Public Space Design Manual

Manifesto for Public Space

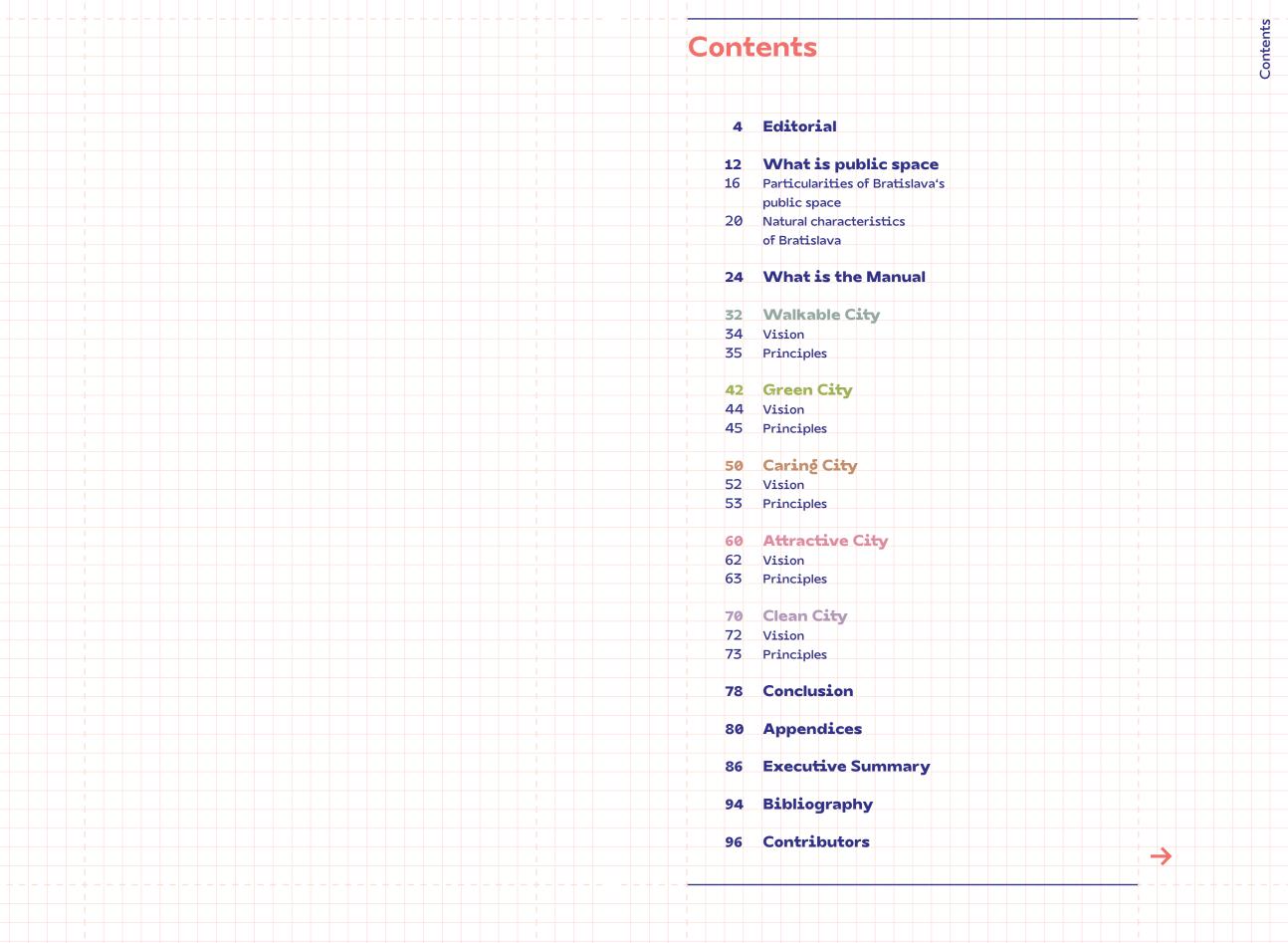
Public Space Design Manual

Manifesto for Public Space



© 2020 Metropolitan Institute of Bratislava

Public Space Design Manual



Editorial

Manifesto for Public Space fa

SK III A III III

Bratislava's public space and its quality have been a long-discussed issue from the outset of Slovakia's independent state. Changes for the better happen rarely and are mostly the results of private investment intents or guerrilla initiatives, all without a clear conceptual coordination of the local municipality.

In order to fill the gaps left by the missing vision for the city's development, we, inspired by the example of other European metropolises, decided to create this Public Space Design Manual, which defines the basic principles of public space design, development and governance.

This document, titled the Manifesto for Public Space, is the first and introductory document of the Manual. It intends to name the foundational, value-based starting points for the creation of clean, attractive, green, and caring public spaces, which will serve all citizens. The role of the Manifesto is not to be a regulation but a helpful tool, which should, in various forms of projection, help to improve the quality of public space through original and smart solutions.

This effort cannot be realized without the combined effort of all those who are partaking in city formation. That is why the Manifesto is meant for a wide audience, starting with the municipality, for which this document serves as a key tool for evaluating both proposed and existing public spaces. For private subjects, it should serve as a groundwork for creating high-quality designs and proposals of public spaces, in line with the vision and principles of the city.

Last but not least, a key part of the public space creation is the diverse public of Bratislava, who breathes life into the urban environment. We hope the Manifesto will not only be informative for the citizens but also stimulate a different way of thinking about the role of public space, which is equally as varied and complex as its users. Preserving local particularities, which characterize our city, is of the utmost importance. The goal of the document is not to instil uniformity in the entire city but to create a comprehensive value-based vision, present in every form of the public space. This goal can only be reached through a dialogue with the general public and the expert community.

Therefore, on the following pages we also include the statements of nine experts on the topic of the quality and potential of Bratislava's public space. We hope such interdisciplinary insights, coupled with practical experiences from everyday life, will serve as the groundwork for the creation of high-quality, authentic but most importantly inclusive public space.

In conjunction with a sensitive approach to history, geography, and especially the societal needs of the city, the Manifesto is a declaration of principles that will reshape the public space of Bratislava and prepare it for the challenges of this century. Editorial

In your opinion, what are the main qualities and potential of public spaces in Bratislava?

Population and urban growth of Bratislava historically happened in considerable deviations from original intends, in circumstances of stagnation and, thereafter, of rapid growth. In a historically layered structure of the city, this leads to diverse forms of public spaces – those that are regulated, as well as those of incidental nature or originating from the overlapping or unfinished grandiose construction intents. That all materialises in a varying quality of image or readability of public spaces. From those conceptually crystallized, through those distraught by overwhelming urbanistic optimism, all the way to those which are only present in glimpses, left unsaid, spatially bewildered. In the context of Bratislava, I see a significant potential in their rich typological diversity. Yet this also indicates a need for their hierarchization, not just in terms of variety but also in terms of their accessibility, ranging from those which are freely accessible to those which have regulated use. All this effort, concerning the uplifting, quantification, and cultivation of public spaces carries with it a certain risk, one that any mission does. That is the overstepping of certain thresholds which would mean sucking-up to a majority taste, immoderate "beautification", efforts to reach an ideal form etc. So, all that, which wipes away the irrationality, incompletion, signs of serendipity, presence of errors of unknown origin or the presence of aerugo or abrasion from our public spaces. This too is where the poetry of the city resides.

Ing. arch. Pavol Paňák – architect, professor

One of the first debates I had led with my friends about Bratislava ended with a bon mot: "If Prague is an old lady, then Bratislava is a young miss". It is precisely this immaturity and energy which is characteristic and valuable for Bratislava. Certain dreamy nature and love for ideas have left their mark on her stratification, ambiguity and inconsistency. She will have to decide if she wants to grow up and lose this incongruity or if she will seize it and use it for her own personal growth. These are different life paths. She does not have to hierarchize; she does not have to remodel. She should find her own values and legacy, understand her role in this world, drive her car less, not sell out and enjoy the fresh air by strolling from the country to the Castle. At the end of the day, her soul and inhabitants dwell in those remnants of her individual and diverse parts. In her diversity, she is capable of becoming a place for all, with no exception. Ing. arch. Ivan Gogolák, PhD. – architect

Jan Tábor spoke about Bratislava as a mosaic of cut off visions which clash at the points of contact. These conflicts left unclarified, vague terrains which give Bratislava its unique character. The intersections of traditional urban environment and sites of late-modern icons (such as Kamenné square or the head of the SNP bridge), areas of unrealized grand plans (Petržalka's central axis, the fragment of the Slovak Broadcasting terraces with a green cross axis) or the remnants of unregulated wild nature of wetlands and Carpathian forests (Lido, Karloveská Bay) are all fascinating territories. They are democratic public spaces which authentically reflect historical and aesthetic overlay of our city. That is why I consider our ability to approach these vague terrains to be one of the greatest challenges of Bratislava's future public space development. The hope is that we manage to conserve their exciting uncommonness and freedom, rather than slide down to the conventional "designment" of conflict-free, globally uniform places of consumerism. Mgr. Peter Szalav PhD. – architecture historian, Historical institute of Slovak Academy of Sciences (SAV) in Bratislava

In Bratislava, the environment has long been neglected. Despite positive changes already occurring, right now we still talk about the potential of tomorrow instead of the quality of today. For a healthy experience of public space, the air quality is key. Low-emission zones help to reduce pollution along with greater control of the industry or the development of cycling infrastructure and public transportation. The ability of air to flow and disperse pollution must be maintained and supported by the elements of green infrastructure, for example. In terms of greenery, there are interesting, special elements that help increase biodiversity - planting for pollinators, dead wood or stationary parched trees, but also the interconnection of green areas for their better "communication" by changing the modes of trimming, or with hedges and tree alleys. Water elements – ponds, rain gardens or terrain depressions – are especially important for climate adaptation. On the other hand, the worst are continuous, impermeable spaces such as parking lots. When building new ones, it is essential to secure their permeability, while with the current ones we must secure proper drainage as well as utilise tree canopies for shade. These natural measures have to be considered with public and intercity transportation stops, too.

Ing. Tamara Stohlová, MSc – environmentalist

Public transport and public spaces have always been entwined. The public transport users are one of those who come into physical contact with public spaces to a greater extent. For example, during trips from their house to transport stops, during transfers or walks from said stops to schools or work.

The potential to bind together public transport with public spaces is tremendous. Tram stops and important trolley and bus stops should be the shining jewels of public transport and public spaces. Transport hubs should be minimalistic, as well as convenient for passengers. Finally, the paths leading to the stops themselves should be as short and as purposeful as possible and, at the same time, such that passengers enjoy using them.

We should also not forget about the space which public transport vehicles drive through. Tram tracks offer the greatest number of possibilities for quality-based integration of public spaces. Given that the goal is to further develop, speed up, and increase the reliability of the tram transportation, the tracks must be, with the exception of pedestrian zones, separated from other forms of transportation. This rule can also be suitably used for the construction of pleasant public spaces, as we see in many European cities.

Ing. Michal Dekánek – public transportation expert, DPB, a. s.

The public space in Bratislava materializes relationships, forming a basis upon which its society reproduces. Just as the social essence of human life, so is public space disparate and shifting. It makes sense only as a whole, the key quality of which is the ability to develop. Bratislava's public space has the ambition to be sophisticated, confident, and reliable but sometimes it gets carried away by the motives it cannot be proud of. In some places, it manages to be selfish and crude, elsewhere indifferent and resigned. It doesn't inspire trust; caution is in place instead. It inherited authentic attractiveness, which it still searches to match with a suitable style. Just as people gain experiences with a more socially beneficial arrangement of relationships over time, so too does Bratislava gradually work on an open public space which will materialize common interests. This public space should not aim to be liked by, and suitable for everyone, everywhere. Rather, it should be open to variability and opportunities that the future holds. Bratislava comes to life with unpredictable, magnetically attractive places, where people meet up as if by chance and spend time together despite there being nothing of note, at the first glance. All that the city needs to do is to have open eyes and respect such places without an acute need to interfere, just as it is rude to meddle in budding interhuman relationships. Those don't necessarily have to last, in fact, only the remarkable ones develop into friendships. But from those, which are the most miraculous, love can manifest. doc. Mgr. Slavomír Ondoš, PhD. – geographer, Faculty of Natural Sciences, Comenius University, Bratislava

Editorial

Editorial

The quality of public space has a direct impact on the formation of city culture, that is, the way in which citizens relate not only to physical space but also to one another. The role of public space regarding the creation of relationships in the city is irreplaceable: public spaces present one of the only spaces where various groups of the population interact and where the citizen ethos is formed. For the public spaces to fulfil this function, they must be inclusive and of multipurpose nature. A quality public space needs to take into consideration the needs of all citizens, be it families with children, youth, minority members, or seniors, and create conditions for these groups to use public space together and feel safe and pleasant in it.

Bratislava is a city that, from a public space perspective, has great potential. The presence of the Danube River and its branches, as well as the vicinity of the Little Carpathians, present excellent preconditions for the development of green infrastructure. Each of the city districts has its own unique character, whether it is from a historical perspective or geographical location, which sets out the ideal conditions for the creation of high-quality public spaces outside the city centre. Bratislava is also a city that has a rich multicultural history. Its gradual "rediscovery" and contemporizing in public space could help to build tolerance towards all ethnic groups of citizens.

