the pedestrian one – pedestrian pathways and underpasses – in order to increase the safety of the pedestrians. The model was specially created to meet the requirements of the automobile era; hence it was also named 'A town for the Motor Age'. Although Radburn model hasn't been applied at a large scale with few exceptions (Cumbernauld, Scotland), it has the quality of creating separate circulation schemes for pedestrians and bicyclists and for motorized vehicles.

The division of transport – pedestrian is presented as an important urban strategy in organizing the street network in 'Tomorrow Town', an Architectural Association School of Architecture educational project conducted by Eric Rowse between 1937 and 1938. The model proposes an interesting scheme of separating different types of traffic. For the safety of the urban citizens the pedestrian and bicyclists alleys go underneath the roads, whenever they come in connection with them. There is also a certain interest in promoting local culture and architecture because the paths of the alleys are very well chosen-between certain buildings – in order to offer a qualitative urban experience.

Beginning with the late 1950s until 1970s, as a strategy for revitalizing the downtowns of American cities, urban planners introduced pedestrian malls, precursors of downtowns indoor malls that failed to revitalize the area. The literature covering the subject points out the main advantages and disadvantages of the strategy. For example, creating these malls only for pedestrians and forbidding car access had positive effects for the pedestrians, but affected negatively the revitalization of the zone because of poor access and parking places for car users. Another phase in revitalizing the centers was the transit malls stage, which had a greater success than its predecessors because they allowed limited car access and they were connected to the public transport and thus integrated in the city' main transportation system.

The preoccupations concerning pedestrianization interested many, from architects to urban planners, designers and social scientists, from both the European and American continent. The pedestrian areas became a constant discussion in the context of

suburbanization, urban sprawl, traffic congestion, pollution and transformation of downtowns. For certain specialists they became perfect urban design strategies in revitalizing the city. The characters that advocated for the importance of the pedestrian areas in the 1960s: Jane Jacobs, Kevin Lynch, Gordon Cullen and Christopher Alexander. They influenced others, whose major concern became the livability of the street and the creation of more pedestrian oriented developments as: Donald Appleyard, Amos Rapoport and Paul Altman.

The literature of the 1970s was concentrated on the revitalization of city centers in a different manner from the 1950s or 1960s. Now, the studies focusing on revitalizing downtowns becomes aware of the importance and efficiency of the pre-World War II downtowns and their pedestrian-friendly orientation. In this manner, it proposes a threefold strategy: historical preservation, main street transformation and waterfront development. The literature of the 1980s is focused mainly on the pedestrianization process and on the street, as an important element for the urban design.

Beginning with the 1980s and 1990s a special attention is given to pedestrian areas in the context of suburbanization and urban sprawl. These two phenomenon and the problems associated with them influenced the advent of New Urbanism. The term refers to a set of development strategies which manage growth and emphasize the importance of: mix-uses developments, increased density, reduction of traffic congestion, accessibility, sustainability, smart transportation modes, walkability, human scale development etc.

One can identify many variations of the subject in the specialized literature: Smart Growth, New Community Design, Transit Oriented Developments (TODs), also known as Pedestrian Pockets (PP), Location Efficient Development, Clustering and Traditional Neighborhood Development (TND). Although, common in scope, these development practices should not be confused as the same and one land use strategy. The distinction relies in their scale of implementation. While New Urbanism, TOD, TND, Location Efficient Development and Clustering can be applied at the block, site, neighborhood, networks of neighborhoods and town level, Smart Growth works at regional level.

The most popular variations of New Urbanism one can find in literature are TOD or PP and TND. TOD or PP was developed by architect Peter Calthrope and promote the readjustment of the existing suburbs by creating public transportation hubs as the center of the neighborhood, surrounded by high-density development and pedestrian areas or pockets. Because they should be adapted for pedestrians the PP are located within 400-800 meters from a transit stop. The TND was elaborated by the firm of Andreas Duany and Elizabeth Plater-Zyberk and it seeks to create mix-use, walkable neighborhoods, less auto-oriented and congested. From the urban design perspective it has a discernible active and green center and its structure is a grid of straight streets and boulevards, where the buildings are lined and grouped by architectural style (Sen and Bell, 2001). Both, TOD and TND promote mix-use and walkable developments in the context of segregation of uses the car-oriented communities developed.

