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ANALYSIS OF THE MULTIMODAL SYSTEM IN THE BUDAPEST AIRPORT FUNCTIONAL URBAN AREA

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Table of content

1. Introduction

The Budapest Ferenc Liszt International Airport (Budapest Airport) is the largest airport in Hungary that handled more than 11 million of passengers in 2016. Due to its central location and has no no significant competitor within the country and in the Carpathian basin, the catchment of the Budapest Airport is covering the whole country and goes beyond the national borders to Slovakia, Ukraine, Romania, Serbia, Croatia and Slovenia. The Budapest Airport is a key economic player along the South-eastern part of Budapest metropolitan region including areas from Pest County. One passenger terminal is in operation that is exclusively accessible via excellent road network dominated by individual motorized, taxi and bus transportation. The potential of nearby running major domestic and international railway corridors are underutilized, though one of them is already accessible by a modal change from the passenger terminal. Furthermore, great capacity of open-air car parking is available in the close vicinity of the terminals as well as in the neighbourhood of the airport. The mobility information systems are focused on specific transport modes and service providers are not interlinked with each other or the integration is at a very preliminary level.

1. Figure: Logo of Budapest Airport[1]

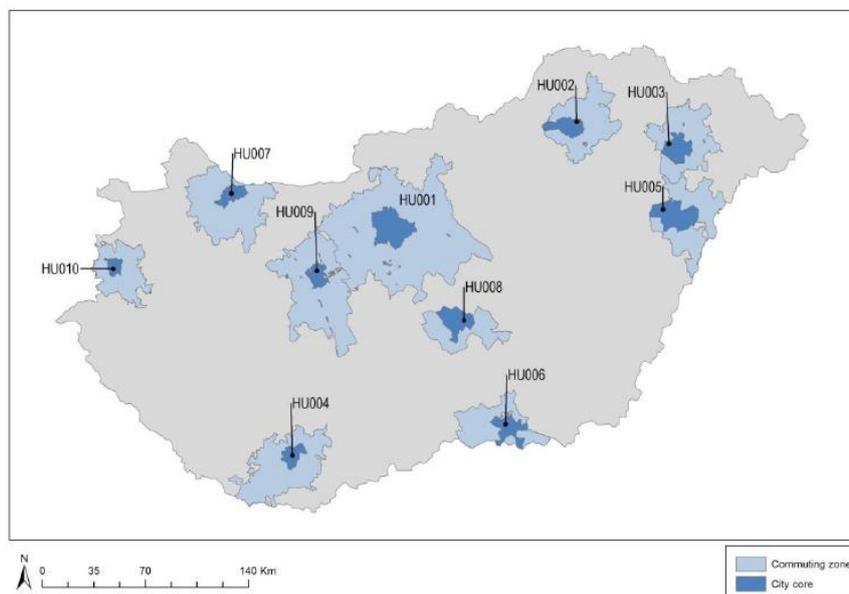[1] Budapest Airport Plc., 2017g online

2. Budapest Airport and functional urban area (FUA)

2.1. General description

Budapest Airport is located 16 km-s from the down centre of Budapest at the South-Eastern border of the capital and the municipality of Ecser, Üllő and Vecsés. The micro-region of the airport experienced a strong urban sprawl during the last few decades and it regarded as a suburbanized area with agricultural areas and mostly logistic companies have their site along the near lying highway network.

The city of Budapest has the population of approx. 1.8 million inhabitants whereas the Budapest functional urban areas has nearly 3 million inhabitants. The Budapest Airport by its good location is regarded as the major hub in the heart of the Carpathian basin.

In order to ensure the comparability of cities in terms of economic, social and environmental performance in cross-country aspect, a new definition of a city and its commuting zone the so called functional urban areas (FUA) was developed by the Organisation for Economic Co-operation and Development (OECD) and the European Commission in 2011.[i] According to the FUA definition, the Budapest FUA is considered the largest one in Hungary with nearly 3 million inhabitants including 7 medium-sized and 2 small urban areas.
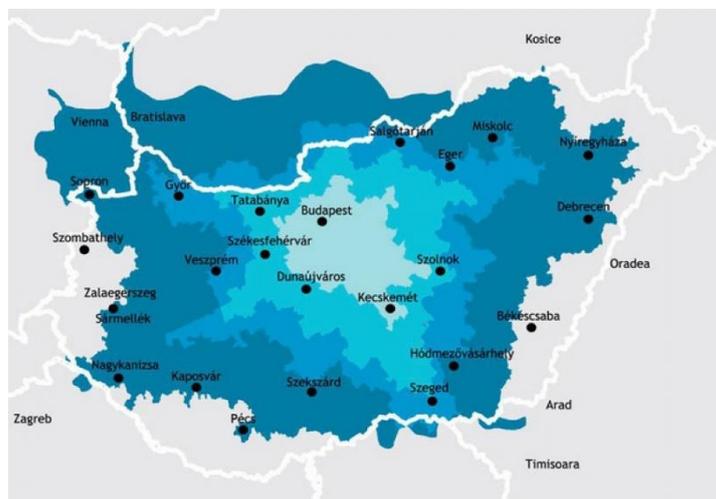

2. Figure: Functional Urban Areas in Hungary[2]

In Hungary the only large metropolitan area is Budapest with its functional settlement network incorporating almost whole Pest and smaller parts of Fejér and Nógrád countries. The population of

the core area of Budapest FUA was 1,757,618 while the population of the commuting zone was 2,879,601 in 2011.

The catchment of the Budapest Airport stretches well beyond the FUA. The Budapest Airport is located along the M0 motorway that makes it easily accessible to almost entire Hungary by road transport as well as reaching out to 13 million people within 3 hours of drive range in the greater region including Austria, Slovakia, Ukraine, Slovenia, Serbia, Romania, Croatia and Slovenia.

- 4.3 million people within 90 minutes drive
- 6 million people within two hours drive
- 13 million people within three hours drive

3. Figure: Catchment area of Budapest Airport within 90-120-180 minutes of drive[3]

2.2. Airport facts and figures[4]

Budapest Airport is located about 16 kilometres south-east of Budapest's city centre. It stretches along an area of 15,15 km^2 while operating with 2 runways. Runway 1 (13R-31L) is 3,010 m, whereas Runway 2 (13L-31R) is 3,707 m long. Out of the two runways, the older one, Runway 1 has been under reconstruction in the last few years. In spite of the constantly increasing flight movements, the Hungarian air traffic controller, the HungaroControl managed to cope with the temporary closure of the Runway 1 for months without any traffic disturbance.

