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# THE EFFECTS OF CHANGING POSSIBILITIES OF URBAN DEVELOPMENT ON THE WATERFRONT DEVELOPMENT IN BUDAPEST

Abstract: The Danube waterfront is an important structural and functional element of Budapest. In the recent decades its function was substantially revaluated while new demands and conflicts to be treated appeared with respect to these areas. Post-socialist urban development seems not to have given the appropriate responses to the new challenges however, in the past few years there have been undeniable improvements with respect to utilizing the potentials of the Danube waterfront. The present paper examines the most characteristic factors of the recent overall urban development trends and also the way the drivers of urban change affect the development of the Danube waterfront. The findings of research imply that the transformation that took place in the public administration and the political leadership of the Hungarian capital city, caused a moderate shift towards centralization, opening up a new era in urban planning and development. The strategies for urban development as well as some of the investment type projects clearly reflect these changes. The latest planning documents of Budapest set strategic objectives connected to the Danube waterfront, just like the previous plans, but the present objectives are more articulated and viable than the ones ever before. Our analysis concludes that while the local social and economic factors and processes fairly contribute to the waterfront development, the key driver is the present Government's support to develop the new image of Budapest, via financing provided from the EU - mainly Structural Funds. Amongst the concrete waterfront valorisation objectives strengthening recreational function is becoming increasingly important. This is in line with the findings of our survey conducted among local residents who gave marked preference to the expansion of recreation function in the riverside area. According to these tendencies, the new EU planning and budgetary period of 2014–2020 may easily move the waterfront area development out of the dead-lock.

Key words: urban development, waterfront development, Budapest

JEL code: P25

#### 1. Introduction

The urban development and planning has an important role in the evolution of a city. The development goals are stated in the urban development documents, which, after the public consultation, are accepted by the municipality. The government of a city can influence local social and economic processes with the implementation of its development objectives. Nevertheless, the urban development depends on the financial possibilities (Hall, 2002). The own financial resources and the private investments, and their combination are important in this policy, but the support of the national government may trigger investments and open up new possibilities, mainly for the capitals (usually the capital is the seat of the government), and in the EU cities the support of EU funds may play an important role in the development as well . For example it is expected that over 50% of European Regional Development Fund investment between 2014 and 2020 will be in urban areas (EU, 2014).

A river is a special factor in the life and the development of a city (Malone, 1996). The role of the water in the life of the cities changes, some functions of the rivers and riversides may weaken, while others get stronger and also new ones can be formed. In the past decades the change in the role of rivers accelerated in many of the large cities, thus a lot of local governing bodies become aware of the importance of this special type of geographic area, the metropolitan waterfront ("bluefield") and its transformation called urban waterfront development (see e.g. Craig-Smith, 1995). The large cities try to redefine their relationship with the water and valorise defunct harbour sites and other brownfields developing them into new, high-quality urban districts (Klopf, 2008). At the same time designers and creative urban planners tried to transform waterfronts into places in which people want to live, work and play (Butunel, 2006). It is generally observed that the classic features of water and banks have decreased, and more experts see that the revival is connected to the tourism and recreation (e.g. Craig-Smith, 1995).

Waterfront areas are undergoing a rapid transformation in many post-socialist cities too (Machala, 2014). While in the more developed cities there are more financial tools for waterfront development, in the less developed ones these possibilities are quite limited. However, in all cities the municipalities should respond to the newly emerging public and market needs. These issues are important in Budapest as well. In our paper we analyze waterfront development and its background in the 2010s in Budapest, because in the past years several new tendencies can be identified regarding the urban development of Budapest.

Our paper aims to analyse the main changes in the tendencies of urban development in the most recent years, the administrative, legislative background of changes, and the way overall urban development affects the development of the Danube waterfront.

The paper is based on the scrutiny of the relevant literature, the assessment of strategic planning documents, the analysis of available statistical data and on a survey conducted among local residents of Budapest.

### 2. Changing functions of the river Danube in Budapest

River Danube has always been and will definitely be a deterministic factor in urban development in Budapest. The river bears various characteristics and potentials which have always given way to the emergence and development of a wide range of functions.