New urbanists or 'neotraditional-urbanists', as they are sometimes called promote walking and development of pedestrian areas by adapting some common measures as:

- High densities;
- Pedestrian friendly design – bicycles, rollerblades and scooter lanes; good crossing and traffic calming measures; free car streets; qualitative and beautiful architecture and urban design that offer comfort to pedestrians and finally a sense of place.
- Pedestrian-oriented street pattern – interconnected street grid networks that reduces traffic and facilitates walking through providing multiple routes between destination and increasing pedestrian accessibility.
- Mix-uses – everything from common households needs to education and work should be placed within a 10 minutes walking.
- Parking regulations – parking shouldn't detain pedestrians therefore it is located to the rear of the buildings and accessed by alleys and lanes.

Therefore one can identify in the specialized literature two directions of re-approaching the pedestrian areas: downtown revitalization and suburban reorganization.

In the context of the development of transport and of its influence on the built environment some authors tried to classify cities in accordance to their capacity of adapting to and maintaining a certain balance between pedestrian and motorized traffic. It is worth mentioning some of them here, because they offer a different classification of the city, which imply its walkable ability.

Two researchers preoccupied with classifying the city are Jan Gehl and Lars Gemzøe. They agree with the idea that public spaces have changed since early 1900, once the motorized traffic developed and they identify three traditional uses of them: meeting place, market place and traffic place. Therefore they propose four different types of cities:

- a. the traditional city – where there is still a balance regarding the three uses of the public spaces.
- b. the invaded city – where the territory has been usurped by a single use at the expense of the other uses of the public space. For example, car traffic has usurped the squares or plazas at the expense of parking.
- c. the abandoned city – marked by the disappearance of both public space and public life.
- d. the re-conquered city – where there are attempts to find a new balance between the traditional uses of the city (Gehl and Gemzøe, 2003, p. 99).

Another author who classified cities in accordance to their capacity to maintain their walkable characteristic was Peter Newman. He names ancient cities 'walking cities' because they could be walked in a very short period of time. It would take someone one hour to walk across from one side of the city to another and an average journey would take half an hour. The Industrial Revolution destroyed this type of city, by bringing new densities and expanding the city. The city took a new form to accommodate the new economy, which he names 'transit city'. The main characteristic of this type is that it

could expand 20-30 km along its corridors, but still be 'one-hour wide'. The transit city could still create walkable environments at every new rail station and along each tram streets. In the context of re-urbanization Newman proposes the concept of 'knowledge-based' city, which appears in the context of 'knowledge economy' that requires people to interact creatively face-to-face. Thus, the city areas, with dense urban environments, with coffee shops and mixed uses, where car traffic is restricted and where people can interact, are becoming more important in the context of the new economy.

2.2. The characteristics of pedestrian areas

Taking into account the literature review presented in the previous section some general characteristics of the pedestrian zones can be punctuated. No matter their type (parks, streets, open spaces, squares or plazas) they all have in common the safety and the comfort of the pedestrians.

The quality of the pedestrian precinct depends on a series of factors that in their turn are influencing the comfort and safety of their users. The topography, the weather and the distance the users have to cover from the starting point to the destination point contribute to pedestrian comfort. The urban quality, translated in terms of reduced air pollution or noise, is another factor, which influences the pedestrians ease.

Except from the urban environment and other land characteristics, the pedestrians comfort is related to the way the pedestrian zone is organized. To achieve a better comfort, in time, urban designers and local authorities brought new improvements to pedestrian areas as: signposting of routes, covered walkways, large pavements, proper street furniture and vegetation. For relaxing and health purposes bicycle, skateboard and roller-skate lanes were also incorporated in the pedestrian precinct. A great importance to develop pedestrian zones to meet the pedestrians' needs was given especially with the emergence of the school of New Urbanism. Except the improvements mentioned above new urbanists propose: the development of two ways lanes for pedestrians, more but shorter street lights, tree-lined streets or hidden parking lots.

Many pedestrian areas have also shopping opportunities, restaurants or other facilities - as children playgrounds - for leisure activities. Except their organization, their location is another characteristic that influences people choice to visit the place. The quality of the surrounding architecture and urban design defines also the attractiveness of the pedestrian zone located nearby.