Budapest Airport has 2 terminals: Terminal 1 has been closed down from passenger traffic since 2012. The second terminal has opened in 1985, called today Terminal 2A. It was extended with Terminal 2B in 1998 while the SkyCourt extending and connecting at once 2A and 2B was inaugurated in 2011. Today Terminal 2 (2A, 2B and SkyCourt) handles the entire passenger turnover.

At this moment, the airport has 10 airbridges and 25 remote stands, but due to dynamic growth of the passenger traffic, the Terminal 2 is going to have new airbridges making the service of continental and intercontinental flights faster and more comfortable.

The extension of the Terminal 2 with the SkyCourt opened brand new business opportunities to the airport in providing excellent onsite service to the passengers. More than 30 shops and more than 20 restaurant, exclusive business lounges and VIP services are at the disposal of the departing passengers.

The airport is experiencing a dynamic development of turnover. It handled 11.45 million passengers, a record-breaking 112,143 tons of cargo with 96,141 aircraft movements in 2016.[5] The most popular destinations are London, Paris, Frankfurt, Amsterdam and Munich respectively. The total number of passenger airlines exceeds 40, while the number of cargo airlines is above 10.

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[3] Budapest Airport Plc., 2017f online

[4] Budapest Airport Plc., 2017f online

[5] Budapest Airport Plc., 2017f online

Approximately 12000 employees work at all companies on the premises of the airport being the largest employer of the region including the 850 employees of the operator of Ferenc Liszt International Airport, the Budapest Airport Plc that was fully privatized in public-private-partnership operating.

2.3. Facts on environmental and social engagement[67]

Budapest Airport is the most significant economic player in the region therefore it aims at building a good relationship with the neighbouring settlements (Budapest District XVIII and XVII, Ecser, Vecsés and Üllő) and other settlements affected by its operation (Budapest District X, XIV and XVI), and to cooperate with local municipalities, political decision-makers and NGOs on a partnership basis8.

Budapest Airport established the 'Budapest Airport Consultative Committee' in 2006, that is comprises mayors and deputy mayors from neighbouring settlements and representatives from the Budapest City Council, professional partners and tourism organizations. This information and discussion forum for municipalities, governmental stakeholders and business partners gives room to partners to receive first-hand information about the latest developments relating to the operation of the airport, and to regularly discuss hot topics in the name of good neighbourly cooperation including environmental issues or the development of public road access to the airport.

Budapest Airport strives to build good cooperation with all municipalities affected by its operation. The company has concluded three-year cooperation agreements with two of its most important partner settlements (Budapest District XVIII and Vecsés). The agreements, valid until 2012, recorded the details of Budapest Airport's voluntary noise insulation program, and the airport operator obliged itself to provide support the settlements annually in excess of 10 million HUF. The municipality is entitled to decide on the use of the support and it may include local foundations as beneficiaries or various events as a sponsor such as the Vecsés Cabbage fest or the Ecser Mayday event or the September food-tasting event in the District XVIII.

Budapest Airport has established a strategic framework for its sustainability efforts by joining the "Committed to CSR Excellence" programme, that is building on a method of self-assessment to evaluate and develop CSR practices based on the organizational excellence model of the European Foundation for Quality Management. Three successful CSR projects paved the way to the intention to establish a working group and started drafting the 2012 CSR strategy for Budapest Airport.

Going beyond the legal requirements, Budapest Airport initiated its international carbon accreditation in 2010 by the Airports Council International Europe (ACI Europe) that certified the airport based on a detailed survey of its greenhouse gas emission. The airport recognized its own responsibility and committed itself to reduce its GHG emission and fight against climate change.[9]

Budapest Airport has launched its Greenairport Program in 2015 summer. This initiative aims at reducing the environmental impacts of the overall airport including companies operating at the premises. The companies are involved at a voluntary basis and they are committed to responsible corporate operation and environmental protection. The programme focuses on climate protection e.g. carbon accreditation and the necessary steps for the emission reduction including reducing energy consumption, using of renewable energy resources, developing electric mobility and introducing separated waste collection in the entire airport area.[10]

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[6] Budapest Airport Plc., 2017i online

[7] Budapest Airport Plc., 2017e online

[8] Budapest Airport Plc., 2017e online

[9] Budapest Airport Plc., 2017i online

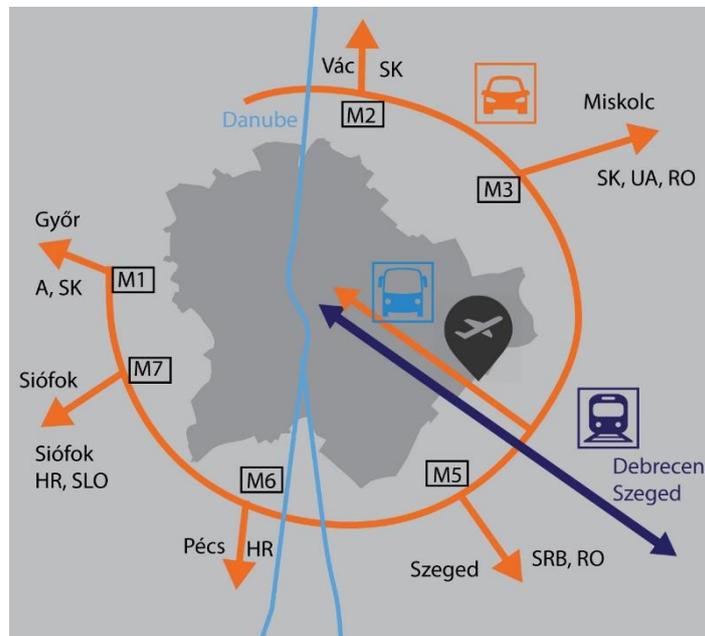[10] Budapest Airport Plc., 2017a online

3. Characterisation of the mobility system

In this chapter, the mobility characteristics of the Budapest Airport, its relationship to the capital and to its functional urban area are outlined. The description includes various mobility systems, transport modes including information services relevant in the context of the LAirA project.