As a born inhabitant of Bratislava, I observe the transformation of public spaces in Bratislava with a watchful eye. In the past few years, I noticed a variety of initiatives aimed at revitalizing the public space and at creating places for the city's inhabitants to meet. These initiatives often come from the sides of non-profit organizations or socially engaged individuals and groups and showcase examples of good practice, which are deserving of recognition and of active support from the municipality. On the other hand, I also observe a trend of privatization and commercialization of the city which often leads to the curtailing of public space and the superiority of economic interests over the public ones. A challenge now stands before Bratislava to strengthen the first trend at the expense of the second.

Mgr. Ivana Rapoš Božič – sociologist, Masaryk University of Brno

We often identify culture with its narrow manifestations perceived in an isolated manner, such as in art, customs, history, economics, politics or the education system. The public space is a domain where their performance itself is realized and they become a common estate. This mirrors our responsibility and relationship to the society, history and our communities, and in turn also sheds light on our future challenges. Culture and public space are inseparably entwined. The existence and quality of one fully depend on the level of openness and maturity of the other. The quality of architecture, adequacy of scale and the design itself speak of an ability to welcome the public. They tell us about the possibilities of expressing opinions concerning public affairs and, at the same time, create both a scene and an auditorium for various forms of cultural display.

Yet in relation to culture, there also exists a public space that is not of physical nature. It is the space of media, internet and the communication of public institutes with citizens. It is important to realize this mutual connection and try not to seclude the discussion. The broader it is, the higher quality of public space can be achieved.

Ing. arch. Michal Hladký ArtD. – architect, director of Creative Industry Košice

The way we feel while in a city is to a large extent influenced by the quality of public space. It should be inclusive, functional and maintained. In Bratislava, the public space has been neglected for a long time. It was created non-conceptually and without regard for the needs and opinions of her citizens. I see the potential of Bratislava in approaching the public space systematically, with decisions being driven by data and, in an adequate manner, with the public being allowed to participate. It is precisely the regular citizens who can bring valuable information and insights. Simultaneously, with their participation, the expectation that the public space will be valued positively and will be used properly increases. In many ways, Bratislava is a blank slate. Seemingly small but thought-out changes can lead to admirable results.

Mgr. Veronika Prachárová – director and researcher for the Slovak Governance Institute (SGI) Editorial

What is Public Space

"The role of urban planning is the planning of public space. The more monofunctional a public space is, the less it corresponds to its role. Its quality lies in the layering, complementing and blending of various functions."

Martin Wentz, city advisor for the development of Frankfurt am Main (2000)

Public space is more important today than ever before. A strategic approach to public space creation, focused at its quality and uniqueness, is the key developmental engine of cities. Public space is the city's carrier of image and attractiveness. It represents both the city and the people living in it. Therefore, expectations of it are constantly on the rise. Well-designed public spaces are a great asset to cities and significantly shape urban identities. If they are attractive, their utilization demonstrably rises as well.

Public spaces represent the unbuilt areas within the built environment. They are the corridors of mobility and places for activities and sojourn of citizens. They are the places for meetups, societal atmosphere and entrepreneurship. Highquality squares and embankments, pedestrian zones, streets, promenades, parks etc. are the cornerstones of city-making. In them, societal, culturehistorical, environmental, compositional, aesthetic, technical, hygienical and transportational aspects are being conjoined.

From the perspective of spatial hierarchy, linear public spaces (streets, embankments) form the basic structure, which are connected by public spaces at nodal points (squares, parks, various courtyards, areas). They are complemented by other types of spaces, which are based around the elements of nature and systems of green corridors (playgrounds, school grounds, cemeteries). Public spaces should create a bigger whole – a mutually interlinked system for safe and comfortable movement and residence of city inhabitants.¹



Under the current legislation, a public realm is defined only for the purposes of § 2b article 1 of Act no. 369/1990 Collection of Acts by the act of the Slovak National Council on borough establishment, as follows:

- (1) A public realm is a street, square, park or marketplace and other space accessible to the public without restrictions, which regardless of owner relations serves for general use, unless a special law provides otherwise. 2aa)
- (2) In a municipality which contains several streets or other public realms, each street or other public realm has its own name.

For example, the law defines the scope of the municipality's responsibility within street labelling, the establishment of dog ownership conditions or the placement of election posters. § 4 further speaks about the responsibilities of the municipality, in the framework of the construction and maintenance of public grounds, communications, cemeteries or sport facilities. In the Act no. 50/1976 Collection of Acts (construction Act), in § 139a (terms of spatial planning) par. 6, an urban realm is considered to be a part of the municipality in which the material-spatial and functional principles of urbanism are applied – a street, a courtyard and the space created by a built environment.²

Legislative definitions provide only an incomplete view of public spaces. They use the term "public realm" while the term "public space" is much more widespread and used by both the general and expert publics. This document utilizes the label "public space" which is not only a replacement but also an extension of the term "public realm". The attribute "public" refers to the basic function of accessibility of space to the public. In general, public space is any space that is designated as unbuilt and accessible. It can also pertain to places that are publicly accessible for a limited time or locations in private ownership (transitional interior yards, passages).

Particularities of Bratislava's public space

The network of streets, squares and parks reflects the current identity and character of Bratislava's individual districts. The many diverse spaces of the city's historical core and of the adjoined city districts' meld into one whole. However, a complex identity is still something Bratislava searches for. Today, Bratislava is a multicultural city with a great regional diversity – a city inhabited by people from every corner of Slovakia, joined by a considerable number of foreigners.³

Bratislava has been through various stages of development, each of which has brought changes that can be still seen today. Some have been negative; however, the majority have had a positive influence on the city's development. Each stage gifted the city with legacy of a given era. Together, these form an interesting heterogeneity of public spaces.

The history of Bratislava begins with the Celtic settlement. It was followed by the Roman and Great Moravian Empires, Middle Ages, coronation privileges, the cultural and societal boom of the 18th century and the advent of the industry in the 19th century. The changing and diverse priorities during these times created the basis for Bratislava's character today.

POZSONY - Vásártér PRESSBURG - Marktplatz



2 By the end of the 19th century, Market Square (today's SNP Square) provided an important social space in Bratislava.



3 Busy life on the SNP Square in the second half of the 1930s.

In the 20th century, the city repeatedly began anew. As one of only few cities in Europe, it changed its name, and in March of 1919 Pressburg officially became Bratislava. Apart from the new name, the original inhabitants were also getting used to the influx of Slovak and Czech immigrants. In 20 years of the "First Republic", the numbers of inhabitants grew by 48%. By 1934, the born inhabitants of Bratislava were in the minority. This period was marked by cosmopolitanism and openness. However, this potential was not fully developed and the city gradually lost its open character. The dream of a modern Czechoslovak metropolis ended after the year 1938, when Bratislava became purely Slovak. The period of "War State" (1939-1945) then did not leave much of a mark, despite there being no shortage of ambitious proposals (see the picture below).



4 The winning design of the international architecture contest for the new campus of Comenius University in place of Bratislava castle, from the Italian architects Ernesto La Padula and Attilio La Padula from 1941.

Space

What is Public

During the years of totalitarian Communist rule in Czechoslovakia (1948-1989), Bratislava's public space lost its former historical function, which was originally linked to economical activity (markets) and in some cases, it even fell victim to demolition of existing urban structures. With modernist urbanistic interventions taking hold, preserving existing public spaces was of little interest to the regime. Damaged corridors of original streets, torsos of forecourts of city blocks (Stone Square), squares and urban connections (Rybné Square and Vydrica) and unsuitable traffic solutions (Staromestská Street) heavily damaged the original urban context of the inner city. At the same time, the new monofunctional districts for living and industry did not tie in with original character and functions of Bratislava's public spaces. Relatedly, the significant urban accomplishments from the first half of the 20th century remained unanswered for, as the regime failed to reflect on their legacy. The city expanded into new areas, all without any significant incorporation of historical and natural contexts. With this expansion, new public spaces emerged in fragmented, undeveloped areas.



5 Images from the construction of mass housing estate Lúky in Bratislava - Petržalka ir 1981. 30 years after the Velvet Revolution, the state of Bratislava's public space is still haunted by societal changes and, most of all, by the steep transformation from socialist central planning to a market economy. While this transformation spurred rapid urban economic development, the development of public spaces itself was not equally progressive. A sequence of post-revolutionary measures, such as building deregulation combined with a weak collaboration between the municipality and the private sector, caused the stagnation of new public space development. The result of this is manifested through tumultuous urban development, where unmaintained public spaces and new monofunctional districts are symptomatic of the lacking urban planning vision. Weak integration into the urban context, caused by the insufficient conceptualization of urban development and the absence of civic amenities in new urban aggregates, have had a critical impact on the functionality of public space in the growing Bratislava.

However, many civic initiatives, as well as private subjects, found space for spontaneity in this predicament. This period, owing to its unsystematic nature, provided an opportunity for unrestrained activity, which led to authentic and high-quality development of various locations throughout Bratislava. It was this unrestrained nature of urban development, stimulated by private initiatives and activism, that formed some of the most important public spaces in Bratislava and significantly contributed to the building of the city's urban identity.



6 The rooftop community garden situated on the terrace of the Slovak Radio building has enlivened the derelict space with its cultural and social activities. The project, named Garden under the Pyramid, was the product of joint effort between a civic initiative, volunteers, neighbouring communities and the broadcaster in 2014 and 2015. What is Public Space

Natural Characteristics of Bratislava

Public spaces are not just places in the middle of built environments. To a larger degree, they are moulded by the natural environment which can manifest itself in various ways.

Bratislava has several elements of nature. The Danube River is not only an important means of transport but most importantly a natural symbol associated with the city. Lesser Carpathian Mountains, surrounding the city from the Northern side, are the city's green lungs and its recreational centre. Situated on the slopes of Carpathian hills, vineyards and agricultural land are not only the source of sustenance, but increasingly also sites for preserving our heritage and agricultural traditions. The abundancy of lakes and forest parks in and around the city then offers oases of greenery to be enjoyed by the public. Combined, all the natural elements create a frame upon which the city's identity oughts to be crafted.

Danube River - For centuries, life in the city has been entwined with the life of the river. Yet to this day, Bratislava has not established a clear relationship with it. The Danube does not unite the city but rather divides it. Its fate in relation to the city is mirrored by its most famous bridge, which should have connected a new district with the centre, but instead, it tore apart the Old Town's historical core. In the city's past, grand plans have rarely been triumphant, but Danube has always been built around. For the city, the river is an artery of life. As a natural element, it has various functions which have impacted the formation of Bratislava. The primordial function as a source of sustenance survives in a recreational form today. Transportation is another function, which too is still active. To this day, Bratislava draws from and is built upon the industrial heritage enabled by its access to the Danube. The climatic function of the river is also important. Due to its volume, it balances the differences in temperature across the city during both summer and winter months. But most vital is the river's influence on human relationships, on interactions between people and the overall quality of life in the city. The Danube currently fulfils many recreationleisure functions (summer beaches, boat restaurants, cycling roads alongside the river). This poses a challenge from an urbanistic perspective and city development. Investment activities often have a negative influence on the river's original environment and especially on the adjacent alluvial forests. There is a great potential in developing the ability to interweave these various functions.5



What is Public Space

The Lesser Carpathians - They are one of Bratislava's dominant characteristics. To this day, they present an underappreciated treasure for her citizens, one which only a small number of capital cities can boast about. The hill range offers ideal conditions for cycling, jogging or strolling with the added value of fascinating nature that directly influences quality of life. The interweaving of city and forest shows great potential for recreation and sport in a natural environment. The forests of Bratislava can be divided into two groups – the Devín Carpathians and Bratislava's forest park. Both have significant functions outside the primary recreational one, such as protection from soil erosion, waterretention or climatic function, which actively lowers the temperatures of adjacent city districts, namely during summers. Though not all activities in the forest positively influence its condition. Uncoordinated logging, hunting and construction are significant negative influences. However, the interest of citizens in nature protection creates a bigger pressure for sustainable solutions in developing our forests, which are the largest public space in the city.⁶



Lakes and forest parks - Nature in the city is embodied not only by forests and river but also by smaller homogenous lake areas and parks. These contribute to promoting leisurely, recreational activities within the more built-up urban environment.



Vineyards and agricultural heritage - Agriculture, in its various forms, is still a culturally and economically significant sector in Bratislava. Within the city, there are many vineyards and other areas of cultivated land. The historic function of securing sustenance is gradually being complemented by recreation. The public space thus reaches beyond the borders of Bratislava's urbanized premises.



10

What is Public Space

What is the Manual

A design manual is a tool which should directly influence the quality of public spaces by establishing a comprehensive vision and principles of their development, reneval and creation.

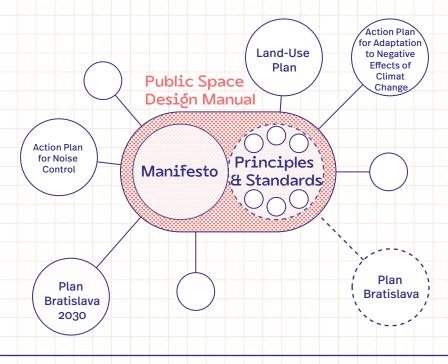
The Public Space Design Manual is a document which responds to a longignored question. Bratislava is aware of the significance of public space and its influence on the quality of life. The Manual is a tool which should directly influence the quality of public spaces by establishing a comprehensive vision and principles for their development, renewal and creation. The goal of the document is not to establish legislative framework but to enable an improvement of the current situation. The document's creation is a long-term and continuous process, one that reacts to the city's changing needs, incorporates feedback and aligns itself with emerging municipal policy.