As important urban strategies pedestrian precincts therefore promote: safety, mental and physical recreation, social interaction, walking and different activities related to it (enjoying nature), the reduction of noise and pollution, of resource consumption and of vehicular traffic. From the same standpoint pedestrian areas should be perceived as the expression of the interaction between three actors: the users or the pedestrians, the managers, namely the local authorities and the designers, planners and architects. The role of each group can be finally translated as the success or failure of the project.

The local authorities compose the group responsible for allocating the financial and human resources to develop pedestrian areas. They also maintain the urban quality and public safety through different applicable measures such as: employing public

guardians or limiting the driving speed in the neighborhoods of these areas. We call them managers because they use different administrative tools to increase the quality of these zones and to fulfill the needs of the pedestrians. The group of designers – urban designers, urban planners or architects – accounts for projecting and integrating the pedestrian zone into the urban landscape. While the last group, the pedestrians, is responsible for maintaining and preserving the quality of the pedestrian zones. The pedestrian group role is to use these zones for social interaction and recreation. They are the dynamic element of the walkable environments and their presence, although hard to quantify in numbers, is a positive response regarding the attractiveness of the pedestrian environment. As the volume of pedestrians attests the attractiveness of the public space, high pedestrian numbers are interpreted as a proof of successful planning (Monheim, 2003).

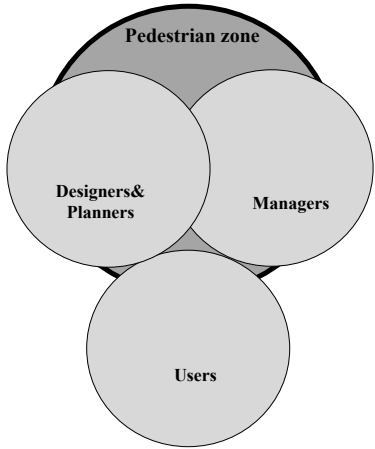


Figure 1: The interdependency relationship between the three types of actors regarding the pedestrian zone

Source: The author

Regarding therefore the three types of actors implied in the success of pedestrian areas, there is an interdependency relation between them (Figure 1). They all share, in different manners, the same space and they cooperate in order for that space to survive. The local authorities and the designers create these spaces for the citizens (pedestrians), who use the zones if they are pedestrian-friendly (meet the safety, security, comfort and mobility principles). The designers depend on the local authorities' investments in order to project the walkable environment, while the local authorities cooperate with authorized architecture and design firms in order to design pedestrian-oriented zones.

2.3. The benefits of walking and of pedestrian precincts

Because walking implies a certain physical effort it is therefore a low physical activity in contrast to fitness or jogging. Like any physical activity, it has certain benefits on people. Since walking was seen as an indispensable activity with health benefits on people, the literature enriched with studies regarding the relationship between low or moderate activity and physical and mental health. But many studies went beyond

health benefits of walking as physical activity and discovered social, environmental and economic benefits, basing their assumptions on concluding research. As to sustain our belief that pedestrian zones and their association with walking and cycling is not an important urban strategy only for revitalizing the city, but also for creating a better and healthier social urban environment for people, we sum up these benefits as follows:

- Health benefits, which are grouped in two categories: a) physical benefits – low mortality, especially when it comes to old people; lower risk of coronary heart disease, especially for elderly; reduced blood pressure; reduced digestive problems; muscles relaxation because of the body-warming effect (Kotecki, 2011); greater bone density (Kotecki, 2011; Leaky and Lewin *apud* Newman 2003); obesity and type II diabetes reduction (Rosato, 2012); calories burning; b) psychological benefits – stress reduction; improved mental health when walking is practiced in groups and social settings; mental relaxation and stimulation of creativity in problem solving (Kotecki, 2011); better mood and growing self-esteem; essential part in children's development and local sense of place (Hillman *apud* Newman, 2003).
- Social benefits – social interaction; communication; increased sense of safety; encourage family and community connection; reduces isolation and loneliness; increased confidence.
- Environmental benefits – less air and noise pollution; environmentally friendly means of transport (walking, cycling, jogging etc.); reduced traffic congestion.
- Economic benefits – less expensive transportation modes; local shops economic revival; reduced maintenance costs than for roads; parking costs savings and consumer costs savings (Litman, 2011); accessibility to public services and goods; efficient land use; community livability.