3.1. Airport access to Budapest and the FUA

The airport is located approximately 16 kilometres east from the city centre of Budapest. The airport is well connected to its surrounding area by road offering and excellent access to individual motorized transport, taxis, urban buses and any other road transport vehicles. The train station is located within few kilometres from the terminals that makes the reach of the airport via train as well. The downtown, outskirts of Budapest and the FUA region are well accessible especially along the East-West axis even with maximum one change by urban, regional public transport (train, bus). The North-South axis is mostly served by the individual motorized transport along M0 and other connecting road network, while public transport service is scarce in this context.
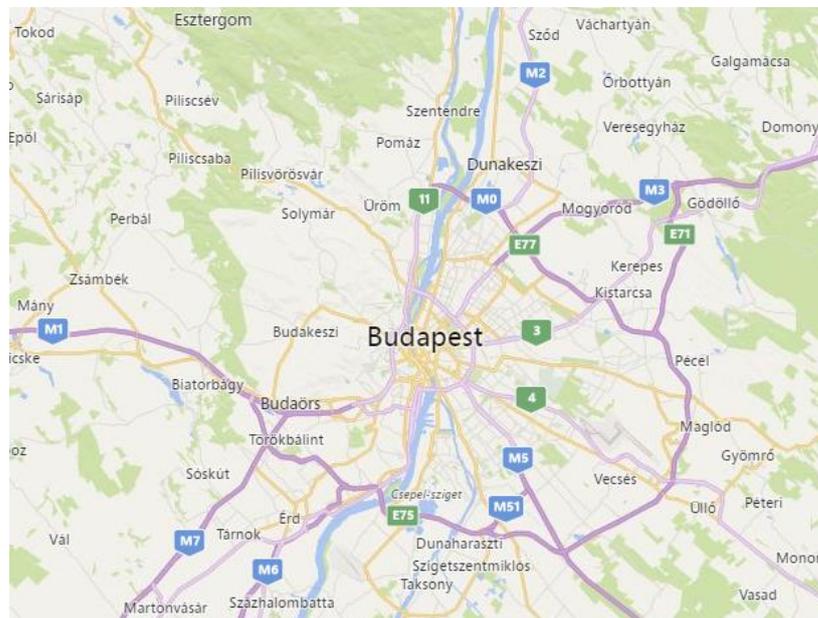

4. Figure: Schematic overview of the access to city centre and catchment of Budapest Airport[11]

3.1.1. Characterisation of road network and services

Road network

The Budapest Airport is located approximately 21 kilometres on road from the city centre along the Eastern border of Budapest and depending on the traffic it can be reached in 20-60 minutes of drive along the "High-Speed Road", the section of main road 4 within Budapest. The airport is located along M0 motorway ring road around Budapest that connects all motorways (M1-M7-M6-M5- M3-M2) heading to the capital in Hungary thereby providing easy and fast road access to furthers parts of the country and extending the outreach of the airport to the neighbouring countries including Austria, Slovakia, Ukraine, Romania, Serbia, Croatia and Slovenia.

5. Figure: Fast road network around Budapest[12]

At a smaller scale, main road 4 is providing a West-East connection to the Airport area, whereas the the North-South connection is served by motorway M0 and subordinate roads 3101 and 4602.

Urban public transport

Budapest Airport is connected to the city centre by two urban public transport bus lines. 100E provides a fast and direct connection to the city centre, whereas the 200E gives a quick connection to the Metro 3 (blue line) to suburban areas. Single ticket for a person costs 350 HUF/way (1,2 EUR/way) for each transport mode, however buying the ticket at the driver costs 450 HUF/way (1,5 EUR/way)

Even though Budapest Transport Centre (BKK) operates the 100E, a special ticket must be bought for each ride. A single ticket for a person for the 100E costs 900 HUF/way (3 EUR/way). For all public transport rides, a separate single ticket must be validated. Otherwise 24 and 72-hour, weekly and monthly travel passes for Budapest public transport are also valid for all other public transport rides such as 200E and M3.
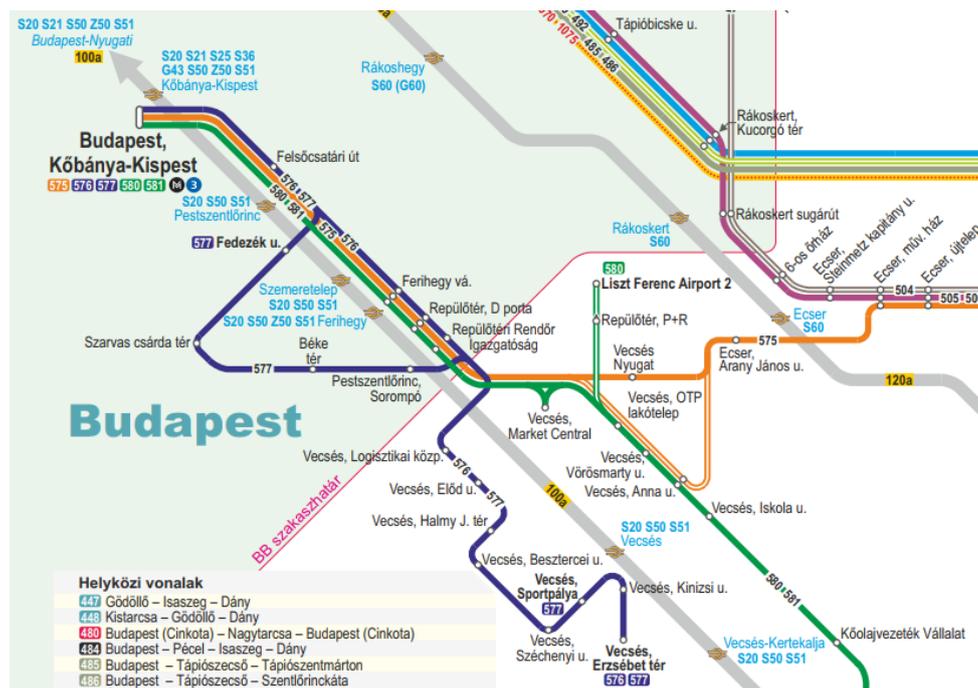
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[12] Microsoft, 2017 online

6. Figure: Information on the fares and routes from Budapest downtown to Budapest Airport[13]

The airport is accessible from the downtown on all weekdays by 100E and 200E leaving at a regular basis between 4:00 and 23:30, while the downtown is accessible an all weekday by 100E and 200E from 5:00 to 0:30. The airport and the downtown can be reached during the night, but with one or two changes by the night buses 900 and 950/950A.