The Manual should inspire and guide the creation and renewal of public spaces. It should also be a tool used in building the city's identity by reviving its traditions, historical footprints and legacies in public space. In the creation of public spaces, it places emphasis on original and intelligent solutions which support the city's character through new, attractive elements both at its the core and subcentral locations. The Manual is a collection of measures which support the development of a healthy and climate-proof city. All these measures take into consideration the socio-historical, cultural, agricultural, and natural contexts of the city.

The goal of the document is to standardize and thus simplify procedures that pertain to the creation or reconstruction of public space. It should provide methodological guidance through exemplary solutions and make it easier for project architects to design, or for the municipality to approve, projects in public space. This should save time and money.

For easier navigation, the Manual is divided by content into two basic parts, which make up individual documents: The Manifesto and the Principles and Standards. These documents are components of the complex package that is the Public Space Design Manual.

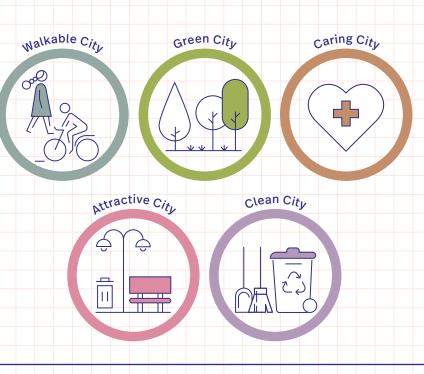
The Manifesto is the first and introductory part of the Manual, and deals with the developmental vision for public space in Bratislava. The document draws from essential strategic materials which, however, do not dedicate much of their attention to the topic of public spaces. The goal of the Manifesto is not to replace existing materials but to complement them and be a part of a comprehensive vision for the city. This currently consists of two fundamental and binding documents. Plan Bratislava 2030 is a foundational strategic document which is currently being prepared. It deals with all areas of city development on the level of strategic planning, action measures and solutions, and is based on detailed analyses of the workings of the city as a whole. The Land-Use Plan (ÚPN) is a binding, strategic and conceptual document of a general character that proposes expected utilization of urban land with designated primary land use. It determines the principles and regulations of spatial arrangement and land use, technical and traffic infrastructure, and the conservation of nature and landscape. It defines the limits of land development and sets the requirements for the preservation of culture-historical, societal and natural values. Its scale concerns the public space only peripherally, through the establishment of land use areas, which contain public space within their territory. Plan Bratislava should also be mentioned. Even though it is not binding, it serves as an inspiration. In the context of Bratislava, it is a conceptual document of note, contributed to by 70 experts from various fields.



The Manifesto for Public Space

The Manifesto can be viewed as an introduction to the Principles and Standards.

The Manifesto can also be viewed as an introduction to the Principles and Standards. It is a document of value that is concerned with a general analysis of existing problems and the defining of its main principles. The evaluation of associated topics, which have an impact on the quality of public spaces, is also one of its key components. The basic thematic areas include mobility, the environment and ecology, climate change adaptation and mitigation, public health, inclusivity and safety, spatial identity, social environment, administration and maintenance. An outline of these areas is the basis for further, more detailed elaboration in the Principles and Standards. The areas in this document are divided into five chapters: Walkable City, Green City, Caring City, Attractive City and Clean City. Each of these chapters discuss specific topic areas. These mutually intertwine, complement one another and repeat between chapters. Thus, they create a complex view of the public space in the city.



What is the Manual

What is the Manual

Principles and Standards

Drawing on from the values defined in this Manifesto, the Principles and Standards form the second part of the Manual. They are a collection of operational documents of a more technical character and define the basic rules of specific elements in public space. With a focus on spatial parameters within the city, they are concerned with the principles of project preparation and realization. The Principles and Standards deal with the principles and rules in a general manner – they cannot be accepted mechanically, without contextual regard. Similarly, they are not intended to address problems of specific locations. The role of Principles and Standards is to demonstrate exemplary solutions and examples of correct or incorrect procedures without attempting at standardization and uniformity in all types of public spaces. In evaluating the significance of public spaces and in the application of specific interventions, their hierarchization should be the natural approach.

The scope of the Manual corresponds to the current informational need. It is a document which will never be finished and will always reflect the inevitable actualizations. Dividing the Manual into the Manifesto and the individual Principles and Standards enables us to operatively complement the topic areas with new details learnt from the field or with brand new topics whatsoever.

Pilot projects are also an important component in the process of creating and updating the Manual. As case studies, they offer valuable insights and act as a testing ground for the proposed principles and standards. This bidirectional verification of information has a goal of minimising discrepancies between theoretical principles and practical utilization. Upon realization, pilot projects become real-life examples and inspiration for other public spaces.



How to use the Manual and who is it for

The Public Space Design Manual is designated for those who take part in the development, renewal, and creation of public spaces on all levels from strategy, planning, investment, design, approval, realization, administration, maintenance, operation and utilization.

The practical application of the document is dependent on its approval by the organizational body of the city. The first step is its approval as an internal regulation for the municipality. The key actors are thereafter the respective individual organisations and departments within the municipal government system.

The practical application can be reached on various levels:

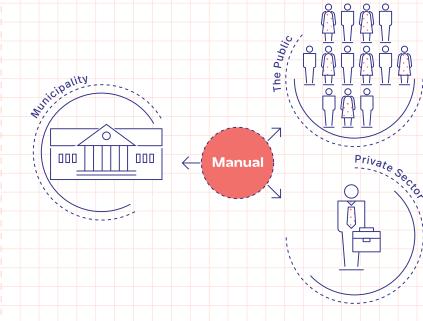
- the Land-Use Plan of Bratislava (ÚPN) the Manual and its basic components are incentives for a new chapter of ÚPN, which shall deal with public space,
- the evaluation of investment intents the Manual should guide the process leading up to binding decisions on investment activities in the city. This can take a form of in-person or virtual consultations,
- public space commissions the Manual serves as a foundation for processing commissions pertaining to renewal or creation of public spaces (design competition, public procurement, market survey, framework agreements). The requirements which stem from the Manual are directly incorporated into the commissions or agreements,
- the evaluation of proposed solutions consultations of intents, studies and various levels of project documentation with the use of measurable and evaluating indicators,
- initiatives and proposals for changes in legislative procedures commenting on the Building Act for the improvement of legislative support for public space development.

Actors and the binding nature of the document

The Manual and its parts are binding documents for select municipal subjects. The document serves as a primary tool for determining the key requirements for public space solutions. By using the outlined principles, it is possible to evaluate the quality of both proposed and realized public spaces as well as their contribution towards the city. The city districts are also parts of the municipality, and the Manual as a whole has an advisory character for them. The primary task of these documents is to simplify decision-making processes and unify the quality of public spaces. The city districts will be able to use the Manual while realising their own projects and evaluating private investments, or use them as a reference to correct practice in land and construction proceedings.

For private subjects, the Manual and its parts outline the city's vision and strategy for public space development. The document should form a basis for the creation of high-quality investment intents and design proposals. The Manifesto and the Principles and Standards have an advising character for the private sector. However, important topics and principles can also have a binding character, with the intent to unify the quality of public spaces in the entire city.

The public is perceived as an inseparable part of public space and as their active element. For the public, the document has an informative and educational character. The Manual serves as a presentation of what is meant by quality public space and as an opportunity to join in on the process of public space planning and creation. The general goal is to heighten the awareness of public spaces, their state and quality and potentially to increase the scope of participation in shaping of them.



The preparation and creation processes

There is an intimate relationship between the Public Space Design Manual and the inevitable processes of preparation and creation. The Manual serves as a source of information and gives these processes a certain direction. It also draws from these processes itself to complement its content. Depending on specific situation, such processes include:

Mapping and data are sources of exact information. Strategic planning should not be based on just subjective, imprecise and unverifiable data. The basic available materials are demographic figures about population, socioeconomic and statistical data. The city has access to more detailed and dynamic figures, but their application without a set goal is tricky. Mapping and data policy are built upon a combination of quantitative and qualitative research. For data work to be of higher quality in favour of public spaces, it is necessary to secure their continual collection, complementation and their use in planning.

Participation is a form of engagement with the general and scientific publics in the process of creation and preparation of public spaces. Participation has various forms, and their usage is dependent on the required scope of the necessary information for a given theme. It can range from surveys, personal meetings, workshops, planned meetings to presentations. A more detailed document titled the Manual of Participation delves deeper into the preparation of participative processes.

Competition is a way of public procurement used in searching for a tailored design that is not simply the cheapest but also shows the best quality. It is an ideal way for the design of important public spaces. Despite the fact that it is a time-consuming process, it ordinarily leads to a high-quality result. Besides the attractiveness of the project itself, other aspects must be stressed in the search for the best designs, such as the dutiful fulfilment of the contest requirements, the evaluation of the results by a qualified professional and independent committee and the ensuring of a problem-free continuity in later forms of the projection and realization.

Interventions in the public space ("Quick Wins") present economically and temporally less consuming, usually temporary solutions. They can be realised by spatial installations (2D or 3D) or with a change of pre-existing functionality in a public space (such as traffic diversion, parking removal). It is a middle ground between the current situation and solutions which are more permanent but are economically challenging and time-consuming. Their temporal nature makes way for continuous data collection and its evaluation, which can serve as a groundwork for contest requirements and thereafter permanent solutions. In some cases, temporary solutions might become permanent.

What is the Manual

Walkable City

The strongest link of the traffic receives the biggest share of space, at the expense of the weakest.

Mobility is a basic function of public spaces, which form the basis of the city structure. They create space for the movement of various types of users pedestrians, cyclists, urban public transport (MHD), cars. However, there is often a preference for one of these modes of transport over others. In most cases it is the car, that is the individual car traffic, which has the dominant position in the hierarchy of urban mobility. The current paradigm of planning places the car at the forefront, which negatively impacts the other methods of transportation. This strongest link of the traffic receives the biggest share of space, at the expense of the weakest. The negative influence of this is the most noticeable when one considers the safety and fluency of pedestrian and cyclist traffic. Considerable areas of public space are being stifled by the influence of dynamic and static car traffic. While a pedestrian needs about 1 m2 for movement, a moving car takes up about 40 to 60 m2. However, most people in cities travel by foot or urban public transport. That is why it is quintessential to protect and give preference to pedestrians, cyclists, and mass transport and to ensure their safe and smooth movement without barriers.

Z

Keywords: pedestrian, pavement, on foot, cyclist, bicycle, bike path, urban public transport, public transport system, bus, tram, trolley, train, a stop, station, supply, taxi, car, automobile, roads, parking, carpark, crossroad, crossings

Manifesto for Public Space \rightarrow

Vision

The vision for mobility in Bratislava is one of conceptual change of infrastructure planning. The traffic should not be about the number of vehicles but about people, who can, in a reasonable time, get to their destination. The basic requirement of public space development is the change in the hierarchy of users in favour of those who are most vulnerable. The prioritization sequence of (1) pedestrian, (2) cyclist, (3) mass transport (MHD), (4) supply and service, (5) taxi and ridesharing, (6) shared cars and then at last (7) individual car transport is key for the future planning of functional areas and subsequent public spaces.

A component of this prioritization is creating a mobility network for the individual modes of transport, focused on making them more attractive. From a short-term perspective, it is about the reinforcement of pedestrian mobility. Pedestrian lanes should provide space for a wide range of activities, not only for pedestrian movement. ⁷ The shortening of distances and the availability of city infrastructure at the same time have a calming effect on individual car transport.

An obstacle for mass utilization of cycling is the absence of safe infrastructure (see \rightarrow chapter 3 Caring city). The construction of bike paths and cycling lanes is requisite for making this type of mobility more attractive. The cycling strategy defines main cycling corridors and their hierarchization. This is followed by a detailed description of individual paths and their integration in the framework of wider traffic. The next step is to speed up public transport and raise its reliability, despite it being at the expense of individual car transport, by using designated traffic lanes for public transportation.

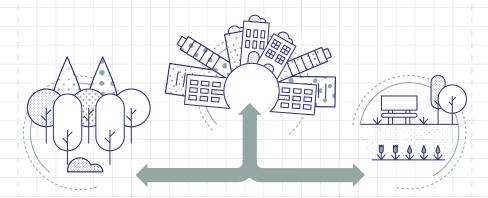
From a long-term perspective, the solution is to restrict individual car transport in the centre by parking regulations and toll, reduce traffic lanes for individual car transport, build off-street parking (underground garages, parking houses), reinforce regional public transport (chiefly railways) and decidedly prioritise infrastructure aimed at cyclists and pedestrians.

Reinforcing sustainable traffic and reducing emissions through restrictions on the volume of private transport are key components of the city's plan for both lowering carbon emissions and adapting to unfavourable effects of the climate crisis.

The absence of awareness about public space, the environment and about complex urban planning leads to the idea of "parking in front of the house" as a right. The capacity of the city to address this is limited and a sustainable solution for all can only be reached by regulation. Restricting parking in public spaces is an unpopular but vital measure for reclaiming these spaces for people.