3. Borough Park from Alba Iulia – a new model of pedestrian precinct in Romania

Alba Iulia is a medium size town from Romania, located in the Transylvanian region, with a population counting about 68,741 people in 2011 (National Statistics Institute, 2011). The city is also the county seat of Alba County and an important regional center. The Transylvanian city is popular for its historical background: in the period of the Roman Empire it was an important military center and later the capital of the Roman Dacia, the first capital of the Voivodeship and later Principality of Transylvania, which attests its significant cultural, economic and politico-administrative role in the medieval period. It housed many important historical events such as: the beginning of 1848 Revolution and the Great Union of the Romanian principalities from 1918.

Under the communist regime (1945-1989) the city obtains the status of municipality (under the administrative reform of 1968). In conformity with the principles of the socialist regime, which sustained country development through extensive industrialization and forced urbanization, Alba Iulia becomes an industrial town. In order to further develop its industrial base, but also because of its new status – county seat – Alba Iulia benefits from important state-oriented investments. After the fall of the communist regime, in the context of deindustrialization process, the post socialist city tried to identify new mechanisms in order to survive the new economic and political situation.

The local authorities that came along once with the decentralization of power focused their attention on formulating urban development strategies with twofold results: to improve the urban life and quality and to attract tourists, important source of incomes. In this context the development and the rehabilitation of the road infrastructure (2090 km of modernized roads from 1990 to 2010), of the water supply and other public utilities and the restoration of the main touristic objectives (Table 1) became the new agenda of the local authorities.

The transformation of the Vauban Borough into a touristic destination became the priority objective for the local authorities. The borough is one of the few well conserved fortifications of Vauban type and therefore represents an important touristic objective, which can have positive spill-over effects on the city economy. The actions the authorities unfolded over the years in order to rehabilitate and transform the citadel into a touristic trademark are represented in Table 1.

Table 1: The stages regarding the development of Alba Iulia Borough and the old center

Stages	Phases	Years	Developed and in course activities
1. The restoration of gates	The 1 st gate	2001-2006; 2009	The reconstruction, restoration and conservation of the gate.
	The 2 nd gate	2001-2005; 2009	The reconstruction of the gate using old photographs and drawings; the accommodation of the construction for car access.
	The 3 rd gate	1998-2008; 2009	The restoration, consolidation and conservation of the guard chambers and of the stone artistic components, the construction of a mobile bridge.
	The 4 th gate	2003-2006; 2010	The restoration and the conservation of the gate; the foundation of a touristic point; the systematization of the public space.
	The 5 th gate	2010-2011	The restoration and the conservation of the gate.
	The 6 th gate ²	2011-2012	The rehabilitation and the reconstruction of the initial gate.
	The 7 th gate	2011	The rehabilitation of the gate.
	The South gate of the Roman castrum	2009-2010	The foundation of an archeological park; the restoration of the gate.
2. The rehabilitation of the Ancient/Medieval routes	The route of the three fortifications	2009-2010	The restoration of the main historical objectives with touristic value.
	The Northern, Southern and Eastern route / The Borough Park	2009-2012 ³	The construction of a pedestrian-car assembly; the organization of the assembly with public furniture, fixtures and proper vegetation; the restoration of the Citadel walls associated with the routes; the restoration of the ravelins and of bulwarks.

- 2 The reconstruction and the rehabilitation of the two are treated by the local authorities as one individual phase because of the proximity of the two historical objectives. In this text they are treated as different stages because I consider important not the financing project or the period of time, but the objective itself.
- 3 The reconstruction and the restoration of the Northern route's curtain walls, bulwarks, ravelins and counterguards is treated by the local authorities – for financial reasons – as a separate phase and was realized in 2012. Nevertheless, because it is part of the Borough Park we treat it as the same phase.

Stages	Phases	Years	Developed and in course activities
3. The reconstruction of the Western route	The Western route/ The last part of Borough Park	2011-present	The restoration of the old Western route, which includes also the Union Park; the construction of three bridges, one of them a mobile bridge; the restoration of St. Michael Ravelin.
4. The rehabilitation of the interior zone of Vauban Borough	The construction of Custozza Plaza	2011- 2012	The foundation of a pedestrian zone with suitable facilities; the creation of parking places nearby; the valorification of the remnants.
	The modernization of the streets situated in the historical center	2011- present	The modernization and the improvement of the streets infrastructure (drainage and water system); the pavement of the alleys and the placement of the street furniture, fixture and vegetation.
5. Promotion of the Citadel	-	2011-2012	The promotion of the touristic potential of the Citadel through different means: on-line, electronic (DVDs, presentation movies etc.) and direct.