Over time a few of them have disappeared (fishery, irrigation, defence etc.), some of them have been weakened or changed (drinking water supply, shipping etc.), while new ones have emerged (tourism, recreation etc.). In every period the social and economic actors – beyond the utilization of the river – have tried to develop the waterfront as well. The flood protection and water management has always been important and nowadays it may gain further importance, due to the adverse effects of climate change. (After 1838, when a great flood had destroyed the city, the banks had got high stonewall ramparts. The last flood was in 2013, and a little segment of the capital was in crisis situation, so the plan of a new mobile barrier has appeared.) In the 19th century after the river regulation and the building of the guays the city has incorporated the riverside (Izsák, Probáld, 2007) and the functions have been separated, partly in different zones. In the City near the historic buildings (castle, churches, and residential buildings) new administrative buildings (Parliament, ministries etc.) and around them new tenement-houses were built. Over time the buildings of other functions also appeared here (education: universities, recreation: parks, promenade, tourism (later): hotels etc.). In the 19th and the 20th centuries in the northern and southern part of Budapest large industrial sites, traffic areas (Izsák, Probáld, 2007) and harbours were created along the Danube. In the previous centuries the inland water freight transport was also an important element of development in Budapest (Földi, 2001, Hardi, 2012). In particular sections of the riverside the recreation function also appeared (Római (Roman) Beach etc.). During state socialism not much attention has been paid to the Danube zone. Until the 1970s the industrial function was important, but in the 1980s the production activity left the riverside (Földi, 2011). In the North large blocks of flats were built along the river-side, and due to the increasing volume of car traffic the roads occupied the immediate waterfront, as a consequence the extent of the recreation areas shrunk (Margaret Island, Danube promenade, Roman bank etc.).

After the political transition, at the end of the 20<sup>th</sup> century some functions of Budapest changed. The modernization process, most importantly the spread of market economy resulted conflicts in the urban structure and urban land use (Beluszky, 1992). Structural changes largely affected the industrial and traffic areas linked to the river and therefore the riverside. Izsák and Probáld (2007) state that the new building activities, due to the suddenly accelerated deindustrialisation and the booming of market economy, were mainly spontaneous, and resulted in the changes in the city structure and valorisation of the waterfront. In 1990s and 2000s the tertiary sector became the main driver of urban economy. The industry has diminished and left several brownfields areas behind (Barta, 2002), on the riverside too. A lot of new service companies settled in Budapest and many office buildings were built, some of them on the riverside, partly in the brownfields (e.g. Graphisoft

Park). Other functions also occupied waterfront areas: new residential parks (e.g. Marina Park, Duna-Pest Residences), new university and cultural buildings (New National Theatre, Concert Hall) appeared. But the main problems remained the same: the dominance of the transport along the riverside and the lack of arranged recreation areas in the inner part of the city. The northern and southern sections of the Danube within Budapest are rich in utilisation potentials: the brownfields and non- or underutilised areas along the main branch of Danube occupied nearly half of the total length of the coast in the 2000s (Izsák, Probáld, 2007). However, the need for recreation activities is growing: the free time of the Hungarian population has increased and the number of tourists in Budapest is also increasing. There was a great step-forward in 2002: the banks of the Danube, the Buda Castle Quarter and Andrássy Avenue have become the part of the World Heritage. This could attract further attention to the waterfront development in Budapest.

In spite of the fact that waterfront development has always been a priority – as Izsák and Probáld (2007) state – in the 1990s and 2000s the district municipalities and Municipality of Budapest were not able to give clear-cut directions to the development of the riverside. The utilization and functional plans for waterfront areas tended to be too flexible, while the private investors' interests often overwrote those of the public. The municipality budget for development was low, and the national government had neither the financial capacity nor the will to support Budapest's "bluefield" plans. The EU accession of Hungary in 2004 brought changes in this situation, when financing from various EU funding schemes became accessible for Budapest too.

# 3. Changes of the administrative system and political context

The transformation in the political as well as the administrative system largely influenced the type, the magnitude and resulted function of the new waterfront developments in Budapest. In light of the democratic system series of laws and regulations were adopted on the territorial administrative system and on local governments after 1990 deeply affecting the urban development of Budapest in the past 25 years.