Principles

Unified City - Unified Public Spaces



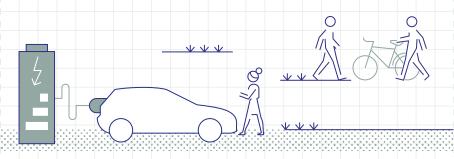
The goal of this strategy is interlinking the city districts within the wider structure of developmental axes (of load-bearing public spaces – mobility corridors) which integrate different types of mobility with the consideration of their hierarchy, beginning with the pedestrian and ending with private transportation. The design of the streets should accommodate everyone. It must be designed in accordance with the principles of universal design, whereas the emphasis is placed on the most vulnerable traffic users such as pedestrians, children, seniors, or people with limited movement and coordinative abilities. ⁸

Pedestrians The city of short distances



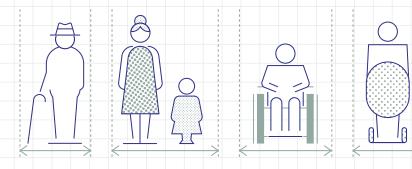
The principle of the city of short distances is vital for the support of pedestrian and cyclist transportation. Creating a compact city can ensure an accessible distance between residential areas, key amenities and public spaces. Basic infrastructure, which includes public transport stops, school, nursery, shops for daily necessities or playgrounds, should at most be 600m from a residence. Public spaces intended for leisure time, including parks and squares, should at most be 750m from a residence.¹⁰

Complex pedestrian network



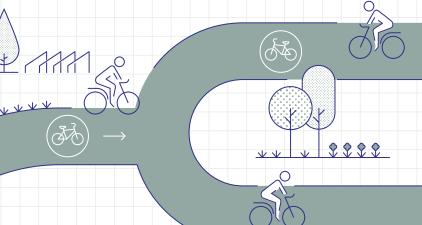
When developing public spaces, it is paramount to create an environment that is considerate to pedestrians. Within measure, it is necessary to support the creation of direct pedestrian corridors (leading through compact urban structures) and indirect, recreational corridors (in proximity to greenery). The priority should be given to the shortest, most direct and interesting pedestrian paths. Particular attention should be paid to their interconnectivity in places where people change means of transportation (public transport transfer, transition to a shared bicycle).

Sufficient space for pedestrians



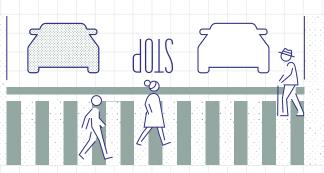
Pedestrian routes (sidewalks, shared lanes) need to have sufficient proportions. The minimal, legally defined width which the drivers have to maintain when parking on the pavement is 150 cm. This distance, however, does not consider the quality of walking or the flow and intensity of pedestrian traffic. Pedestrian space must be without barriers and must allow for fluent and direct movement (intentional snaking of pedestrian paths is permissible only when this encourages a fluent flow of pedestrians). In zones with speed limits for vehicles, it is suitable to integrate various forms of mobility with an adequate design that minimises standard traffic signage (sharing space with pedestrians, cyclists and motor vehicles).

Cyclists The creation of compact cycling infrastructure



The development of cycling infrastructure depends on creating well-connected and hierarchically organized cycling corridors. In doing so, one must differentiate between the corridors of daily and recreational use. Hierarchization here influences the design of bike paths (for example, the main corridor – separated bike path, residential street – bike lanes integrated within the roadway), as well as the approach to bike parking placement (bike racks).

Cars Traffic calming



Reductions in urban car traffic are done with the help of design elements influencing its flow and comfort (speed humps, chicanes, narrows, elevated pedestrian crossings, preferential treatment of cyclists and public transport in crossroads) as well as by gradual implementation of zones with limited car access. Equally vital is to prefer smaller and less ecologically demanding vehicles (e.g. within the commercial supply chain). (see also \rightarrow chapter 3 Caring city)

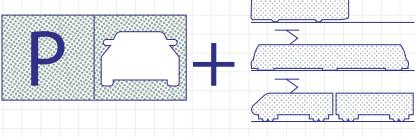
Walkable City

Urban public transport Development of complex and integrated infrastructure for public transport

The attractivity and efficiency of public transport should be achieved by its preferential treatment in the public space (designated bus lanes, prioritization of vehicles on crossroads). An important element is the creation of integrated transfer points between regional transport, urban public transport and cyclist and pedestrian infrastructures. Equally important is also modernization and new development of tramway infrastructure and urban public transport stops in a manner, wherein they are accessible for all groups of the population and offer comfort and enough information about the public transport itself.

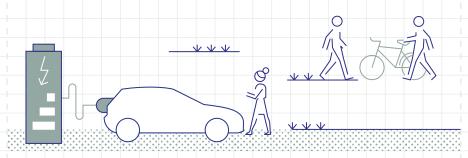
Parking

Regulation and integration of parking



When it comes to parking policy, it is necessary to enforce a regulation that clearly demarcates parking spaces, both in the form of street and concentrated parking (underground garages, parking houses). Within the process of creating parking spaces, it is required to define residential, short-term and long-term parking and adjust their design and operational policy. When increasing parking capacities, it is necessary to abandon the policy of "parking in front of the house" and focus on the creation of integrated parking capacities in the framework of transferal nodes of urban public transport ("park and ride").

Transport innovations



Innovations in the transportation sector mainly pertain to electromobility and shared economy. An example would be a city-wide system of bike-sharing which functions throughout the city and is available to people who do not wish to own and service a bicycle. Shared bicycles help link residential living with work and other forms of transport. The docking stations for shared bicycles should be accessible at housing estates, near business centres and chief transportation nodes, with intervals of 100-300m in the centre and 300-500m outside of it. A system of shared automobiles (car sharing) also helps to improve the mobility of citizens. For a small fee, access to a car can be granted to those who only need it occasionally, do not want to own a car or can't afford one. To motivate citizens to use electro mobiles, it is, for instance, possible to establish a fee-free parking place for electro mobiles or by providing charging infrastructure.

Walkable City



solution; a pavement which does not leave the minimum of 1,5m transitional width is non-permissible. Bratislava, Matičná Street



12 Creating continuous parking spaces that take-up a significant portion of a street's public space without an interruption by e. g. greenery, is non-permissible. Bratislava, Zochova Street



13 It is vital for pedestrian crossings in traffic-calmed and residential streets to be placed on the pavement level. Solutions like these increase safety and support movement without barriers. Bratislava, Bernolákova Street

Manifesto for Public Space



14 An apt solution for a safe and segregated bike path, which is guided separately through the middle of a traffic-calmed street and separated from individual and pedestrian traffic. The tree alley also offers cyclists climatic comfort.

Bratislava, Trenčianska Street



15 In the framework of urban public transport modernization, it is vital to create stops and crossings in line with the principles of universal design, to visually unify components and elements of infrastructure, to reduce noise and maximise the utilization of waterretention measures. Bratislava, Karloveská Street



16 Barriers such as an unsuitable curb height, which complicates the movement of pedestrians, is unacceptable. Bratislava Bratislava, Grösslingová Street

Green City

Urban greenery is a genetic footprint of the surrounding country and of its natural qualities and wealth, whether these are environmental or aesthetic.

Greenery is an important and integral part of a city, connecting the urbanized environment with the natural one. It is a genetic footprint of the surrounding country and of its natural qualities and wealth, whether these are environmental or aesthetic. Greenery plays a special role in maintaining the quality of air and of the environment. It forms the so-called urban landscape, which is a synonym of something that one can see, store in memory and rejoice in. Today, we view the urban landscape as an aggregate of built and unbuilt areas which are connected by the topics of environmental sustainability, reductions in carbon footprint and adaptations to climate change. Now more than ever, as climate change mitigation and adaptation become one of the the city's key priorities. In this context, the city's greenery plays an irreplaceable role. Its connection to the surrounding country, support of biodiversity and preservation of natural city landscape are the urban development missions of the 21st century. Landscape elements are also urban elements. No matter if its spot, linear, ground cover greenery or rain gardens, wetlands, lakes or rivers - together they create the ecosystem of urban greenery¹⁷ Importanly, the requirement of quality here is not quantity but a complex and mutual relationship.

Key words: greenery, water, air, waste management, green energy, climate, rainwater

Manifesto for Public Space \rightarrow

In the context of the current environmental crisis, the fight against the adverse effects of climate changes should be at the centre of our attention when addressing the topics of city ecology and sustainability. Cities globally produce more than 60 percent of carbon emissions, use up 78 percent of energy sources and, at the same time, are the main polluters of water and air¹². A green city must react to these problems not only via the reconstruction of city mobility but also with systemic changes in the administration of waste, green and blue infrastructure and the energy industry. Short term and long-term development goals are therefore intensely focusing on these topics, starting with city greenery, which lessens air pollution and urban heat island formation.

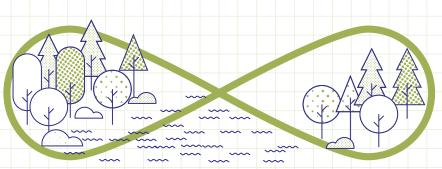
The quality of city greenery depends on its maintenance and on measures employed to protect it. For instance, during construction work, it is often damaged from negligence. Short-term measures should therefore be oriented towards the protection and maintenance of existing greenery (see also \rightarrow chapter 5 Clean city / Greenery care and maintenance). Substitutive and fresh planting then naturally follow the life cycle of greenery. Attention must also be paid to surface maintanence requiring the use of water. It is important to view rainwater as a resource, which should be locally collected and well utilized. It shall no longer go to waste by sewer drainage.

From a long-term perspective, it is necessary to approve complex conceptions of green infrastructure development in the strategy framework of public spaces. On the one hand, there are the principles of identification and hierarchization of individual land types. On the other, there are qualitative parameters of establishing new greenery, both on reinforced and non-reinforced surfaces, which will reflect into sustainable greenery in the city. The significance of biodiversity in urban ecology should also be considered. When establishing green spaces, an attention should be paid to plant diversity, as the role of greenery should not be merely aesthetic but primarily serve to support the urban ecosystem.

Long-term measures should organize new planting as a natural process of renewal and maintenance of urban greenery. The documentation of trees and green areas (their "pasportization") also needs to be realized, together with determining their health condition and primary function. That function can be societal or ecologic. The primary function of an area should be decided by its user accessibility and by the way in which it is used within the urban structure. This configuration should decide the economic effectiveness of administrating and renewing greenery.

Principles

The concept of intertwined green and blue infrastructures



It is vital to connect the individual areas of greenery into a singular system and, additionally, connect urban greenery to the city's surrounding natural context.¹³ To reach this goal, it is necessary to define the hierarchy of public spaces pertaining to their function, location and area. This is an important prerequisite for the creation of a high-quality public spaces, as well as for mutual interactions between elements of green and blue infrastructures and the surrounding countryside. This way we can combine ecological and societal functions of public space with its quality. Protected green areas should also be incorporated into the interlinked green infrastructures, and as a part of the system of urban greenery, they should be made accessible to the public where possible.

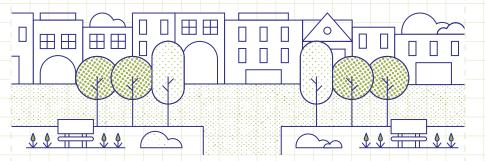
Utilization of supplementary forms of greenery



It is necessary to create conditions for constructing vertical green walls and facades or vegetative roofs. Employed this way, greenery has a large influence on the retention and evaporation of rainwater in horizontal constructions and a significant cooling effect on buildings when using vertical constructions. Such use of greenery is key for areas where ordinary solutions are problematic. Vegetative roofs should be built in cases of attic apartments, which are exposed to extreme temperatures, as well as in senior homes or healthcare and school facilities.

Green City

Increasing the vegetation ratio in public space



Planting trees in the city centre, avenues, carparks or using them in creating road dividers and pocket parks are just a few examples of measures that increase the ration of vegetation in public space. Wood to grass ratio should be more than 60% when talking about the vegetative composition. The selection of woody plants for planting purposes should adapt to the predicted increase in mean temperature. It is also important to diversify the selection to secure a greater variety and varying lifespans of woody plants, with a preference for short-lived tree varieties. Another basic criterion for a choice of woody plant should be its sufficient freeze and drought resistance. It is necessary to secure the most suitable determinant conditions for alley trees and sufficient space for roots to take hold. ¹⁴ When planting trees on reinforced surfaces, it is necessary to root them in soil cell systems. In cases of roadways and areas of static traffic, it is necessary to root the trees in soil cell corridors fitted for concrete.

NUL,

i

Alternative energy sources

<u>(</u>

 $\mathbf{\Lambda}$

The generation of alternative energy is one of the main themes in the fight against climate change. In the framework of public space creation, it should be about the decentralization of electric networks by the application of renewable energy sources (solar panels, for example) to the elements in public space (street lighting, the lighting of urban public transport stops, electronic informational elements). The city should also focus on creating a more complex energy infrastructure (solar panels on the rooftops of houses, wind power plants, biomass burning) which should cover the energy consumption. The placement of such elements should be sensitive to the surrounding context.

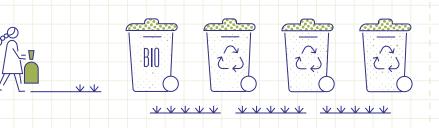
......

