

Diagnostic report - City of BUDAPEST



1. Brief details

Budapest is the capital of Hungary.

Area: 525 sq. km.

Area of Budapest World Heritage (core zone): 473 ha

With buffer zone: 967 ha

Population: 1 682 426 (2022)

Structure: 23 districts

Cultural heritage objects in Budapest: cca. 5100



2. Administrative information – Emergency Contact Details

- 2.1 Name, organization, address, and contact details of Budapest World Heritage site management: Deputy State Secretariat for Heritage Protection., Ministry for Construction and Transportation. Tel: +36 1 8953044
- 2.2. Relevant emergency service contacts: Budapest Disaster Management Directorate (fire and civil protection authority) Budapest Police: Tel: 112, Fire Department: Tel: 105, Civil Protection Authority: +36 1 469 4100.
- 2.3. Risk prevention management structure: Budapest World Heritage site risk prevention is coordinated by the Budapest World Heritage Site Management, involving the Municipality of Budapest City, the local governments of the Budapest districts which share the area of the Budapest World Heritage site, heritage conservation specialists (e.g. ICOMOS), emergency services, and Budapest Civil Guard (volunteer organization). However, clearly defined protocols for rapid crisis response exist for individual institutions (e.g. Hungarian National Museum). As the the World Heritage area is shared among 9 districts, the responsibility to react in crisis is also shared.
- 2.4. List of organizations involved in crisis management: Municipality of Budapest (City Planning Department, Water Management Department, Climate and Environment Department), Fire Department, Disaster Management Directorate

3. Geographical info

Protected area and buffer zone:

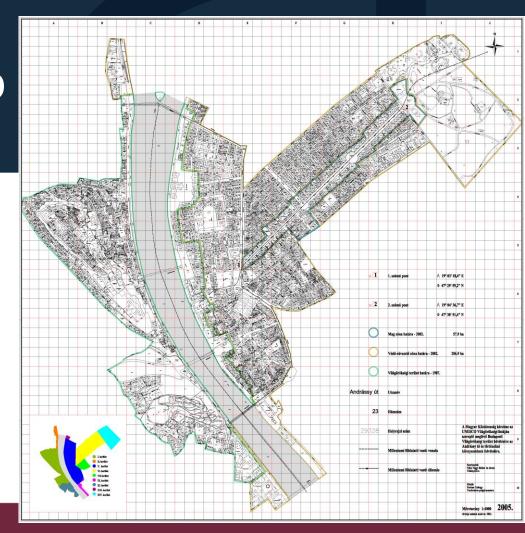
Area of Budapest World Heritage (core zone): 473 ha With buffer zone: 967 ha

Map of Budapest World Heritage site and buffer zone: Border of the WH area (green line) and that of the buffer zone (yellow line).

National monuments: red

Local monuments (municipal): orange

Ensembles: yellow.



4. Property Ownership

Description of building ownership: approximately 40% residential (mostly condominiums), 35% institutional (governmental and cultural buildings), 15% commercial, and 10% mixed-use properties.



5. Protection Level

- General description of protection levels:
- 1. World Heritage protection. The WH site (core zone and buffer zone) is protected according to the UNESCO World Heritage Convention, as an area of National Monument Significance (zone protection).
- 2. Individual monument protection (national monuments and local monuments). Within the WH site and in the whole area of Budapest numerous building are under individual protection (national or local municipal or district protection). The national monuments also have protected surroundings (neighbouring buildings).
- 3. Area protection. Outside the WH area both national protection and local protection have also area protection (ensembles).

6. Type(s) of risk/hazard to which the city is exposed

- 1. Floods. Budapest is exposed to floods from the Danube. In the inner city it does not cause problems as the embankments of the river were built 1 m higher in 1860-1870 than the highest water level measured in the 19th Century so only the lower embankments are regularly flooded. (However, in the suburbs of Budapest the summer cottages close to the river get under water during floods and in the last decades the water level sometimes was rather close to the upper embankment of the inner city, too). Plans are being made to protect the suburban areas from floods by movable dams.
- 2. Stormwater. Heavy rains (which are more and more serious due to climate change) frequently overwhelm the city's aging drainage systems, resulting in urban flooding in some areas with water flowing also into the cellars of the buildings. Bigger capacity drainage would be necessary and to raise the threshold of cellar doors and windows.
- 3. Fire. Old electric networks often cause fires in historic buildings. It happened in one of the residential buildings of Andrássy avenue in 2014 which resulted in a serious fire on the upper floor and the roof. The renovation took several years.
- 4. Climate change. Summers increasingly feature prolonged heatwaves, posing health risks and placing additional stress on infrastructure, especially in densely populated historical areas where building cooling solutions are limited. Winters are becoming milder, which can lead to altered structural stresses on historical buildings. Additionally, Budapest faces alternating periods of severe drought, negatively affecting urban green spaces. The increasing need for climatization and sunshades has a negative effect on the townscape.
- 4. Earthquakes (low to moderate risk). The area of Budapest is not exposed to bigger earthquakes, in the last

7. Existing information about the site

The site (Buda Castle with the two banks of the River Danube – listed in 1987, completed with Andrássy Avenue in 2002) has the remains of monuments such as the Roman city of Aquincum, the fortress of Contra-Aquincum and the Gothic castle of Buda, which have had a considerable influence on the architecture of various periods. It is one of the world's outstanding urban landscapes and illustrates the great periods in the history of the Hungarian capital.