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7. Figure Public transport link from Budapest Airport to the downtown[14]

8. Figure Public transport link from the downtown to Budapest Airport[15]

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[14] Budapest Airport Plc., 2017c online
[15] Budapest Airport Plc., 2017c online

Regional and international bus transport

Even though the regional bus operator (Volánbusz Zrt.) has a relatively good route network, it does not serve the passenger transport of the airport, but the airport employees. The regional buses (575, 576, 577, 580, 581) stop at the entrances of the airport where most employees enter the airport area. There is only a single early morning bus (840) stopping the terminal 2 building at 5:20. BKK 24 and 72-hour, weekly and monthly travel passes are valid within the boundaries of Budapest, otherwise the tickets can be bought at the driver.
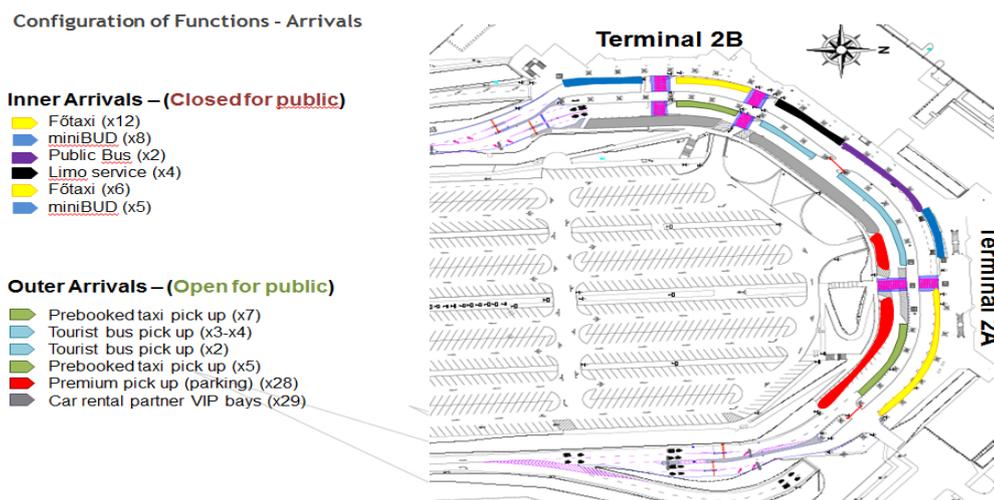

9. Figure: Regional bus routes near Budapest Airport[16]

Local and international bus lines and shuttles connect the airport with the FUA and the catchment of the airport. International buslines (Flixbus, Orangeways) and other smaller busline operators, shuttles provide connection to more distant Hungarian cities as well as to neighbouring countries such as Serbia, Romania, Ukraine, and Slovakia.
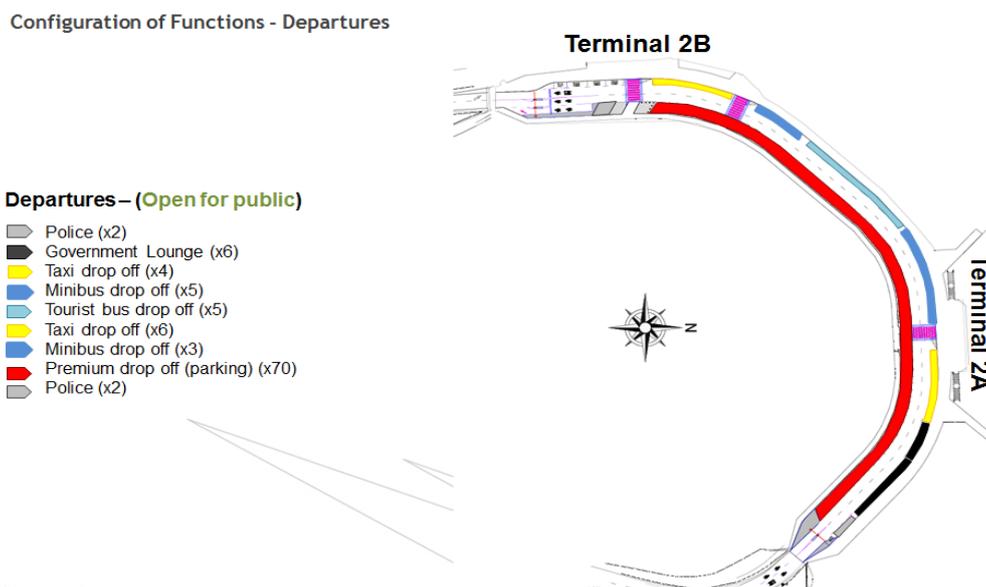
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[16] Volánbusz Plc., 2017 online

Parking

The arrival and departure traffic are separated in front of the terminal. The official partners of Budapest airport and public transport provider have distinguished location (inner arrivals) at the arrival level just outside of the terminal building, whereas other service providers and private vehicles are not excluded, but have a separate location along the outer arrivals, which is open for the public.

Configuration of Functions - Arrivals

Inner Arrivals – (Closed for public)
- Főtaxi (x12)
- miniBUD (x8)
- Public Bus (x2)
- Limo service (x4)
- Főtaxi (x6)
- miniBUD (x5)

Outer Arrivals – (Open for public)
- Prebooked taxi pick up (x7)
- Tourist bus pick up (x3-x4)
- Tourist bus pick up (x2)
- Prebooked taxi pick up (x5)
- Premium pick up (parking) (x28)
- Car rental partner VIP bays (x29)

10. Figure: Configuration of Functions - Arrivals[17]

Configuration of Functions - Departures

Departures – (Open for public)
- Police (x2)
- Government Lounge (x6)
- Taxi drop off (x4)
- Minibus drop off (x5)
- Tourist bus drop off (x5)
- Taxi drop off (x6)
- Minibus drop off (x3)
- Premium drop off (parking) (x70)
- Police (x2)

11. Figure: Configuration of Functions – Departures[18]

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[17] Budapest Airport 2017 online
[18] Budapest Airport 2017 online

Budapest Airport has approximately 3050 open-air long-term car parking places and approximately 900 open-air short-term parking places. The parking prices vary according the length of stay in both cases as well as the location (walking distance from the terminal building) e.g. a one-day parking ranges from 3000 HUF (10 EUR) to 30000 HUF (100 EUR) depending on the car park. For the short-term parking places up-to 5 minutes, the parking is free. Gate prices significantly differ from the booking through the online system at https://parkolo.bud.hu/. Bookings can be done at least 12 hours prior to the planned time of departure.