Source: Information provided by Alba Iulia City Hall, 2012, and author's own analysis

Leaving from the objective of transforming Alba Iulia City into an attractive Romanian touristic destination, the local authorities focused on transforming the citadel moats into a great pedestrian zone, called Borough Park. The construction of the park started in 2009 and was possible through European funds. Two main projects, all aiming at transforming the old borough moats in the biggest pedestrian zone of Alba Iulia, were financed:

- ‘Rehabilitation Historical Centre, Eastern, Sothern, Northern route, Vauban type fortification Alba Iulia – access routes, external lightning and specific street furniture’ – the total amount of the project: 47.5 million lei, of which 28.3 million is irredeemable contribution from the EU (EFRD⁴) and 4.3 million from the Romanian Government (Alba Iulia City Council, 2012, Center Regional Development Agency, 2012).
- ‘Reconstruction and emphasis on the accessibility of the Western flank, Alba Iulia Carolina Citadel, Vauban type fortification’ – the total amount of the project: 68.3 million lei, of which 41.3 million lei are EFRD funds and 9.09 million lei from the Romanian Government (Alba Iulia City Council, 2012, Center Regional Development Agency, 2012).

The development of the Borough Park in two different phases is motivated by:

- Conservation reasons – the Western route of the citadel was destroyed in 1920 to make way to the Coronation Cathedral. In these circumstances, while the northern, southern and eastern routes of the park needed less complex activities to be rehabilitated, the western flank necessitated optional interventions to be reconstructed.
- Financial reasons – result from the conservation reasons. The reconstruction of the western flank implies more financial resources than its counterpart.

4 European Fund for Regional Development.

- Management reasons – because of the immensity of the project, this was divided in two phases in order to achieve perfect timing, good organization and also to reduce the period of time in which the zone was inaccessible to the public.

Borough Park is designed as a multifunctional space (alleys, playgrounds, and green spaces) situated between the citadel's walls, which proposes different types of facilities that promote human scale. The place is an association of pedestrian and bicycles alleys and carriageable roads. The access to the park is possible from many points, from different passages situated in the northern area to the gangways and bridges located in the western part. This transforms a simple journey, into an interesting one and offers the pedestrians different options.

The development of this pedestrian zone is linked with the redevelopment of the old center, which has touristic value. Its intensions are to improve the image of Alba Iulia and to make it a constant destination for the national and international tourists. The action can be connected with the revitalization of the American and European downtowns, specific for 1960s and 1970s. The instruments of revitalization differ. While the transformation of the American and European cities downtowns implied transforming the main streets into pedestrian shopping streets, the local authorities of Alba Iulia transformed a historical objective into a pedestrian area, keeping its historical value.

The reorientation of the Romanian local authorities towards pedestrian zones appears as a consequence of adhering to European Union, which makes it possible for the Romanian cities to access European funds. These environmental-friendly, safe and multifunctional zones raise the quality of the neighboring area and of the entire city. They are also good indicators in attracting business and tourists.

Borough Park is the first project of this type in Romania. Its uniqueness lies in the development of a pedestrian precinct, with all the facilities, in a Vauban type fortress. Keeping in mind the three types of actors responsible with the functioning of the pedestrian area the formula for Borough Park is the communication between the Alba Iulia City Hall, Grup Corint, responsible with designing the project and the residents, the direct beneficiaries and the tourists⁵, the indirect beneficiaries of the park (Figure 2).

3.1. Borough Park present impact on the local community, economy and tourism

As any other new development Borough Park raises questions regarding the short-, medium- or long-term, temporary or permanent, beneficial or adverse impact of the newly built zone on the community, the city and the local economy. There are some elements that should be considered in order to establish the impact of the development on the surroundings such as: its location, character, facility, potential and capacity of absorbing businesses and people.

5 Here I considered the number of tourist arrivals in the touristic reception structures in 2011 (National Statistics Institute).