Summary of existing Conservation Management Plans: Current WH Management Plan (2005) is just an outline of the plans to be elaborated. The preparation of a detailed Management Plan has started by the National Heritage Protection Development Institute (belonging to the Ministry of Construction and Transportation) but the completion is estimated to last for years.

8. Significance of the World Heritage City

Budapest's World Heritage sites encapsulate over two millennia of historical and architectural evolution, representing a rich tapestry of cultural influences and political eras. The city's foundations lie in Roman Aquincum, located in present-day Óbuda, where the remnants of baths, amphitheaters, and roads are still visible. The medieval period is embodied in the Buda Castle Quarter, including the Gothic Matthias Church (7) and the medieval Royal Palace (6), both restored after World War II.

Following the Ottoman occupation in the 16th–17th centuries, notable bathhouses such as Rudas and Király were constructed, some of which still operate today. The Habsburg-led Baroque reconstruction brought new palaces, churches, and civic buildings. In the 19th century, during the Austro-Hungarian Monarchy, Budapest was extensively redesigned and unified from the towns of Buda, Pest, and Óbuda. This golden age of development saw the construction of iconic landmarks such as the Hungarian Parliament Building (8), St. Stephen's Basilica (9), the State Opera House (5), the Central Market Hall, the Great Synagogue in Dohány Street (10), and the Chain Bridge.

The early 20th century introduced Secessionist and Modernist elements, while the post-WWII reconstruction preserved much of the historic core. Sites such as Andrássy Avenue (1) with the underground from 1896 (2) showcase urban planning and architectural cohesion, flanked by mansions, embassies, and the Heroes' Square (3) with the Museum of Fine Arts (4).

9. Summary of buildings and urban fabric

- Condition and risk identification summary: Buildings in Budapest's World Heritage zones vary from excellent to poor condition. Key risks identified include structural vulnerability due to aging materials, flood-prone areas near the Danube, and dense urban structures complicating emergency access.
- References to studies and surveys appended: MBFSZ (Magyar Bányászati és Földtani Szolgálat Hungarian Mining and Geological Service): Flash Flood Hazard Study (2015), part of the NAGiS project, assessing stormwater and flash flood risks in Budapest and other urban areas: Flash Flood Hazard Study nagis.
- NAKFO: "Climate change and adaptation Establishing the National Adaptation Geo-information System (NAGIS)" (2016), addressing urban heatwaves, drought periods, and extreme rainfall in Hungary: The Second Climate Change Strategy of Hungary (NCCS-2) | Nemzeti Alkalmazkodási Központ Főosztály NAKFO

10. Existing risk assessment management / planning procedures

• Existing management/response programs: Budapest maintains integrated disaster management plans, regular drills, and updates to urban planning protocols. One of the key reference documents is the "Budapest veszélyeztetettsége" (Vulnerability of Budapest) report (Budapest Disaster Management Directorate - Fővárosi Katasztrófavédelmi Igazgatóság, 2015), which assesses the primary risks affecting the city, including natural and human-induced hazards:

BUDAPEST KATASZTRÓFA- VESZÉLYEZTETETTSÉGÉNEK ELEMZÉSE - PDF Ingyenes letöltés

11. Training plans and information programs

- Training/information programs: Regular training sessions are conducted annually for heritage experts including also risk management with emergency responders, heritage conservation specialists, craftspeople, and community stakeholders focusing on disaster preparedness, heritage preservation, and emergency response strategies.
- Budapest supports disaster risk management for heritage conservation through structured professional development initiatives. The Budapest Disaster Management Directorate (Fővárosi Katasztrófavédelmi Igazgatóság) regularly organizes general disaster preparedness exercises across the city (source: fovaros.katasztrofavedelem.hu).
- ICOMOS Hungary collaborates with the Hungarian National Museum (Magyar Nemzeti Múzeum) to organize specialized workshops and conferences focusing on heritage protection during emergencies and disaster risk reduction (source: icomos.hu). A regular training course is the international ICOMOS Summer University held usually in the first week of July.

12. Useful contacts

- Local/regional experts available for immediate disaster response: heritage protection officials of the Government Office of Budapest (Construction and Heritage Protection Office, Heritage Protection Department).
- Qualified contractors for repair/stabilization work: for the moment there is no such list (although it would be useful). In the past, when heritage protection had a central national institution (Cultural Heritage Protection Office), it had a section of contractors experienced in heritage conservation and emergency repairs.