30 parking short-term places are available for buses, whereas 9 parking places are available for long-term parking.
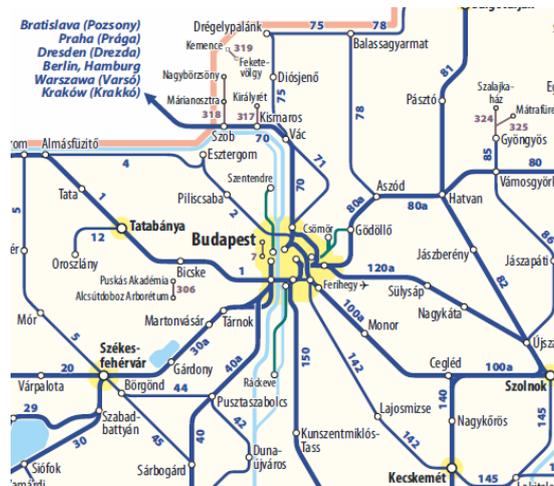

12. Figure Parking places in a walking distance from Terminal 2[19]

In the neighbourhood of the airport other private companies offer their long-term parking service with or without a shuttle service to the terminal.

3.1.2. Characterisation of rail network and services

Hungary has a strong concentration of the main railway lines. Train routes starting from head stations characterize the Budapest-centred railway system. The first through train lines are being tested, however the recent railway infrastructure within Budapest is not fully capable of supporting this function that could extend the range of comfortable reach of Budapest Airport by train.

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[19] Budapest Airport Plc., 2017h online

13. Figure Railway line structure of Budapest and its wider agglomeration[20]

The Budapest Airport has a good location; two major East-West railway corridors (100a, 120a) run along its borders. The 'Ferihegy' railway stop was built along the 100a railway corridor in 2007 and since all regional, domestic and international trains stop there. 120a is only accessible via few complicated changes to urban and regional buses. This connection is not even considered.

It takes 22-25 minutes from the downtown (Nyugati train station) to reach the Ferihegy railway stop. 24 and 72-hour, weekly and monthly travel passes are valid for regional trains (S20, S50, S51) without any supplementary ticket within the boundaries of Budapest including Ferihegy train stop. For intercity or fast trains supplementary tickets are mandatory. The change to bus 200E at Ferihegy train stop is included in the price of the travel pass. Without any travel pass, a regular adult single train ticket from the downtown to Ferihegy costs about 370 HUF/person (1.25 EUR/pers.). By showing the valid train ticket to the bus driver of 200E a reduced price single bus ticket can be bought for 300 HUF/person (1EUR/person). The Ferihegy railway stop is about, 12 minutes away from the Terminal 2 by bus 200E or 6 kilometres by taxi.

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[20] MÁV-START Plc., 2017a online

14. Figure: The railway link of Ferihegy train stop and the connecting bus line 200E to Budapest Airport[21]

The MÁV-START operates regional and domestic trains departing from Nyugati train station. Regional trains operate between Budapest Nyugati train station and Monor (journey time: 13-20 min) as well as Cegléd (48 min) and follow each other every 20-30-60 minutes frequency depending on the time and day of the week. As a result of the abundance of trains 4-6 trains stop at Ferihegy every hour in each direction.

Domestic normal, fast and Intercity trains follow each other at one- or two-hourly frequency and leaving from Ferihegy directly for Kecskemét (60 min), Szolnok (55 min), Szeged (120 min), Debrecen (120 min), Nyíregyháza (170 min), Záhony (300min). Other Hungarian can be reached with one change such as Székesfehérvár (90 min), Békéscsaba (150 min), Miskolc (160 min) or major cities outside Hungary Oradea (260 min), Cluj Napoca (360 min), and Timisoara (350 min) etc.

In the last decades several solutions were brought up how to make the accessibility of Budapest Airport by train offering a seamless transport from a wider catchment area. The Hungarian government has decided to improve the accessibility by building of 100d train corridor with a train station under Budapest Airport Terminal 2. The planning process is under way.

3.1.3. Characterisation of cycling network and services

Budapest has a slowly, but gradually evolving bicycle road system, but most of the developments are focused in the central areas of the capital. Terminal 2 can be reached via a 25 km bike trip from the city centre on various quality of road, street, bike road, bike lane etc. but it has no direct access to the airport terminal on the last mile, only on a dirt road.

The bike road system does not make up a road network in the vicinity of the airport, a spine of a potential road network is built along the congested main road 4 linking, but otherwise only non-marked and recommended cycle paths exist in the traffic calmed residential neighbourhoods.

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1. Figure Bicycle road system around Budapest Airport[22]

3.1.4. Characterisation of pedestrian road network

Scarce and variable quality of pedestrians roads characterize the suburbs of Budapest. The close vicinity of public transport stops, entrances of buildings is usually well supplied with barrier free access that concern mostly the employees working at the airport and using different entrance gates than ordinary passengers. Even though the Terminal 2 is located only few kilometres away from the closest residential areas, it is not linked by pedestrian road network.

3.2. On-demand mobility services

Beyond conventional transport modes on demand mobility services are also available at the Budapest Airport, however only taxis play a considerable role.

3.2.1. Car-sharing

Budapest has only few car-sharing companies. The first existing car-sharing service since 2011, the Avalon 'caresharing' is offering downtown pick-up and drop-off points. They do not have either station at the airport, therefore it is not regarded either as a car-sharing service provider at Budapest Airport. Another private company, the GreenGo offering e- mobility covering mostly the downtown area, even though the range of the service was extended in 2017, it still has not reached the airport area. A new player, Mol-Limo is expected to enter the car-sharing market from 2018, but it is unclear, whether the service will cover the Airport Area or not.

3.2.2. Ride-sharing/Carpooling

There are two large private carpooling organizers on the Hungarian market: oszkar.com and blablacar.hu both offering rides from/to Budapest Airport, predominantly to domestic and international destinations. The rides are organized online with registered drivers and passengers.

3.2.3. Taxi companies[23]

The Budapest Airport has a contracted official taxi partner company, the Főtaxi since 2010. The official taxi partner company is regularly tendered in a competition. The winner has distinguished position at the airport terminal to offer its services. The prices are regulated and taxi companies, cars and drivers has to comply with the Taxi Decree from 1st September 2013.

The prices according to the Budapest Transport Centre are the following for licensed taxis: basic fare, 450 HUF (1.50 EUR), time-based fare unit is 70 HUF/min (0,25 EUR/min), whereas the distance-based unit costs 280 HUF/km (0,95 EUR/km). Other pre-ordered, officially licensed taxis could also stop at the airport too near the entrance at the same price. Furthermore, non-licensed and pushy so call "taxi hyenas" hunt and deceive the incautious newly arrived passengers in the arrival hall of the terminal at a much higher price.