In line with the Local Government Act (1990) Budapest adopted a democratically elected two-tier administrative / governmental system after the political transition in 1990. Beyond the metropolitan government, there are 23 district municipalities in Budapest. The Local Government Act (1990) regulated the legislative and administrative rights and duties of both local government levels, however this law has been changed in 2011. The new regulation (CLXXXIX.) preserved the two levels of local governments and confirmed their formal equality concerning the basic rights, however partly reallocated their tasks and powers. The metropolitan government has got similar duties and powers as the county level authorities, beside that of the local governments. There are 19 counties and the capital in Hungary on NUTS III level. The representative body of the metropolitan government is the Municipal Assembly. The members of Budapest General Assembly are the 23 mayors of the metropolitan districts, the Mayor of Budapest, and nine elected politicians. Earlier

the Assembly has consisted of the Mayor and various numbers of elected representatives. Because of the membership of the district mayors in the municipal assembly a sort of interdependence has been created, since the Mayor's activity is quite closely 'supervised' by the mayors of the districts, however – in many development issues – the districts also need the support of the municipal level.

Another change in the administrative settings was the creation of a new micro-regional system ("járás", township) in Hungary since 2013. This territorial level is a secondary decentralized administrative level of the national government. In Budapest all of the districts have become micro-regions, as well, and some administrative tasks have been moved to the new governmental offices.

There was another change in 2013 concerning the administrative division of Budapest. The law on local governments declares that Budapest consists of 23 districts and Margaret Island. The popular recreation island of Budapest was previously governed by the 13<sup>th</sup> District Municipality, but since 20<sup>th</sup> of July, 2013 it has been directly governed by the Municipality of Budapest, which is an exceptional case.

Yet, probably, the most overwhelming twist affecting the development of the waterfront areas is a new regulation (law No. CXC. of 2012) which passes the ownership of all the land (real estate with buildings, berths and port infrastructure etc.) along the river to the Municipality of Budapest from the relevant district governments or the state formerly possessing and managing them. The district assemblies naturally opposed the ownership change.

These changes show a kind of centralization and strengthen the power of the metropolitan municipality, however the composition of the General Assembly of Budapest (as the district's mayors are in the Assembly) creates a need for consensus, because their support is necessary to the important decisions. (Although the comfortable majority is available for the Mayor, since 17 of the 23 district's mayors are from the ruling party in 2015.) There can be a conflict between the districts on the allocation of development resources to Danube-linked projects, because only 12 districts out of 23 are bordering the Danube. In summary, these changes may have positive effects on the development of the riverside, because the new regulation has established the background for the implementation of a uniform development plan for the banks of the Danube and an easier decision-making procedure in this issue.

# 4. Changes in the financing possibilities

The Mayor of a city may have an important role in the development of a metropolitan area. Since 2010 Budapest has had a new mayor belonging to the presently governing party, his activity has been strongly supported by the new national government. The relationship between the leader of the city/Mayor and the government is balanced; for example the Government has taken over the debt of the Capital (as of other municipalities) and provides financial support for its investments. It is an important factor regarding the changing (improving) financial possibilities for development.

The Government may have a strong drive and interest in its approach to Budapest, which has been turned into a governmental objective: creating a novel, strong

image to the Capital city. One of the steps leading to realizing the objective is renaming streets and squares etc. using the names of emblematic historic persons, other steps imply implementing major investments into renown buildings and important infrastructure etc. The reconstruction and symbolic take-over of symbolic places may be important for the politicians One example can be the renovation of the Buda Castle by the Danube in downtown Budapest. Its first step was the rehabilitation of the Castle Garden with the utilization of EU Structural Funds. The buildings were in run-down condition for decades and the establishment was not accessible for the public for years. The Castle Garden was reopened by the prime minister in April 2014, and became one of the symbolic landmark locations of Budapest. There are further proposals for investment – also mentioned in the strategic planning documents – some linked to the Danube waterfront (such locations are *e.g.* the sites at Margaret Island reserved for the 2024 Summer Olympic Games.).

In sum, the Danube waterfront may as well be the winner of the (symbolic) image building initiative of the Government. However, this bright future may easily fail as long as the governmental ambitions exceed or contradict the waterfront valorisation objectives of the Municipality of Budapest or those of the districts.

Other important external financial source is the support of the EU Structural and Investment Funds. The Central Hungary Region (composed of Budapest and Pest county) was the sole 'phasing in' region (not a convergence region, because of its relatively high value of the GDP per capita) in Hungary in the period of 2007–2013. The region received 4.9 billion EUR from the EU Structural Funds; majority of the Central Hungarian projects were realized in Budapest. In the current programming period the Region has its own Operational Program (Competitive Central-Hungary OP (VEKOP)) again, with a 927 million EUR budget (total OP budget; EU contribution is 464 million). There are other sectoral operational programs, from which the management of the capital may receive development resources for environment and public transport projects. The list of planned major projects has been approved by the national Government (Decree 1199 of 2015). The EU sources may shrink in comparison to the previous period, but a significant support by the government may compensate it.