Rainwater management and application of water elements



Water management measures belong in the key elements of public space creation, with a particular emphasis on rainwater management. The priority is to eliminate the practice of draining rainwater into the central sewage system. It is important to gradually introduce procedures of sustainable management of rainwater, with the goal of reducing its drainage from reinforced surfaces, road networks and static traffic areas into sewage. The solution is its interception, which can be attained by the interlinking of roof and terrace gutters into a surfacelevel drainage system and diverting it into retention reservoirs, absorption basins, rain gardens or artificial wetlands. Other solutions consist of introducing water elements into the built environment, vegetative roofs, renewal and revitalization of water currents within or near the city and the construction of water fountains.¹⁶

Waste management



Within the framework of waste handling, the focus should be on the reduction of its production, pertaining above all else to public activities (markets, festivals). The key step here is the reduction of single-use items. Important points also include the support of waste recycling by means of public campaign and other motivational measures as well as the creation of high-quality infrastructure, for example by raising the capacities of recycling yards or the establishments of reuse centre networks. It is necessary to support separation, collection and composting of organic waste as well as its subsequent use. 17 A good example of the intertwining of blue and green infrastructure for the betterment of public space is the integration of design into natural characteristics without interfering with ecological and visual balance. Bratislava, Železná studnička



19 An apt way of integrating alternative energy sources (solar panels) into the framework of public spaces is their placement next to complementary elements of public space, which can become self-sufficient from the perspective of electrical energy. Yyteri, Finsko

Manifesto for Public Space









20 The creation of green facades, which apart from a visual variety also offer support of a building's climatic comfort, is a desirable approach to the creation of supplementary greenery in public space. Bratislava, Grösslingová Street Green City



21 It is vital to design and situate waste containers in the context of a given public space in a way that they become a part of the overall visual identity. It is also desirable for their spatial requirements to be minimalized, e. g. by sinking them into the ground. Bratislava, Žižkova Street

22 A good example of an optimal green infrastructure solution is the creation of compact tree alleys, which provide shade and simultaneously make the area more pleasant to support the climatic comfort for pedestrians. Bratistava, Medická Garden

Caring City

Lively urban environment places an emphasis on socialization, societal activities and on human scale in urban design.

Every year, more than 1,2 million people die in road-related accidents worldwide. This means that a person dies approximately every 30 seconds. Several of these accidents happen in cities and are avoidable. That is to say, they are related to street design. The quality of public spaces has an impact on the citizens' health and feelings of safety. Spatial clarity and its lighting are important factors which prevent crime, influence people's feelings and their utilization of public spaces. The urban environment is faced with the negative consequences of traffic – noise and air pollution. These factors reduce the quality of life and directly impact people's health. A vital urban environment, on the other hand, places an emphasis on socialization, societal activities and human scale in urban design. Even distribution of public street furniture, construction of playgrounds and sports grounds for all citizen groups are the prerequisites for a healthy environment. Options for human interaction suppress feelings of loneliness and support safety by providing social control.¹⁸ Thus, the soft measures are being complemented by hard and material ones.

Key words: crime prevention, traffic safety, public health, inclusive public spaces, community life, sport and recreation, societal activities in public space

Manifesto for Public Space \rightarrow

Vision

Key measures for the improvement of public space safety can be applied immediately. These can range from topical repairs, completion of missing or insufficient lighting, removal of spatial and visual barriers, placement of safety cameras or traffic-light signalling. Adapting public space to fit the needs of people with limited orientation and movement abilities, children and seniors by implementing debarierisation measures should be a matter of course.

Deaths and accidents can be avoided with a correct approach to public space creation. Street design must contribute to a safe environment for all and offer options which will make active transportation more attractive – whether this is walking, cycling or public transport use. The streets should reduce noise level and create an urban landscape that improves the quality of air and water.¹⁹

As far as complex measures are concerned, increasing street safety should include gradual diversion of individual automobile traffic from those parts of the city with higher concentration of pedestrians and cyclists. This reorganization of the urban street network must be in accordance with the land use plan. From a long-term perspective, it is important to illuminate our public spaces in a complex manner that will take into consideration the specific requirements of particular areas and the needs of their users.

For the improvement of public health, it is key to reduce the environmental pollution. This must be supported by a long-term, environmental and political urban vision. Measures that are more complex in their scope include systematic planning and support of societal activities in public space. This should be a part of a document that is being prepared, which has the goal of unifying and establishing transparent rules for event and gathering organization in the public space realm. It concerns the organization of short-term cultural and sports events and public gatherings.

Urban planning should place an emphasis on the needs, interests and health of local communities. An individualistic approach to public space creation is not sustainable in the long-term. From a long-term perspective, the renewal and construction of new public spaces, lively streets, parks, playgrounds and sports grounds have an influence on the vitality, social and economic attractivity of the entire environment. The development of a healthy city is based on the cultivation and the development of green infrastructure (see also \rightarrow chapter 2 Green city) as well as high-quality care of it. A healthy city is founded on fully-fledged incorporation of greenery into the continual urban landscape which is formed by an effective network of interconnected traffic with a preference for urban public transport and cyclists ²⁰ (see also \rightarrow chapter 1 Walkable city).

Principles

Safety

Crime prevention

Crime prevention is linked to the creation of lively public space which supports social control. American urbanist Jane Jacobs talks about the "eyes of the street" which are the windows of residential areas and street ground floors, oriented towards public spaces (streets or squares).²¹ Danish architect Jan Gehl also emphasizes the need for an active street ground floor which is formed by a rich composition of shop windows, entrances and terraces.²²

Safe public space

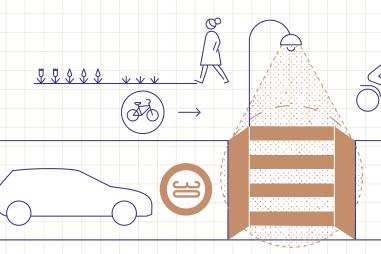


When creating a safe environment, it is necessary to increase visual clarity and eliminate physical barriers: narrow and dark over- or under- passes, corridors, corners, and passages. It is especially important to avoid this around new development and transport infrastructure. In spaces that are insufficiently illuminated, lighting or convex mirrors need to be installed. Public transport stops also require improved safety measures. After dark they should be illuminated, they must be clean and show dynamic information about transport connections. In the vicinity of a public transport stops, there should be no shrub-like greenery or other barriers (litter bins, corners) which raise the potential of pollution or violent encounters. On squares and in meeting places, it is necessary to pay attention not only to sufficient lighting but also to the vertical illuminance which is important for facial recognition.



Building plans should avoid frontages longer than 150m. Long blocks tire out pedestrians and cause them to start avoiding these areas. If the facade is monotone – it does not have an active ground floor, windows or entrances – its attractivity to pedestrians is even more reduced. Incentivising corner establishments and the expansion of their terraces is the most attractive form of street revival.

Traffic safety



As far as traffic is concerned, there are three most vulnerable groups that need to be protected – pedestrians, cyclists and handicapped groups of people. Traffic calming is among basic measures, reducing the risk of accidents. Others include safety-oriented design of streets and crossroads, shortening of distances on pedestrian crossings and their greater incidence, creating rest islands for pedestrians or segregated bike lanes. Important measures also include the removal of physical and visual barriers near crossings, functional traffic signs and traffic-light signalling, high-quality and climate-pleasant surfaces, surface modification that is suitable for the public with limited mobility and the maintenance and repair of road network surfaces. When illuminating roads, it is important to pay attention to a sufficient beam spread (the alternation of light and dark sections raises the level of visual difficulty for drivers, ultimately increasing the risk of collision). Importantly, it is also necessary to highlight accident-prone and untransparent road sections. In places of multi-traffic intersections (of pedestrians, cyclists, cars) it is necessary to secure the protection of the more vulnerable users. An effective tool is securing sufficient lighting at pedestrian and cyclist crossings. It is crucial for the lighting to be constructed in a manner where there is an increase of the vertical intensity of pedestrian/cyclist lighting in every driving direction of motor vehicles (not a mere increase in the horizontal intensity of light). To secure sufficient driver attention, it is appropriate to highlight the pedestrian crossings in a differently coloured light.

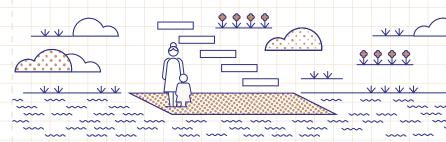
Health

The creation of a healthy environment is a complex issue, which demands a multidisciplinary approach. It deals with the creation of a high-quality environment for societal activities, sport and recreation (parks, playgrounds, sports grounds), with the effects of light and sound on the human organism (regulation of lighting colour and intensity, traffic calming, a reduction in intrusive effects of outdoor advertisement), and with the cleanliness of the environment (reduction of pollution and dustiness by the design of the green environment, maintenance and waste management).

Traffic regulation

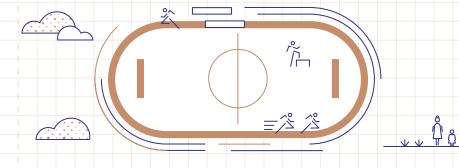
Traffic regulation has a significant influence on the quality of public spaces. It is done with the reduction of exhaust gas emissions, the reduction of noise and the reduction of unwanted lighting. The implementation of sound-proof walls is undesirable, considering the character of urban transportation, its serviceability and habitability, the support of connections, pass-through nature and transparency. The reduction of noise needs to be reached, for instance, by the acoustic insulation of tram and bus operations with an application of a suitable road surface or tram tracks, ²⁴ as well as the modernization of public transport vehicles, especially trams.²⁵

Developing green and blue infrastructure



Trees and vegetation are key elements of public space. They provide shadow, regulate extreme temperatures in the city, contribute to the flow and humidity of the air. They reduce pollution, produce oxygen, trap carbon dioxide and reduce noise.²⁶ Trees and greenery reduce stress and aggressive behaviour, by which they contribute to crime suppression. They also reduce sickliness and increase the overall user comfort.²⁷ A complex approach to green infrastructure can help create well balanced residential areas with recreational potential. An important aspect in the formation of healthy environments is also the creation, utilization and revitalization of water elements and currents in an urbanized environment. Water positively influences urban microclimate, naturally cools down surrounding environment, contributes to air quality and improves conditions for local biodiversity. At the same time, it reduces noise pollution, has a positive psychological influence on people and encourages physical activity.

Supporting healthy lifestyles



By shaping public space, it is possible to influence healthy lifestyles through the infrastructural support of the citizens' physical activity. The integration of active transport (pedestrian movement, bicycle) into people's lives is the most suitable way of improving their health. When building infrastructure for sport and recreation, it is then key to consider the availability of drinking water, clean toilets, changing rooms, showers, facilities for sporting events, including options for sitting and healthy meals. It is also important to build comfortable sports areas, which are within an accessible walking distance for citizens. Inclusive design and a clear navigation system should be a matter of course.³¹

When creating public spaces, it is necessary to take into consideration the orientation towards cardinal directions, the direction of prevailing winds, and other climate conditions in such a way that a pleasant environment can be formed. Apart from the placement of natural elements, that create natural climatic comfort, it is possible to have an impact with artificial elements and architecture- shading elements, utilization of surfaces with a higher grade of sunlight reflection or ones that are permeable. This concerns chiefly places with a higher concentration of people.²⁹ Given the occurrence of extremely hot days, it is also necessary to create spatial options for water cooling elements.³⁰

Regulácia svetelných zdrojov



Individually standing objects for advertisement purposes, large-scale banners or LED screens do not bring any additional value to public spaces. With the nature of their scale, they are intended for long-distance glance-like perception, which reinforces a traffic character of the space, contributes to visual smog, reduces the safety of traffic and overall degrades the character of the city. It is therefore desirable to limit them as much as possible. Large-scale LED screens and sound-based advertisement, which is not a component of architectural intents, should not be allowed. ²⁸ In residential areas, courtyards, and housing estates, it is necessary to prevent installations of intrusive light (over-lighting of facades and windows), the placement of disproportionately high lamp posts, and the use of lighting with a high ratio of blue light.



23 An unsuitable solution and parameters of a pedestrian island. Insufficient dimensions can contribute to traffic accidents and heighten the feeling of danger. Bratislava Račianske mýto

24 Environmental activation through the utilization of an active ground floor or programming of space along with its proper illumination or the removal of visual barriers has a significant influence on the improvement in feelings of social security. Bratislava, Velvet Revolution Square



25 The regulation of individual traffic to the advantage of pedestrian, cyclist and public transport can be reached by the organization of protest events, which transform themselves into soft measures of temporary city closure for individual traffic (e. g. Sundays without cars). Bratislava, Rázusovo Emkankment

Manifesto for Public

Space









26 An apt solution for the support of climatic comfort in the public space is the application of water elements (fountains) which cool down the surrounding space through the potential to interact with water but also by scattering droplets in the area. New York, USA

Cariné City

27 A good example of encouraging healthy lifestyle is the creation of safe pedestrian and cycling corridors connected to the natural environment and separated from car traffic in such a way that they support spontaneous sport-related activities. Bratislava, Chorvátske rameho

28 An important point of health support is the construction of hygienic nodes in the public space especially the toilets. Helsinki, Finsko

Attractive City

Attractivity is the ability to stimulate positive relationship between people and the city, accompanied by permanent trust.

An attractive city is a place of experience and variety.³² High-quality public space becomes a living room, a playground, a corner for relaxation, a concert hall, and a place for social life. It contributes to the revenues of ground floor shops, to the value of the real estate in the area's vicinity and to the appeal of the entire city. Most importantly, however, it significantly influences a district's character. A place is created, which people can identify with a be proud of.³³ Attractivity is the ability to stimulate positive relationship between people and the city, accompanied by permanent trust. The condition of such relationship is a strong urban identity (genius loci) on every scale, the authenticity of local displays and valuable architecture. Together, they form a visual and emotional experience. The types of street furniture and ground surfaces help to simplify and divide spaces and support their natural qualities. The appearance and the feeling of it are influenced by the arrangement, design and the quality of all the elements and materials in public space. Another natural part of public space is art. Not only in the shape of statues or plastic art on facades but also in the form of interactive art or installations, which directly influence the cultural and social aspect of an area.