3.2.4. Other on-demand services[24]

The miniBUD is a contracted official airport shuttle minibus service of the Budapest Airport with distinguished place at the main entrances of the Terminal 2. The miniBUD offers a door-to-door collection and distribution service for passengers 27/7 starting from 6.70 EUR/person depending on the distance to be covered with a potential discount on the return trip. The rides are pooled, therefore it may cause waiting for passengers leaving the airport up to 30 minutes. For arriving passengers service can be ordered in the terminal building at the miniBUD airport counter, or for departing passengers at least 12 hours before your flight departure via an online reservation system, or by via the telephone customer service.

7 international car rental companies offer their services at their counter at the arrival level of the terminal building.[25] Car rental companies have 189 within the terminal parking and 29 VIP parking space at the premium parking arrival level.

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[23] Főtaxi Plc., 2017 online
[24] MinBUD Ltd., 2017 online
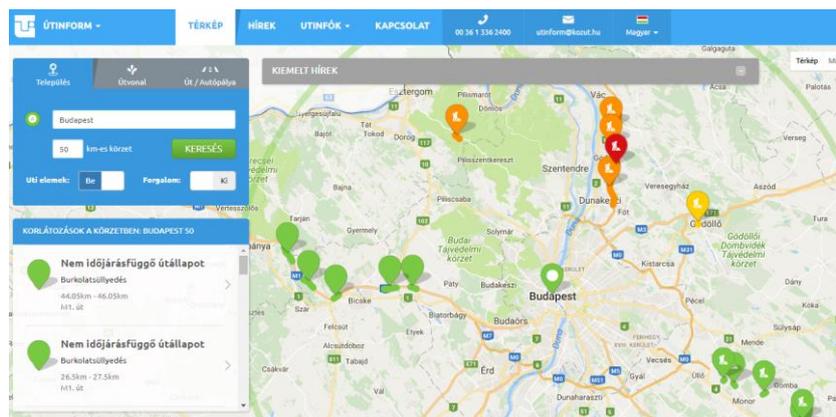[25] Budapest Airport Plc., 2017d online

4. Mobility information systems

Different service providers have their own separate information systems that by chance overlap each other in Hungary. There is no visible intention to harmonize these systems, as each private or state-owned enterprise sees competition in a comprehensive database. Right now, there is no single information platform for the Budapest Airport. The best multimodal routefinder is embedded in the online map service.
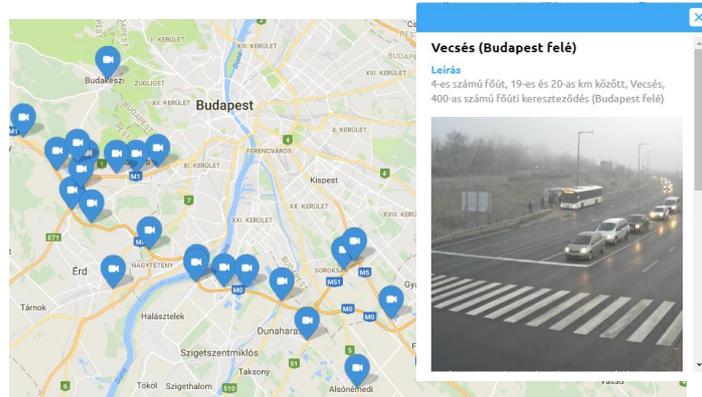
4.1. Description of existing mobility information systems

Road maintenance including the static and dynamic information service belong to the responsibilities in Budapest and in Hungary of the Budapest Közút (Budapest Public Roads) and the Hungarian Public Road Non-profit Plc. respectively.

The Hungarian Public Road Non-profit Plc. operated a live online platform including a map on real time highlighting traffic conditions and road works and other road obstacles within its own authority in Hungary, the so-called Útinform (Road Information Service). Furthermore, the all webcams along the Hungarian motorway and main road network is accessible through this website.

15. Figure: Real-time online information map of Útinform[26]

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[26] Hungarian Public Road Plc., 2017b online

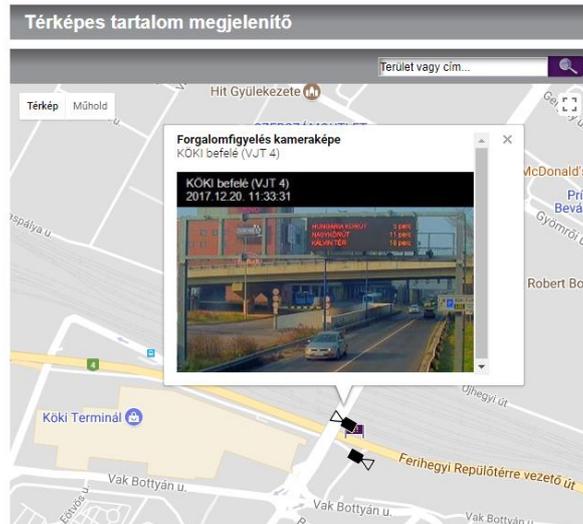**16. Figure: Screenshot from the real time online information map of Útinform**[27]

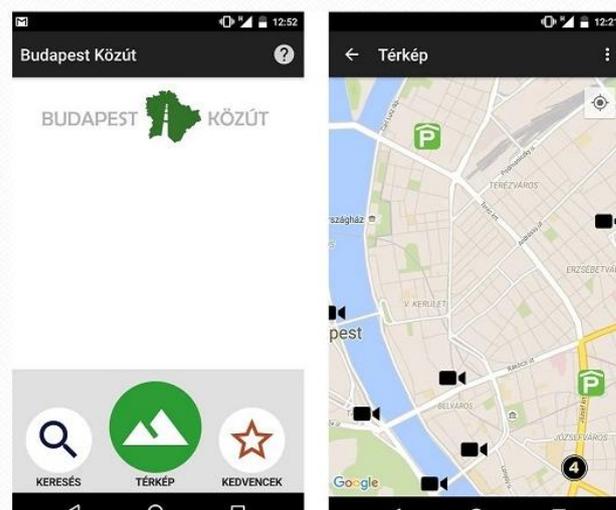**17. Figure: Visual information boards on Main Road 4.**[28]

Budapest Public Roads has an online interface for traffic information (webcamera, dynamic traffic information boards, real-time parking information of some P+R and parking houses) is accessible, but not in user-friendly way. The same set information is available via a smartphone application called 'Közút Figyelő'.

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[27] Hungarian Public Road Plc., 2017b online

[28] Google. 2017 online

18. Figure: Online road traffic information including a webcamera screenshot[29]

19. Figure: 'Közút Figyelő' smartphone application[30]

Centre for Budapest Transport Plc. (BKK) operates an extensive information system including all road information including public transport related information in visual map and text format within the boundaries of Budapest. The BKK does not fully provide a real-time traffic flow information, however it is being combined with a private company's community map, that already incorporates this additional information on the traffic flow and other perceptions by the users.