In short, besides the budget of capital, the budget of government and EU funded Operational Programs are the main sources of waterfront developments. Later, with the further emergence of the prestige of Danube waterfront – location and with the end of stagnation of real estate prices, the emphasis may shift to the private investment.

# 5. The development goals and projects for the waterfront of the Danube

In past five years several planning documents have been prepared for Budapest, due to the changes in the Hungarian regulations, the administrative status of the capital and the new strategies of the new city government, as well as because of the preparations for the new EU programming period. In June 2015 the following comprehensive planning documents have been approved by the Budapest General Assembly:

- Budapest 2030 Long-term urban development concept (2013)
- Regional Development Concept of Budapest (2014)
- ITS Budapest Strategy 2020 Integrated Urban Development Strategy (2014)
- Regional Development Programme of the Capital Strategic and Operational Part (2015)
- Integrated Territorial Programme of Budapest, 2014–2020 Version 2.1 (2015)

The significance of Danube is reflected by the fact, that there are separate chapters on waterfront developments in these documents, even a specific analytical working paper has been prepared: "Development Study Plan of Danube area of Budapest" (2013). Based on this document a strategic document was also prepared: "Coordinated development of areas along the Danube – thematic development program" (2014).

In the Long-term urban development concept (Concept 2030) a separate chapter deals with the riverside. This chapter defines the main objectives and identifies eight thematic tasks: the expanding functions on the riverside with the utilization of the brownfields; taking advantage of the natural characteristics of the Danube; to develop the accessibility of the Danube banks and the public utilization; the development of the Danube coastal tourism and recreation areas; reducing the effect of separating elements of transport along the Danube; the creation of walking and cycling links to the Danube islands; regulation of mooring of the hotel boats and placing floating platforms; better utilization of the Danube as the local water transport route. The Regional development concept of Budapest also incorporates these objectives.

In the "Coordinated development of the areas along the Danube – thematic development" program there are also eight medium-term goals, but these are partly different from the previous ones: the development of brownfields, taking advantage the recreation and tourism potential; to ensure the accessibility of the river for the pedestrians; improvement of the traffic connections; development of shipping; and the new ones: the utilization of water; preparation of revitalization of estuaries of small streams; renewal of the flood protection works.

The Integrated urban development strategy was prepared in 2014 to promote the implementation of the development Concept. It contains six medium-term objectives: five thematic ones, and one territorial objective (Living together with Danube – the integrated development of the community and economic capacity of the Danube and its banks, islands). This territorial objective contains 14 planned projects, which are in the five thematic objectives and related to the Danube and its banks (Fig. 1). There are projects for the integrated development of recreation areas (flood protection, development of bike paths, coastal promenades, water sports, cultural institutions, green area, and improvement of public safety etc.), building footbridge, recultivation of contaminated land, improving the energy efficiency of buildings, modernization of thermal baths etc. It would cost up to 1 billion EUR, and according to the plans a part of it could be financed by the VEKOP, and the two other sectoral operational programmes (Environmental and Energy Efficiency

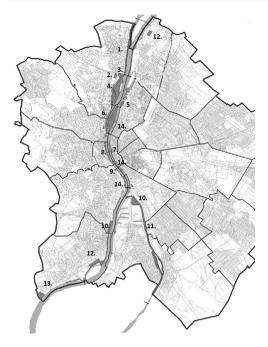


Fig. 1. The locations of the 14 planned projects in the territorial objective. 1. Integrated development of Roman Strand; 2. Modernization of flats (Gázgyár); 3. Establish a creative cultural park, remediation (Gázgyár); 4. Integrated development of Hajógyári Island, building footbridges; 5. Dagály bath - improvement of services; 6. Integrated development of Margaret Island and Palatinus Bath; 7. Complex rehabilitation of the public space on the riverside in the centre (I. phase): 8. Restoration of the Chain Bridge and Castle Tunnel; 9. Restoration of Gellért Thermal Bath; 10. Creation of urban public park (North-Csepel); 11. Coordination of integrated recreational development of Ráckevei-Soroksári Danube branch, building of foot-bridge to the Molnár Island; 12. Preparation and management of economic utilization (Hunyadi barrack, unused urban management land in North-Pest); 13. Preparation of creation of multimodal logistic centre, development of harbour (I. phase); 14. Economic program of Danube (harbours, floating platforms)

Source: Integrated Urban Development Strategy 2014.