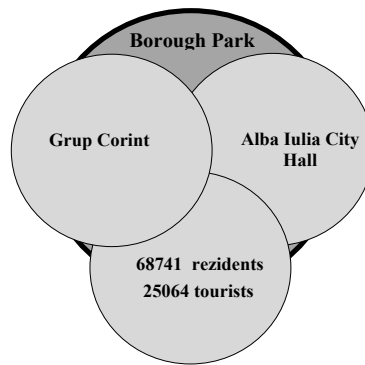


Figure 2: The Borough Park main actors and their interdependency relationship

Source: The author

Considering the above characteristics and taking into account the visits to the site in August, October 2011 and June 2012 and the specialty literature covered in order to confront the field information, some social, cultural, economic, environmental impacts of the Borough Park can be identified.

Probably the most important benefit for the local population, with short and long effects over time, was the opportunity of employment in the period of the site construction and after the opening of the park. The only data available regarding employment is for the western flank project and is represented in Table 2. Because of the location of Borough Park, in a site of historical importance, in time the community will develop a sense of place and pride. Through its character, the zone promotes further social interaction and cohesion. Nevertheless, by promoting cycling and walking it emphasizes the importance of moderate activities and their benefic effects on the everyday life.

Table 2: The number of temporary and permanent jobs regarding the construction of the western flank of the Borough Park

Project name	Temporary jobs (during construction)	Estimated permanent jobs (after the construction)
'Reconstruction and emphasis on the accessibility of the Western flank, Alba Iulia Carolina Citadel, Vauban type fortification'	280	26

Source: Alba Iulia City Council (2012)

At the moment, the economic impact of the Borough Park can be measured in terms of jobs created during the construction (Table 2). Only the project for the western route generated a number of 280 jobs, the majority in construction. The local authorities expect to create after the finalization of the Borough Park 26 permanent jobs in the area of the western route.

Because of the cultural and historical value of the place (Figure 3) and of the landscape improvement, Borough Park is an important touristic attraction. Analyzing the data regarding the tourist arrivals in the touristic reception structures between 2009 and 2011 (Table 3) we see that the highest annual growth rate, of 25.4 %, was in 2011, in

comparison with 2010 when this was negative. We find the same situation in the case of number of nights spent in touristic reception structures (Table 4).

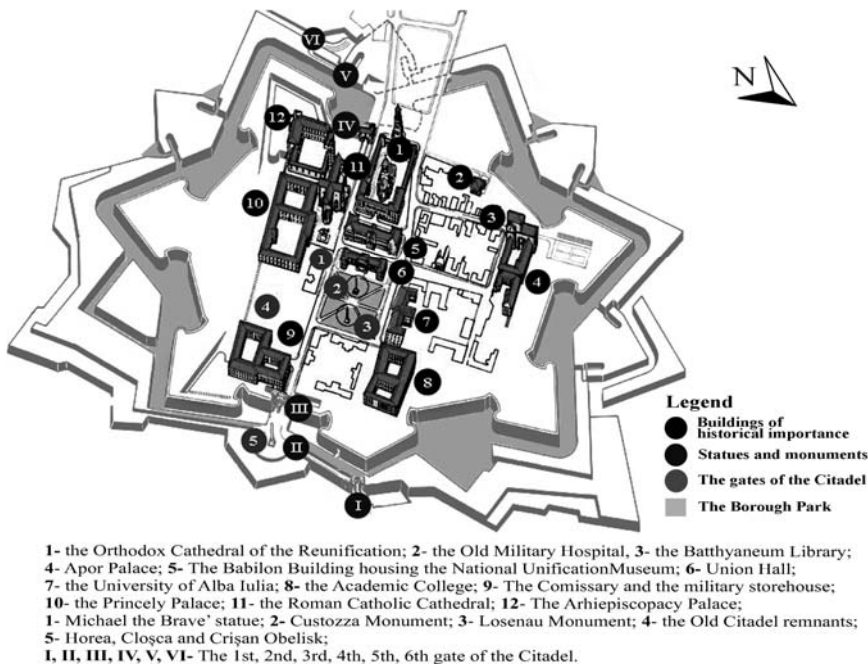


Figure 3: Borough Park and its main attractions

Source: Extracted from Alba Iulia City Hall, (2011), adapted by the author

Table 3: Tourist arrivals in the touristic reception structures⁶, in Alba Iulia municipality