Key words: street furniture, materials, surfaces, visual smog, art in public space, elements of small-scale architecture

Manifesto for Public Space \rightarrow

Vision

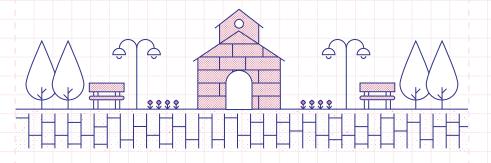
Public space creation draws from a thorough knowledge of a place and its context. As a first step, it is important to conduct an analysis of a space's condition and of its elements. From a short-term perspective, the unification of an overly wide spectrum of street furniture based on their functional, spatial and hierarchal categorization (squares, streets, parks, city districts) is needed. Within all this, new identifying street furniture should be designed, one which has the potential (as a characteristic detail) to symbolize the city and its districts. Street furniture should ideally come from a design contest and a catalogue along with which the rules of its placement should subsequently be made (within the framework of Public Space Design Manual). In the city, one can currently find layers of dysfunctional and unattractive elements (street furniture, lighting, components of traffic and technical infrastructure, advertisement devices) and elements which are at the end of their service life. Those, which are unutilized, should be removed and there should simultaneously be a systematic effort for gradual and coordinated replacement of obsolete elements (this is linked to a needed revision of below surface infrastructure – see also \rightarrow chapter 5 Clean City).

Commercial displays are a common feature in public space but without regulation, they become visual smog. The first step is to establish rules for the placement of advertisements, including the regulation of large-scale billboards. It should be followed by the gradual removal of advertisements from public space based on chosen criteria.

From a long-term perspective, it is necessary to accede to a gradual replacement of ground surfaces, mainly those which are related to an identity of a given environment. Simultaneously, a catalogue of surfaces should be created – a unique material palette for Bratislava. Art also belongs in public space, in various forms. Pre-existing art must be protected and restored and, at the same time, there should be a support for the creation of new art. While searching for the placement and design of new art, contests and collaboration with public art institutions are suitable. Simultaneously, it is desirable to define the general principles of artwork placement in public space.

Principles

The character of space and context



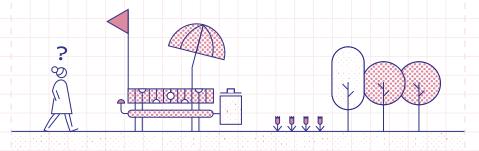
The application of individual elements (street furniture, surfaces, advertisement) should be in accordance with the overall character of the space. There is no universal solution for every space, one must always consider the values of any given space and its context. The utilization of individual types of elements, their execution and quantity, must consider the historical, cultural and natural conditions to which they enter (in a city centre, it is necessary to conserve and restore preserved historical pavement, while in parks soft permeable surfaces ought to be used). Materials from local sources should be used primarily. A unique character can be reinforced or created by placing art into public space.

Spatial uniformity versus diversity

When altering public space, it is necessary to view hierarchy of public spaces in a wider context. While typical spaces (streets, small parks) are fit to be unified, spaces which possess unique character (squares, city parks) should be distinguishable. In typical urban premises (boulevards, residential streets), it is desirable to repeat an identical type of elements (street furniture, surfaces). When approaching more distinctive spaces, the approach should be more individual, using materials of higher quality or a tailored street furniture. It is necessary for architects to be entrusted with the design and realization of important public spaces, ideally in the form of a design contest.

00

High-quality design



The aesthetic criteria of public spaces are equally as important as those of function. The appearance of public spaces should satisfy the aesthetic requirements of a variety of future users. The design of elements in public space (including advertisement) should be refined and of high quality. Utilitarian elements (elements of traffic and technical infrastructure, lighting devices, street furniture) in basic areas (streets) should have a simple and unobtrusive design, surface colours should be more moderate. Certain special cases form an exception, like when any given element is an accentuation or is an item of street furniture and art simultaneously. Cases, which require an individual approach, should be identified by the city and should be the subject of a design contest.

Composition



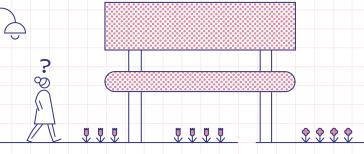
Public space should be designed so that its elements form a unified and compositionally balanced whole. Their placement and arrangement within a space should come from compositional principles. The individual elements of public space (street furniture, parts of traffic and technical infrastructure) should complement the space in a refined manner and apart from exceptions, should not visually dominate the area. They should also not interfere with important view corridors and obstruct the view of important buildings or artworks. The application of accentuations (specific elements, art) in public space should be limited to only spatially important places and should come from a general consensus (a design contest).

2222 0°C

Spatial orientation

Quality public space should be clearly defined and transparent. It should allow for intuitive use with minimum effort and simple orientation. The key to securing transparent public space is a specific arrangement of their physical structure (see also \rightarrow Composition). The creation of orientation points, the accentuation of entrances to important buildings, the division of space by varied surface types, or the altitude-based division of space can contribute to spatial clarity and help the natural organization of mobility. Another contribution is a unified information and navigation system (signs, writings), which informs and navigates people to important sites. When creating information system, it is necessary to consider the needs of handicapped people (information available in Braille, access from a wheelchair). Instead of crowding the public space with elements of an informational system, an emphasis should be placed on intuitive navigation through space utilizing its formation and composition, that is "without guidance".

Human scale

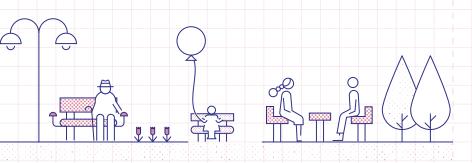


The public space should serve people and reflect on their needs. That is why all its parameters should stem from the human scale. The creation of an environment to a human scale means that the environment and individual elements (street furniture, surfaces, advertisements) are tailored to human size and shape and the possibilities and limitations of human perception. In practice, this means the eye-level placement of the majority of information in a way that enables one to perceive it with own senses (pedestrian movement scale).

Attractive City

Functionality

Attractive City



Functionality contains an assortment of qualities which enable problem-free utilization of space. When designing spaces and choosing elements for them, one should think about the spectrum of their users (children, seniors, adults, the handicapped). Good functionality is influenced by the arrangement of elements and their accessibility without barriers. When designing elements, user comfort needs to be considered – e.g. materials with stable temperature for sitting or backrests and armrests for standing up comfortably. Walking comfort is also important (creation of flat surfaces), and when selecting surfaces which can be walked and driven upon, the anti-slip properties and the sound and light reflectability (surfaces which reflect sunlight but do not dazzle, surfaces that absorb sound, "silent" surfaces for driving) need to be taken into consideration. The materials should naturally age without quality loss. The elements should be able to be easily (dis)assembled and repaired (see also \rightarrow chapter 6 Clean city / Construction and repair). When selecting the elements, a suitable compromise between quality, resilience, simple maintenance, service life and investment costs needs to be found.



29 It is necessary to view art as an integral component of public space. It is apt to combine function (like shading) with aesthetics in its design. Barcelona. Spain







32 The visual variety of elements in this small area and their compositional arrangement is unfitting. It is recommended for the elements to be unified by shape, material and colour and be suitable placement. Bratislava, Biely Križ Souare

Attractive City



33 It is vital to reduce visual smog caused by advertisement, shop signage, or traffic. The removal of advertisement is desirable and traffic signs are to be combined with other vertical elements (e. g. lamp posts) if the situation permits. Bratislava, Kamenné Square

34 Quality street furniture elements at the end of their service life should be refurbished. During the maintenance

and refurbishment, it is

necessary to consider

the choice of materials

and their resistance to

Janka Kráľa

environmental factors or

vandalism.. Bratislava, Sad

31 A suitable approach to surface solutions in public space is a choice of high-quality, lasting, and replaceable surfaces ideally acquired from local sources. It is necessary to design edges and boundaries with a considerations of potential car traffic stress. Lisbon, Portugal

Clean City

Tending to public spaces influences their functionality. That is why it is vital for them to be continually cleaned and maintained.

Creating high-quality public space is the basic precondition for its success. However, it is but the first step, to which a long-term duty of responsibility is connected. It is necessary to preserve the configured quality in the following years from project realisation. The care for public spaces influences their functionality. That is why it is vital for them to be continually cleaned and maintained. Otherwise, there is a risk that the space will begin to get damaged and used only by select groups, which can cause its gradual decline. Considering the diversity of elements, attention needs to be drawn to various topics – greenery, street furniture, technical infrastructure, surfaces and waste. Despite the fact that all the elements are parts of a single whole, their maintenance is divided into thematic groups where each has a different subject caring for it. When creating public spaces, it is necessary to think about this aspect as well, so that future care does not become overly complicated. Public space should simplify and minimalize maintenance with its design.

V

Key words: maintenance, repair, engineering networks, supply, cleansing, cleaning, development, signage, greenery protection

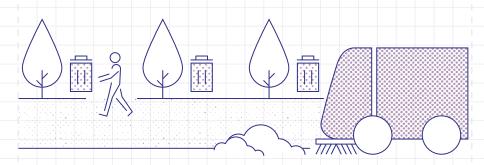
Manifesto for Public Space \rightarrow

Vision

Principles

The amount of urban green areas influences the flexibility and speed of their maintenance. Thus, from a short-term perspective, restrictions on mowing and trimming in select locations can lead not only to the improvement of local climate conditions but also to the optimization of the timetable for greenery maintenance. Irrigation systems also have a great potential to simplify maintenance, mainly during the summer months. The short-term measures also include the cleansing and cleaning of public spaces. To these, all citizens can contribute by behaving responsibly – by disposing garbage to litter bins or to places selected for waste collection, separating it correctly or by voluntary cleaning of their surroundings.

From a long-term perspective, the maintenance of technical infrastructure can be simplified in suitable locations with the creation of above and underground collectors, in which all networks are connected. This eliminates the need to remove surface layers while accessing them. It is also important to coordinate landscape modifications and green and blue infrastructure development with the construction and reconstruction of engineering networks and technical infrastructure. Service and emergency lanes or semi-recessed waste containers speed up and optimize the utilization of service vehicles. Since public spaces and engineering networks in Bratislava have different administrators, a vital condition of reaching an overall level of quality and efficiency is the coordination of these subjects from the get-go.³⁵ The city has the ideal conditions to ensure the collaboration and coordination of the individual administrators. It is also necessary to synchronize maintenance plans so that the functionality of public spaces is limited in the least restrictive manner.³⁶ Cleaning, tidying and maintenance



Public space maintenance includes regular waste collection, litter bin emptying, plant care and watering, the removal of stickers and unwanted graffiti from street furniture and surfaces, winter maintenance (snow shovelling, salt scattering) and regular cleaning and tidying. During the winter maintenance, it is important to prioritize the maintenance of pedestrian pathways. These spaces need to be designed in sufficient dimensions, with a clear maintenance strategy and without unnecessary barriers blocking machine movement. In the framework of maintenance simplification, it is apt to use surface finish of street

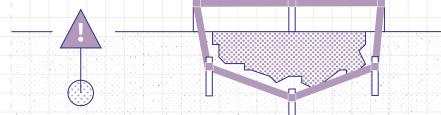
furniture and facades that protects against vandalism (anti-graffiti coating). It is also necessary to think about the placement of sufficient number of litter bins in public space and about the conceptual placement of compounded dumpsters for all types of waste (see also \rightarrow chapter 2 Green city / Waste management).

Supply



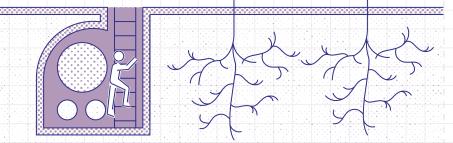
Supply areas are vital parts of every urban design. In the framework of supply management, it is necessary to create parking supply areas, if the spatial parameters permit it. In cases where the spatial or other parameters (general binding rules) do not permit direct supply, it is necessary to create room for alternative forms of supply (by a hand truck, bicycles, a smaller vehicle). Clean City

Construction and repair



The construction and repair of public spaces influence their quality, the approach to them and their economic efficiency. The maintenance and repair of public spaces need to be considered at their inception and a lasting environment needs to be created (high-quality details and materials, fine craftsmanship). Individual components need to be designed with their service life and their replaceability and repairability in mind. Correct drainage of rainwater also increases the lifespan of both furniture elements and ground surfaces. Small-scale repairs of traffic infrastructure are important as well. Correct marking and fencing of construction sites are necessary so that pedestrian lanes are preserved. Particularly when excavating streets (e.g. during reconstructions of engineering networks), it is necessary to delimit safe pedestrian diversion. It is also necessary to limit the dustiness and pollution caused by construction mechanisms in the areas adjacent to them. Marking of underground engineering network lines by pavement sprays is unacceptable.

Underground engineering networks

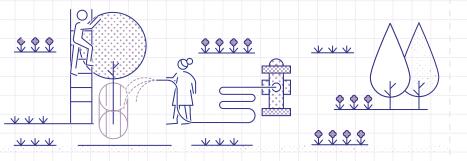


It is important to plan underground engineering networks as early as possible so that they minimally impact the utilization of the space above (tree planting, street furniture placement). An important principle is the merging of underground networks into collectors. Collectors are placed below paved roads in a way that enables quick repair and access. Surface signs of underground networks (covers, guards, curbs and gutters) should not be placed randomly, but with consideration of spatial composition. Engineering networks must not interfere with the protective area of tree root systems.