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[29] Budapest Public Roads Plc., 2017a online
[30] Budapest Public Roads Plc., 2017b online

20. Figure: Screenshot from the BKK real-time road transport information[31]
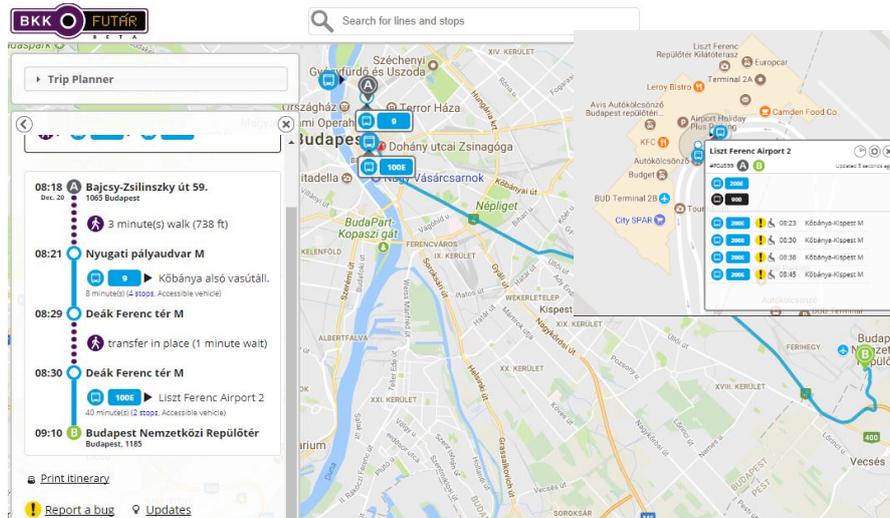

21. Figure: Screenshot from the BKK real-time road transport information[32]

BKK organizes the public transport in Budapest since 2010. It provides attractive static and dynamic information system from static brochures, route maps and timetables to real-time, dynamic information screens as well as online and smartphone application.
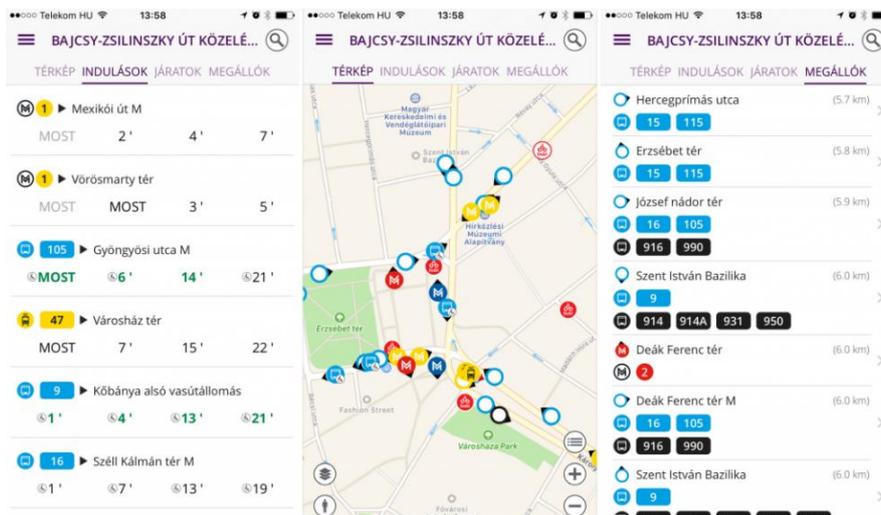
The online route planner provide the fastest public transport connection from point to point including walking and all public transport modes operated by BKK. Furthermore, it provides the users with real-time based information on the position of the vehicles and departure from a specific stop.

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[31] Centre for Budapest Transport Plc., 2017a online
[32] Centre for Budapest Transport Plc., 2017a online

22. Figure: Online map of BKK with a planned route to the airport and a real-time information at the Liszt Ferenc Airport 2 bus stop[33]
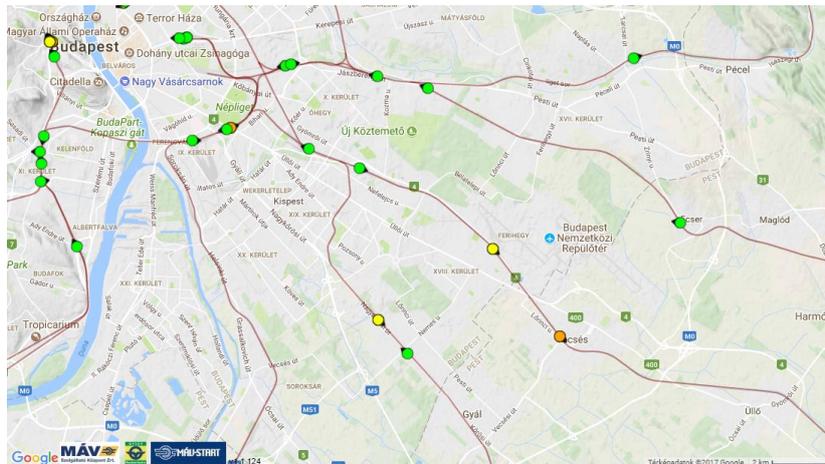

23. Figure: Screenshots from Futár Smartphone application[34]

The MÁV-START (Hungarian State Railways) has an online search engine for finding train connection at domestic and at international level. Real-time information (e.g. delay) is being included in this search engine, as well as all passenger trains in operation are depicted on a real-time overview map.