OP (KEHOP), Integrated Transport Development OP (IKOP)). It is supplemented by the budget of Budapest Municipality and national budgetary allocations, while there are some projects on the list without any named resources.

The Integrated Territorial Program of Budapest was approved by the Assembly in the June of 2015. This document is the background paper for the absorption of EU financial sources from the VEKOP (72.86 M EUR), which is planned to finance primarily calls for applications. The two EU financed sectoral (transport and environment) operational programmes contain lists of major projects summing up to 1 billion EURs. It is important to mention that only a segment of them affects the riverside. There are three VEKOP measures that are available for the beneficiaries in Budapest, and one of them is connected to the riverside: sustainable multi-modal mobility. The Municipality would like to allocate the 60% of this budget to 'green' traffic projects on the riverside, enhancing the accessibility of Danube banks.

In the last step the new land use plan has been prepared for the entire Danubean area; the public consultation process has been launched in June, 2015. To realize the plans, in a few cases it is necessary to make amendments to the local land use regulations.

In summary, the city administration is committed to change the functions, land use, to promote the utilization of "bluefield" areas in the Capital, and the essence of this intention can be traced in the development documents, naming definite projects

with dedicated financial resources for this area. The question is that, which goals can be realized in the current financial period.

It can be interesting to have an insight, what is the opinion of the residents in Budapest about the official waterfront development objectives? In August 2014 we have carried out a survey at eight locations along the bank of Danube among people living in Budapest and using the recreations areas (n=1035; male: 44.3%, female: 55.7%; age: <30: 42.8%, 30–60: 42.1%, 60<: 15.1% (answer=987)). One question was connected to the judgement of the different development plans connected to the Danube and the waterfront: inquiring to what extent did they agree with the following development goals of the municipality (very important (3), important (2) or less important (1)). In connection with the objectives, the preservation of the natural parts of the Danube got the largest number of positive marks (2.59). This was followed by the goals for creating more connections (bridges) with the islands (for the pedestrians and bikers) (2.28), and later by the enhancement of public usage of the riverside (2.23). The development of water transportation and the improvement of the accessibility of the riverside by walk were also considered to be important (2.09–2.09). Location of crafts with cultural and catering functions (1.74), mooring restriction of hotel ships (1.70) and the rehabilitation of old industrial areas (1.62) were the least important development plans for the people interviewed (Fig. 2). Most of the respondents would like to see the riverside as a recreational green area, rather than a pleasure ground, and the public utilization and easy accessibility of the river banks are significance also.

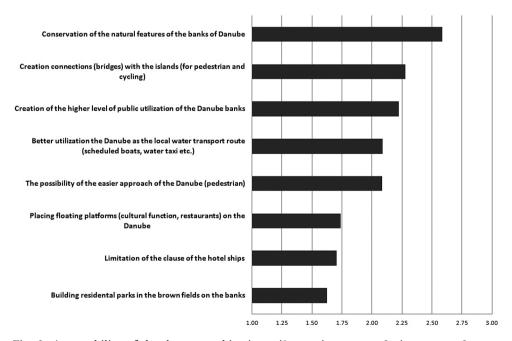


Fig. 2. Acceptability of development objectives. (1=not important, 2=important, 3=very important)

According to the statistical data the free time of Hungarian population have increased in the 2000s – 1986/87: 230 minutes/day, 1999/2000: 280 (KSH 2013), and there are only a few activities which can not be carried out on the Danube riverside. Another important fact is that the increasing demand arises from the tourists also: number of nights spent in commercial accommodation in Budapest has increased from nearly 5 million (2000) to 8 million (2013) (http://www.ksh.hu). To sum it up, there is a need for more recreation areas.

The main problem of the recreation function is that there is a significant road traffic load on the riverside especially in peak hours, therefore the number and the accessibility of Danube-side recreation areas is limited. Formerly the experts suggested a number of possible solutions for traffic calming, exclusion of traffic, building a tunnel for the traffic etc. The municipality is committed to the changes, but there are different interests resulting conflicts. The latest official plans offer partial solution to this problem: on the riverside of Pest in the City traffic calming, new bike and footpath, recreation areas are proposed. (In autumn, 2015 a design competition was launched for this purpose (http://duna.budapest.hu).) In the future completing the ring road around Budapest (M0), the introduction of inner-city congestion charging and creating quick public transportation connections in north-south direction across the city could result detectable decrease in the traffic load of the riverside. Nevertheless, the inhabitants do not represent a uniform opinion regarding the issue (e.g. car drivers contra users of public transport means) and there is no political consensus. Only more plans and studies have been prepared, while no real breakthrough has been achieved even in the new administrative and political frameworks.