Merging of above-ground engineering networks

The above-ground elements of infrastructure must be minimized both quantitatively and in terms of volume and must be merged with other infrastructural elements.³⁷ For instance, this concerns the merging of traction line poles with public lighting or with traffic-light signalling devices but also the merging of switchboard boxes in public space. If the spatial and other conditions allow it, there should be a preference for the placement of public lighting and electric traction systems on suspensions between the facades of opposite buildings.

Greenery care and maintenance



Trees and vegetation are living organisms that develop throughout time. A comprehensive strategy for greenery care must, therefore, lay foundations for establishing greenery. Water accessibility is a crucial factor here. It is important to think about the irrigation system before the project realisation stage and limit artificial systems of irrigation as much as possible. When caring for greenery, it is recommended to use gardening technologies developed with the intention of conserving rainwater. It is also recommended to choose types of greenery that do not require intensive care.³⁸ Regular pruning and trimming of woody plants also belong to greenery management, as well as protection against damages (protective bars, trunk protection). Protection and care of existing trees should be done in accordance with the arboricultural standards which concern tree pruning and the protection of woody plants during construction. Evaluation of trees should in turn be done in accordance with the arboricultural standard on tree condition evaluation. (see also → chapter 2 Green city).

Manifesto for Public Space 35 Incorrect marking, enclosing or overt narrowing of the direct pedestrian lane is unacceptable during construction and repair of public spaces. Bratislava,

Vazovova Street



36 The support of alternative forms of supply is generally desirable. Above all, it is vital in locations with limited spatial conditions, or in areas with an increased presence of pedestrian and cyclist movement. Bratislava, Laurinská Street



Contra la

TTR

37 In areas with a higher intensity of waste accumulation, it is vital to increase the capacity of waste containers, or increase the intensity of waste collection and cleaning. Bratislava, Sibírska Street

Manifesto for Public Space



38 It is necessary to pay special attention to the protection of trees during construction work. It is vital to protect the tree trunks from mechanical damage by wood-wrapping and to secure the protection of root systems during construction. Porvoo. Finland

Clean City



39 Before any construction work in public space begins, it is desirable to inform the public about these intentions, e. g. with the help of temporary information boards. Bratislava, Sad Janka Kráľa



40 A good example of merging above-ground engineering networks in a way that reflects on the visual identity of a public space. Bratislava, Jama Park

Conclusion

The Manifesto for Public Spaces is the first step towards the formation of highquality urban public spaces. The Manifesto defines basic frameworks and rules in order to grasp public space creation challenges. The document is simultaneously a blueprint for future procurement of technical requirements for the creation of public spaces (Principles and Standards), as well as the complementation of various important strategic documents of the city. Principles and Standards will then become the technical directive for city departments during the design of urban public spaces. The Manual will be put into practice in all project intents and project realisations managed by the city. The Principles and Standards themselves are intended as open documents. Their ability to be changeable throughout time, under the influence of constantly shifting priorities, technologies and materials will be key in preserving the quality of urban public spaces.

The principles presented in this Manifesto are also reflected in the procedures related to public procurements and design contests. At the same time, the topic of public space and its foundational principles will become a part of the binding component of the Land Use Plan (ÚPN), which will lead to the reinforcement of the outlined values for all actors involved in city-making.

While writing the Public Spaces Design Manual, several pilot projects were in the phase of project documentation preparation and realization. These pilot projects served as a practical laboratory for the proposal and verification of the principles and standards outlined in this document. Conclusion

Appendices

In the framework of the creation of the Manifesto for Public Space, we have acceded to the creation of a tool for the evaluation of the quality of urban public spaces. It is a simple form, which contains questions based on the five chapters of the Manifesto.

The intention behind this tool is to acquire more detailed information about the prepared projects in public spaces and on the basis of measurable indicators, subsequently assess and evaluate the future quality of the public spaces, as early as in the preparation stage of project documentation.

The form should serve for all interventions in urban public spaces (for example, urbanist-architectural contests, submitting of investment intents, etc.), regardless of the investor being the public administration or the private sector. It can equally serve the public as a controlling mechanism of the quality of creation and realization of public space projects meant for the municipality or the private sector.

1. Mobility

What is the ratio of individual types of public spaces? 1.1. a. Streets m² m² b. Courtyards m² c. Squares m² d. Pedestrian zones e. Parks m² f. Open space m² 1.2. Does the design also include public spaces Yes No that restrict public access? m² a. What is the scope of the area? 1.3. Does the design include zones with limited | No Yes vehicle access (pedestrian zones, squares)? 1.4. What are the pavement widths on the street? m m m Yes No 1.5. Does the design include segregated bike paths? a. What is the scope of the area? m 1.6. Does the design consider the loading zones Yes No and bike stands for cyclists? a. In what scope? Yes No 1.7. Does the design include public transport stops? a. What type (bus, tram, etc)? b. How many? c. Longest walking distance to a stop m 1.8. Does the design include parking spaces No Yes on the street / in public space? a. How many?

Appendices

2.	The Environment				3.	Health and safety		
2.1.	Does the design include green areas?	Yes	No	3	.1.	Is movement without barriers facilitated		
	a. What is the scope of the area?		m²			in the entire public space (for people with		
						limited ability of movement and orientation,		
2.2.	Does the design include a continuous					prams, etc.)? ?	Yes	No
	area of publicly accessible greenery							
	/ park (min 1 000 m2)?	Yes	No	3	.2.	Does the design include playgrounds?	Yes	No
	a. What is the scope of the area?		100 m²		.2.	a. What is the scope of the area?	103	m ²
	a. What is the scope of the area:		111			a. What is the scope of the area?		111
<u> </u>	Desethe design include large trace?				2		Vee	
2.3.			No	3	.3.	Does the design include sport facilites?	Yes	No
	(crown diameter above 3 m)?	Yes				a. What is the scope of the area?		m²
	a. Approximately how many?							
				3	.4.	Does the design include resting site		
2.4.						for seniors?	Yes	No
	in natural terrain?	Yes	No			a. What is the scope of the area?		m²
	a. What is the scope of the area?		m²					
				3	9.5.	Does the design include spaces which		
2.5.	Are there green areas placed over					have sufficient lighting throughouz		
	underground constructions?	Yes	No			the whole year?	Yes	No
	a. What is the scope of the area?		m²					
2.6.	Are green roofs included in the design?	Yes	No					
	a. At what scope?		m²					
2.7.	Does the design include water-permeable							
	surfaces (different from green areas)?	Yes	No					
	a. At what scope?		m²					
2.8.	Are there water elements included in							
2.0.	the design?	Yes	No					
	a. Which ones?							
~ ~	Departies design work, with rejeventer							
2.9.								
	and its retention, or more precisely,	Yes	No					
	its management?	Yes						
				+ - - + - - +				

Appendices

4. Identity and attractivity 5. Maintenance 4.1. Does the design create an active ground 5.1. Does the design include engineering Yes No floor with terraces in a public space? networks merged in an underground Yes No m² a. What is the scope of the area? collector? a. Where exactly (roads, streets, 4.2. Are high-quality and lasting surface green areas, etc.)? materials used in the design of a public Yes No 5.2. Is it possible to access the entire area space? No Yes with maintenance and emergency vehicles? a. Which ones? 5.3. Is the area accessible for maintenance in its entire scope? (greenery, reinforced Yes No 4.3. Are specific elements of street furniture surfaces, road communications, etc.) utilized (different from the standard namely 5.4. Does the design include centralized waste bench, litter bin, bike stand, public lighting Yes No Yes No

Yes No

collection points?

b. In what form (standing above ground,

semi-recessed, underground.)?

a. How many?

Manifesto for Public Space

Appendices

lamps) that are project-specific?

4.4. Are you considering the placement of art

a. Which ones?

in your project? a. What type?

Appendices

Summary

The Manifesto for Public Space is an introductory document of the Public Space Design Manual, which defines the basic principles of public space creation in Bratislava. The goal of the manifesto is the naming of basic starting points for the creation of public space. It is divided into five thematic areas, in which it establishes the vision and principles of development, renewal and creation of public spaces. These areas are (1) Walkable City, (2) Green City, (3) Caring City, (4) Attractive City and (5) Clean City. The Manifesto should simultaneously serve to select subjects of the municipality as binding, to city districts and private subjects as an advising and to the public as an informative document. The goal of this text is to provide a brief summary of the main executive points of the Manifesto, to which it refers. It does not serve as a replacement of the whole document. For specific details of the value-based starting points, it is necessary to refer to its full version.

The following section will clarify the topic of public space in Bratislava, followed by a summary of the individual chapters.

What is public space

Public spaces present (1) unbuilt areas between built environments, (2) corridors of mobility and (3) places for activities and sojourn of citizens. From a spatial planning perspective, linear public spaces (streets, embankments) form the basic structure, and are connected with nodal public spaces (squares, parks, various courtyards, areas). Other spaces belong here as well, such as natural elements and green corridors (playgrounds, school grounds, cemeteries). The natural environment of Bratislava hides an enormous untapped potential for urban development. Individual public spaces should create a bigger whole; they should systematically intertwine and offer options for safe and comfortable movement and residence of city inhabitants.

What is the Manual

The purpose of the Manual is to establish a comprehensive vision and the principles of development and creation of public spaces. The goal of the Manual is not only the standardization and introduction of principles leading to a higher quality of public space but also the preparation of Bratislava for the challenges of this century. The Manual places importance on original and intelligent solutions for the creation and renewal of public spaces, which should always contribute to Bratislava's overall character and considers its culture-historical, societal, agricultural, and natural context of the city.

The manual simultaneously emphasizes the importance of a good configuration of preparation processes in public space creation. Strategic planning, which is vital for public space development, must be supported by data. For the purposes of high-quality development, the continuous collection and administration of quantitative and qualitative data need to be ensured. Equally as important is the participation of the general and scientific community. Last but not least, the Manual emphasizes the importance of design contests where important public spaces are concerned. Thorough fulfilment of contest requirements and the evaluation of design proposals by an independent expert committee is key for a problem-free and quality project realization in public space.

The Public Space Design Manual is divided into two parts. The first is the Manifesto for Public Space, which is the first and introductory part of the Manual. In the Manifesto, we name the foundational, value-based starting points for the creation of public spaces, which will serve as a groundwork for the creation of high-quality public space designs and their proposals, in accordance with the visions and principles of the city. The Manifesto should simultaneously serve to select subjects of the municipality as binding, to city districts and private subjects as an advising and to the public as an informative document.

The Principles and Standards are the second part of the Public Space Design Manual and will be gradually published throughout a period of a few years, which will enable an operative supplementation of strategic topic areas with details from practice or with brand new topics. It is a collection of operational documents of a more technical nature which define the basic rules of specific elements or parts of public space with a focus on spatial parameters within the city.

The following sections give a name to individual thematic areas, which are named and addressed in the Manifesto and which form the conceptual basis for the Principles and Standards of public spaces.

Walkable city

A part of the new conceptualization of infrastructure planning is the change in the hierarchy of the users of public space and infrastructure with a preference to their most vulnerable users. For the future planning of functional areas and public spaces, the key is a prioritization in the following order: (1) pedestrian, (2) cyclist, (3) public transport (MHD), (4) supply and services, (5) taxi, (6) shared cars and (7) individual car traffic.

The following principles should guide the development in the area of mobility in Bratislava. For details, refer to pgs. 32 - 39 in the Manifesto:

- Street design should suit everyone, that is, it must integrate different types of movement (according to the aforementioned user hierarchy) and must be designed accordingly with the principles of complete streets, which places an emphasis on the most vulnerable members of traffic.
- Basic amenities should be within a maximum distance of 600 m from a residence. Nodal public spaces should be at a maximum distance of 750 m from a residence.
- When creating public spaces, the priority is to create a suitable environment for walking. Care must be taken to ensure the interconnection of pedestrian network areas near spaces where people change the method of transportation.
- Spaces for people must be as barrier-free as possible and allow for smooth and direct motion. The absolute minimum width of a sidewalk is 1,5 m.
- The prioritization of public transport should drive the creation and renewal of urban infrastructure. An important element is also the creation of integrated transferral points between regional and public transport stops and cycling or walking traffic.
- The calming of car traffic in the city should be a priority when creating and renewing urban infrastructure. This should be done using elements that reduce driving comfort and also by a gradual introduction of areas with restricted car access. A preference for environmentally friendly vehicles, such as electric cars, is permissible.
- In regard to the urban parking policy, it is important to accede to the regulation with clearly marked parking spaces, in a form of both street and concentrated parking. It is necessary to move away from the practice of parking in front of the house and increase the parking capacity within the framework of public transport transferral nodes.

Green City

A part of the new conceptualization of the urban landscape is the interconnection of the urbanized environment with the natural one. This need is particularly pronounced in the context of climate change and its adverse consequences.

The following principles should guide the development of green and blue infrastructure in Bratislava. For details of this section, refer to pgs. 34 - 49 in Manifesto:

- It is necessary to interconnect green areas in Bratislava wherever possible, to support the creation of green corridors and to connect urban greenery to the natural backdrop of the city.
- During new construction or renovation, it is necessary to create the conditions for implementing vertical green walls and facades or vegetative roofs. Vegetative roofs are especially crucial to be established in cases of attic apartments, in social service facilities, in senior houses, medical and school facilities.
- The composition of vegetation in a public space should include the proportion of woody plants to grass of at least 60%. The choice of woody plants must react to the expected rise in temperatures and to biodiversity needs.
- It is also necessary to create a comprehensive energy infrastructure that favours sustainable resources. In the framework of public space creation, steps should be taken to decentralize the energy network through the application of energy sources on various elements in public space.
- Sustainable rainwater management should gradually replace the centralized rainwater sewage system.
- The use of disposable plastics and non-recyclable materials must be restricted in the city, particularly during events in public space. At the same time, it is necessary to build high-quality waste infrastructure, for example by increasing the capacity of collection yards. It is necessary to support the separation, collection and composting of organic waste and its subsequent utilization.