Year	Tourist Arrivals	
	Number	Growth Rate (%)
2009	18,256	
2010	17,232	-5.6
2011	25,064	+25.4

Source: Data provided by the National Statistics Institute (2012)

Table 4: The number of nights spent in the touristic reception structures⁷, in Alba Iulia municipality

Year	Number of nights	
	Number	Growth Rate (%)
2009	40,438	
2010	42,156	4.24
2011	59,510	41.1

Source: Data provided by the National Statistics Institute (2012)

6 Hotels, motels, touristic villas, boarding houses and agrotouristic lodgings.

7 Idem.

Summarizing these impacts of the newly pedestrian-oriented development some general conclusions can be drawn. The magnitude of the impact during site construction was low because it influenced only the zone in discussion. The significance of the impact was adverse in the case of the landscape, the soil, the passing citizens and those living nearby and therewith beneficial for the level of employment. It is therefore advisable to say that the impact was of short-lasting duration (almost 4 years). Today, the impact of the park, without its Western flank, which is still under construction, has a low, medium, but also high magnitude, since it affects the site, the contiguous zone (from the landscape perspective) and the entire city (e.g. job opportunities). The impact of the Borough Park on the social, economic and environmental environs is of long-term duration. Usually the impact of the park is beneficial and less adverse.

The identification of the different types of impact of the Borough Park and their short-, medium- or long-lasting effect can offer a comprehensive imagine of the place sustainability in time. It is preferably that the impact is of positive and of long-term type. Table 5 tries to offer a brief analysis of the Borough Park impact on the economy, tourism, transport, built environment and society and therefore of the place sustainability over time.

Table 5: The analysis of the Borough Park sustainability

Sustainability	Positive impact (+)	Neutral impact (*)	Negative impact (-)
Economy – Encourage the location of local shops, restaurants, coffeehouses, newsstands, ambulatory and souvenirs shops; – Attract more tourists because of the recreational facilities and the restoration of the citadel; – Generate high rents because of the competition between firms;	+ +		-
Tourism – According to its position and historical value encourages anthropic tourism;	+		
Transport – Encourage walking and cycling; – Discourage use of cars;	+		-
Buildings – Conserve the citadel walls, the ravelines and the bulwarks;	+		
Environment – Reduce local pollution (noise, air, land); – Control the climate through plants and trees (microclimate);	+	*	
Society – Encourage people to value the national history; – Improve access for disabled;	+	*	

Source: Author's own analysis

6. Conclusions

First, the present study highlights the new stage the Romanian post-communist cities of regional and local influence, experience today. This is a stage of city revitalization and downtown redevelopment, through the regeneration of public spaces. The European funds play a major role in making possible the transformation of the city into an attractive urban center.

Second, by analyzing the present impact of the Borough Park upon the entire community it confirms the great benefits of economic and social nature the pedestrian areas have on the evolution of the urban society. In this context pedestrian areas are essential strategic tools in the redevelopment of the urban community.

Third, the level of implication of the local authorities through proper management and improved cooperation is vital. At this level I believe the cooperation between the public institutions and universities regarding the development of pedestrian areas in cities would have a major impact on the quality of the developed zones. There should be a strong relationship between the scientific research and public proceedings.

Last but not least; Borough Park has definitely the quality of reviving the old center of Alba Iulia municipality. At this point this is obvious at the level of tourists, whose number grew since the pedestrian zone was opened, and which proves the positive image the city has created.

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Note: Several documents and statistical data were requested by the author from various local and/or regional institutions in order to provide her with the broad socio-economic context in which the redevelopment took place. Among them the most important are: a) Programul Național de Restaurare 2012, (The National Restoration Program 2012), Ministerul Culturii și Patrimoniului Național. Institutul Național al Patrimoniului (The Ministry of Culture and National Heritage. National Heritage Institute), 2012, [Online] available at <http://www.patrimoniu.ro/pnr/pnr2012.pdf>, accessed on June 6, 2012; b) The Development Strategy of Alba Iulia Municipality, March 2005, [Online] available at http://www.apulum.ro/ro/strategia/alba_cap_00.pdf, accessed on September 5, 2012; c) Information on the financing of various redevelopment projects in the area, Alba Iulia City Council (2012) and Center Regional Development Agency (2012).