#### 6. Conclusions

In the recent years several administrative, political and financial changes have taken place affecting the Hungarian capital city, Budapest. Some of them imply marked features of centralization. These changes may have tangible impacts on the urban development of the city, and also on the revitalization potentials of the Danube waterfront.

The findings of the survey analysed in the paper highlights that Budapest residents wish for changes in the land use of the Danube waterfront, and prefer to see more recreational areas along the river. The Municipality of Budapest could be a driver of the widely wished change as it is not only responsible for the administrative issues of the waterfront areas but also the owner and the manager of most properties along the river. In addition to it the Municipality of Budapest is supported by the national government thus has access to EU Structural and Investment Funds.

Addressing the needs of the inhabitants is important for both metropolitan and district municipalities as well as for the Government, as they all feel their re-election safeguarded by the spectacular and popular development initiatives completed. The result of the above introduced factors and the change in the development approach can be the increased attention afforded to riverside developments of Danube in Budapest.

#### References

Barta G., 2002, A magyar ipar területi folyamatai. 1945–2000 (The Regional Processes of Hungarian Industry. 1945–2000). Budapest-Pécs: Dialóg Campus Kiadó.

Beluszky P., 1992, Budapest és a modernizáció kihívásai (Budapest and the Challenges of Modernization). "Tér és Társadalom", Vol. 6, No. 3-4, pp. 15-54.

Butunel B., 2006, *Waterfront Revitalization as a Challenging Urban Issue in Istanbul*. Waterfront Revitalization as a Challenging Urban Issue, 42nd ISoCaRP Congress.

Craig-Smith S.J., Fagence M. (eds.), 1995, Recreation and Tourism as a Catalyst for Urban Water-front Redevelopment. London: Praeger.

European Union, 2014, Regional Policy. European Union, Publications Office of the European Union, Luxembourg.

Földi Z., 2011, A Duna-reneszánsz margójára – A folyó dinamizáló hatásának értékelése Budapest városfejlődésében (Evaluating the impact of the dynamism of the river in the development of Budapest) Utóirat – Post Scriptum 2011/1. XI. évf. 60.szám pp. 3–9.

Hall P., 2002, Urban and Regional Planning. London and New York: Routledge.

Hardi T., 2012, Duna-stratégia és területi fejlődés (Strategy of Danube and regional development.) Budapest: Akadémiai Kiadó.

Izsák, É., Probáld F., 2007, Klimatikus környezet és városfejlesztés Budapesten (Climatic environment and urban development in Budapest), [in:] Orosz Z., Fazekas I. (eds.) Települési Környezet. CD-ROM. Kossuth Egyetemi Kiadó, Debrecen. pp. 116–121.

Klopf P., 2008, *Waterfront Development*. Dokumentation der internationalen Städtekonferenz im Juni 2007 in Wien. Wien: Stadt Wien, Stadtentwicklung und Stadtplanung

KSH (Central Statistical Office of Hungary), 2013, Kulturálódási szokásaink. (Cultural habits). Central Statistical Office of Hungary, Budapest

Machala B., 2014, The uneven struggle for bluefields: waterfront transformation in post-socialist Bratislava. Hungarian Geographical Bulletin, Vol. 63, No. 3, pp. 335–352.

Malone P., 1996, City, Capital and Water. Routledge: London and New York.

Official documents:

http://budapest.hu/Lapok/Hivatal/Varosfejlesztes.aspx (Retrieved May and June 2015)

Budapest 2030 – Long-term urban development concept (2013)

Budapest Regional Development Concept (2014)

ITS Budapest Strategy 2020 - Integrated Urban Development Strategy (2014)

Regional Development Programme of the Capital – Strategic and Operational Part (2015)

Integrated Territorial Programme of Budapest, 2014–2020 – Version 2.1 (2015)

Development Study Plan of Budapest Danube area (2013)

Coordinated development areas along the Danube – thematic development programs (2014) Budapest Transport Development Strategy – 2014–2030. (2015)

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