Summary

Caring City

The urban environment must emphasize socialization, communal development, social activities and urban design on a human scale. These measures should go hand in hand with the reorganization of the city's street network by rerouting individual traffic from parts of the city with increased walking and cycling traffic.

The following principles should guide the development in the urban health and safety field. For details of this section, refer to pgs. 50 - 57 in the Manifesto:

- When creating public spaces, it is necessary to increase visual clarity, eliminate physical barriers and install sufficient lighting.
- Building frontages longer than 150 m should be avoided.
- In residential areas, the speed of vehicles must be reduced to 30 km/h. Safe and well-lit crossroads must be created, and the incidence of pedestrian crossings, cycling lanes and segregated bike paths should increase. The barrier-free approach is a priority in the creation of infrastructure.
- When building infrastructure for sports, recreation and shared time spending, it is vital to ensure the availability of drinking water and toilets. This also pertains to changing rooms, showers, and accessible seating in cases of sports grounds.
- In areas with increased concentrations of people, such as public transport stops, it is necessary to ensure climatic comfort by providing sufficient shade, or alternatively by creating space for water cooling elements.
- It is desirable for individually standing advertisement objects to be limited as much as possible.
- In residential areas, courtyards and housing estates, it is necessary to limit intrusive light, the fitting of disproportionately high light carriers and the usage of light devices with a high proportion of the blue part of the light spectrum.

Attractive City

The city must be a pleasant environment for its inhabitants. The key aspect of high-quality public space is its attractiveness, which must come from the context of the city. Public space should offer smart solutions and evoke a positive public attitude towards the city.

The following principles should guide the development in the field of urban design. For details of this section refer to p. 60 - 69 in the Manifesto:

- The application of individual elements in a public space must be consistent with the overall character of the public space. There is no single universal solution. The unique character can be supported under certain circumstances by the placement of art in a public space.
- While typical public spaces such as streets and parks are suitable for unification, significant public spaces such as squares and city parks are appropriate to be enriched by art or individual designs.
- Individual elements in public space (furniture, surfaces) should come from locally sourced materials.
- The utilitarian elements of common spaces should have a simple and inconspicuous design. The colour of the surfaces should be moderate. Cases which require individual approach need to be solved through design contests.
- Public spaces should have a uniform and compositionally balanced character, that is, they should draw from compositional principles.
- Public spaces should be clearly defined and transparent without an acute need to crowd the public space with an information system. If an information system is necessary, it should consider the needs of handicapped people.
- When designing public spaces, the needs and the user comfort of the entire user spectrum must be considered.

Clean City

The care for public spaces has a critical impact on their functionality. Systematization of urban maintenance and cleaning is as critical as the creation high-quality public spaces.

The following principles should guide developments in the field of public space management. For details of this section, refer to p. 70 - 77 in the Manifesto:

- To simplify maintenance, it is advisable to use a surface treatment of street furniture and facades which is resistant to vandalism.
- A sufficient number of litter bins need to be placed in the public space.
- Where possible, loading zones for supply vehicles must be created.
- When repairing or constructing traffic infrastructure, it is necessary to ensure that future repairs can be done easily, for example by using easily dismantable pavement surface.
- When streets are being excavated it is necessary to demarcate a safe pedestrian diversion.
- The marking of underground engineering networks with pavement sprays is
 unacceptable.
- Underground engineering networks must minimize their impact on the usability of space above them. Surface signs of underground networks must not disturb the surface composition of the space.
- Engineering networks must not interfere with tree root systems.
- Above-ground engineering networks must be minimized quantitatively and in volume, possibly by merging with other elements of the infrastructure. This applies, for example, to combining traction lines with public lighting. If the spatial and other options allow it, there should be a preference for public lighting and tram traction lines to be suspended between the facades of opposite buildings.
- Irrigation systems should be considered as early as when trees are being planted, while the reduction of artificial irrigation methods should be a priority. An ideal solution would be implementing irrigation solutions that rely on water retention.
- The protection and care of existing trees must be carried out in accordance with arboricultural standards on tree pruning and the protection of woody plants during construction works. Evaluation of trees must also be carried out in accordance with the arboricultural standard.

Bibliography

- BURÁK, Dušan BURÁK, Michal NOVÁČEK, Oto. 2019. Manuál tvorby verejných priestrnastiev mesta Prešov. Architektonické štúdio Atrium s. r. o. Košice. ISBN 978-80-973418-0-0.
- BURÁK, Dušan BURÁK, Michal NOVÁČEK, Oto. 2019. Manuál tvorby verejných priestrnastiev mesta Prešov. Architektonické štúdio Atrium s. r. o. Košice. ISBN 978–80–973418–0–0.
- ВАЈАΝÍК, Martin BLAŠČÁK, Fedor MORAVČÍKOVÁ, Henrieta. 2018. Identita.
 In: M. Vallo a kol., Plán Bratislava. SLOVART, spol. s r. o., 2018. s. 14 21.
 ISBN 978-80-556-3596-5.
- ВАЈАNÍK, Martin BLAŠČÁK, Fedor MORAVČÍKOVÁ, Henrieta. 2018. Identita.
 In: M. Vallo a kol., Plán Bratislava. SLOVART, spol. s r. o., 2018. s. 14 21.
 ISBN 978-80-556-3596-5.
- 5. MARCINOV, Michal a kol. 2018. Životné prostredie. In: M. Vallo a kol.,
- Plán Bratislava. SLOVART, spol. s r. o., 2018. s. 251 279. ISBN 978-80-556-3596-5.
- 6. MARCINOV, Michal a kol. 2018. Životné prostredie. In: M. Vallo a kol.,
- Plán Bratislava. SLOVART, spol. s r. o., 2018. s. 251 279. ISBN 978-80-556-3596-5. 7. GEHL, Jan. 2011. Život medzi budovami. Island Press. ISBN 1610910230.
- 8. NETRI, Peter a kol. 2018. Mobilita. In: M. Vallo a kol., Plán Bratislava.
- SLOVART, spol. s r. o., 2018. s. 153 177. ISBN 978-80-556-3596-5.
- 9. BÁRTOVÁ, Hana a kol. 2007 (2019). Principy a pravidla územního plánovaní Brno. Ústav územního rozvoje Brno.
- Dostupné na internete: http://www.uur.cz/default.asp?ID=2571
- 10. PRINZ, Dieter. 1997. Städtebau. s. 82. Kohlhammer. ISBN 3170126296.
- NETRI, Peter a kol. 2018. Mobilita. In: M. Vallo a kol., Plán Bratislava.
 SLOVART, spol. s r. o., 2018. s. 153 177. ISBN 978-80-556-3596-5.
- Mutizwa-Mangiza, Naison D. et al.. 2011. Cities and Climate Change: Global report on human settlements. United Nations Human Settlements Programme (UN Habitat).
 Earthscan. s. vi – viii, 33 – 62. ISBN 978-1-84971-371-9.
- Stratégia adaptácie na nepriaznivé dôsledky zmeny klímy na území hl. mesta SR Bratislavy s. 43
- Stratégia adaptácie na nepriaznivé dôsledky zmeny klímy na území hl. mesta SR Bratislavy s. 44
- 15. Akčný plán adaptácie na zmeny klímy hl. mesta SR Bratislavy 2017 2019, s. 52 53
- Stratégia adaptácie na nepriaznivé dôsledky zmeny klímy na území hl. mesta SR Bratislavy s. 48
- GDCI NACTO. 2016. Global Street Design Guide. s. 6. Island Press. ISBN 1610917014.
- JACOBS, Jane. 1961. Život a smrť amerických veľkomiest. Random House. ISBN 067974195X.
- GDCI NACTO. 2016. Global Street Design Guide. s. 6. Island Press. ISBN 1610917014.

20. MARKO, Igor a kol.. 2018. Rozvoj mesta. In: M. Vallo a kol., Plán Bratislava. SLOVART, spol. s r. o., 2018. s. 27 - 65. ISBN 978-80-556-3596-5. 21. JACOBS, Jane. 1961. Život a smrť amerických veľkomiest. Random House. ISBN 067974195X. 22. GEHL, Jan. 2010. Cities for people. Island Press. ISBN 159726573X. 23. NETRI, Peter a kol. 2018. Mobilita. In: M. Vallo a kol., Plán Bratislava. SLOVART, spol. s r. o., 2018. s. 153 - 177. ISBN 978-80-556-3596-5. 24. MELKOVÁ, Pavla a kol. 2014. Manuál tvorby veřejných prostranství hl. m. Prahy. s. 244. IPR Praha. ISBN 978-80-87931-11-0. 25. Návrh akčného plánu ochrany pred hlukom Bratislavskej aglomerácie pre stav v roku 2011. 2015, s. 32 26. GDCI - NACTO. 2016. Global Street Design Guide. s. g. Island Press. ISBN 1610917014. 27. GDCI - NACTO. 2016. Global Street Design Guide. s. 9. Island Press. ISBN 1610917014. 28. MELKOVÁ, Pavla a kol. 2014. Manuál tvorby veřejných prostranství hl. m. Prahy. s. 264. IPR Praha. ISBN 978-80-87931-11-0. 29. Akčný plán adaptácie na zmeny klímy hl. mesta SR Bratislavy. 2017 – 2019, s. 59 30. Akčný plán adaptácie na zmeny klímy hl. mesta SR Bratislavy. 2017 – 2019, s. 60 31. BENEDIG, Dávid a kol. 2018. Šport. In: M. Vallo a kol., Plán Bratislava. SLOVART, spol. s r. o., 2018. s. 235 - 247. ISBN 978-80-556-3596-5. 32. MARKO, Igor a kol. 2018. Rozvoj mesta. In: M. Vallo a kol., Plán Bratislava. SLOVART, spol. s r. o., 2018. s. 27 - 65. ISBN 978-80-556-3596-5. 33. BÁRTOVÁ, Hana a kol. 2007 (2019). Principy a pravidla územního plánovaní Brno. Ústav územního rozvoje Brno. Dostupné na internete: http://www.uur.cz/default.asp?ID=2571 34. JEHLÍK, Jan. 2016. Rukověť urbanismu. Ausdruck Books. ISBN 978-80-260-9558-3. 35. MELKOVÁ, Pavla a kol. 2014. Strategie rozvoje veřejních prostranství hl. mesta Prahy/ návrh, s. 43. IPR Praha. ISBN 978-80-87931-13-4. 36. MELKOVÁ, Pavla a kol. 2014. Strategie rozvoje veřejních prostranství hl. mesta Prahy/ návrh, s. 43. IPR Praha. ISBN 978-80-87931-13-4. 37. MELKOVÁ, Pavla a kol. 2014. Manuál tvorby veřejných prostranství hl. m. Prahy. s. 183. IPR Praha. ISBN 978-80-87931-11-0. 38. Stratégia adaptácie na nepriaznivé dôsledky zmeny klímy na území hl. mesta SR Bratislavy s. 46

Contributors

Authors				
Roman Žitňanský, Oto Nováček, Adam Lukačovič,				
Petra Šingerová, Michal Marcinov				
Co-Authors				
Ingrid Konrad, Peter Netri, Samuel Achberger				
Expert Consultants				
Ivan Bútora, Milota Sidorová, Zora Pauliniová,				
Juraj Hurný, Igor Marko, Eduard Donauer,				
Martin Berežný, Ján Mazúr, Juraj Nyulassy				
Authors of the introductory expert commentaries				
Ivan Gogolák, Pavol Paňák, Peter Szalay,				
Tamara Stohlová, Slavomír Ondoš,				
Michal Dekánek, Ivana Rapoš Božič,				
Michal Hladký, Veronika Prachárová				
Editing				
Samuel Achberger				
Translation				
Daniel Holko				
Graphic Design				
Martin Bajaník				
Layout and illustrations				
Barbora Gavláková, Vojtech Ruman				
Image Sources				
Peter Netri – 23, 35; Oto Nováček – 12, 14, 19, 26, 28, 30, 31, 38, 40;				
Zora Pauliniová – 1, 6, 9, 10, 11, 12, 15, 16, 17, 18, 20, 22, 24, 25, 27, 33, 36, 37;				
Petra Šingerová – 8;				
Roman Žitňanský – 21, 29, 32, 34, 39;				
Historické pohľadnice, zroj:				
https://www.facebook.com/StaraBratislavaNaFotografiach/photos/a.330586450362439/	/35270			
3351484082/?type=1&theater) - 2;				
Archív architektúry USTARCH SAV - 3;				
http://riowang.blogspot.com/2014/09/fasisticky-univerzitni-kampus-v-bratislave.html - 4	;			
TASR - 5				

Public Space Design Manual Manifesto for Public Space

Metropolitan Institute of Bratislava Public Space Department Primaciálne námestie 1 814 99 Bratislava

© Metropolitan Institute of Bratislava, Bratislava 2021 Public Space Design Manual/Manifesto for Public Space Published in Bratislava in 2021 by the Metropolitan Institute of Bratislava. Any modifications to the publication are only possible with the approval of the publisher. The publication is freely accessible to download. Dissemination is possible only with proper citation.

First Issue

www.manual.mib.sk