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[33] Centre for Budapest Transport Plc., 2017b online
[34] Centre for Budapest Transport Plc., 2017b online

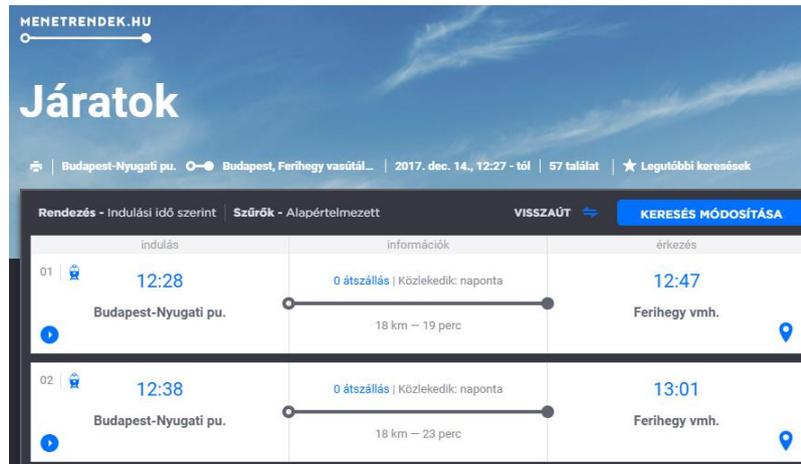**24. Figure: Online, real-time information map for Hungarian passenger trains[35]**

25. Figure: Search engine with real-time data from Budapest-Nyugati Train station to Ferihegy train stop.[36]

In 2016, a small step has been taken towards the integration of the state owned railway and bus companies that resulted in a common search engines at www.menetrendek.hu.
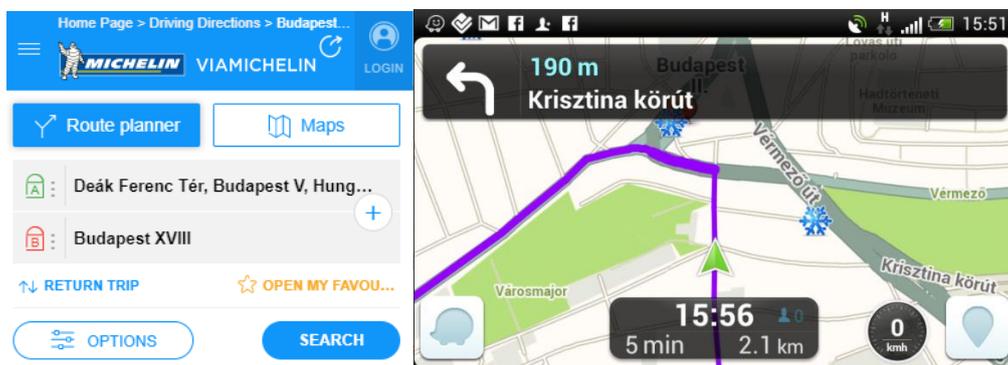
[35] MÁV-START Plc., 2017b online
[36] MÁV-START Plc., 2017c online

26. Figure: Common timetable search engines of state-owned railway and bus companies[37]

The website of Budapest Airport (www.bud.hu) collects all major transport modes that are available at the airport in Hungarian and in English language. The most relevant information about the use of the official service providers and public transport are on the website including further reference to their website. Parking has a distinguished site on the webpage with all the relevant information that short- and long-stay passengers, of which visitors shall be aware. The website uses generally a descriptive, simple language, while providing visual information too by taking over maps and infographics about routing, as well as own maps about the airport transport facilities.
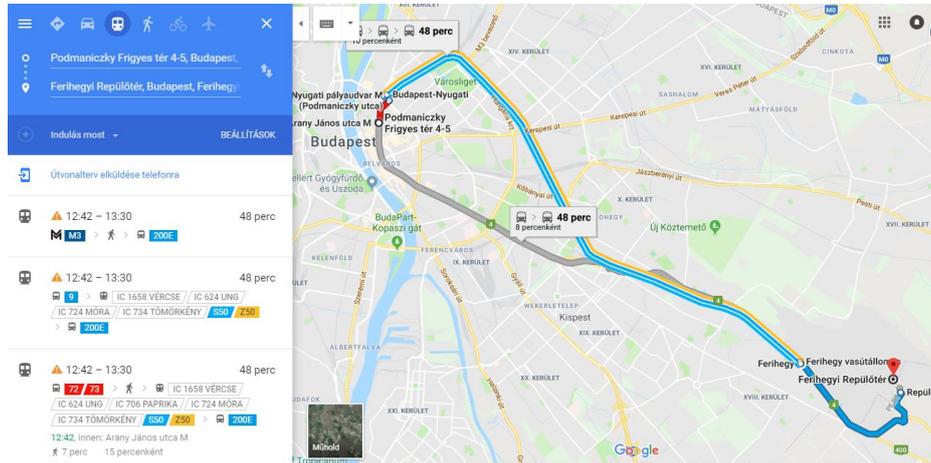

27. Figure Screenshots from online and smartphone route planners and navigation applications (viamichelin, Waze)[38]

For finding the optimal route from/to the airport, most of the car drivers use international websites and smartphone applications to optimize their journey. The best international online maps and route planner services make it easy to carry out the planning of a journey the same way all around the world. Moreover, the use of mobile internet and smartphones provide the drivers real-time information about the traffic as well as they optimize the route of the journey while driving (Waze, GoogleMaps).

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[37] VOLÁN Egyesülés, 2017 online

[38] Waze Mobile 2017

Few international online maps, journey planners provide a good search engine for multimodal route choice and comparability are the still the online maps handling real-time information for road traffic, public transport (urban, railway, long-distance bus) such as GoogleMaps or BingMaps. The timetable of public transport of BKK, MÁV-START and Volánbusz are embedded in the system.

28. Figure: Multimodal route planning with GoogleMaps[39]

[39] Google. 2017 online

5. Potentials and gaps

Gaps

- Road dependency of the Budapest Airport and lack of direct bound-rail connection
- Lack of seamless high quality link to the international, domestic and regional public transport e.g. rail link and international bus
- Lack of cooperation among public transport service providers
- Missing one-stop shop for mobility service providers
- No direct public transport link at night to the downtown
- No bicycle and pedestrian road system to the terminal
- Exclusive taxi service provider at the airport and lack of price competition for taxi companies.

Potential

- Integration of Terminal 2 to the nearby railway corridors
- Closer cooperation of public and private transport modes
- Development of soft mobility modes to the airport
- Better support shared mobility services
- Improving information and ticketing system for public transport

6. Conclusion

Budapest Airport is very well accessible by road from all parts of Budapest, FUA and wider catchment. The past mobility developments around the airport were dominated by road transport system; however, a comparably smaller investment in the railway infrastructure (train stop) enhanced the accessibility of the airport too. The urban public transport connection to the city centre is relatively good, though the comfort and the capacity limit, the increasing passenger numbers and the limited rail accessibility predestines a larger bound-rail infrastructure development that supposed to be integrated into domestic and international system. Regional accessibility of public transport in the FUA is easier along the East-West transport aisle, but in the North-South axis is dominated private car traffic. Rail link for domestic and international trains with one mode change is available, that was a great step forward in making public transport accessibility more attractive, however the lack of seamless travel options makes public transport choice still less attractive than private road transport. Many mobility service providers operate at the Budapest Airport competing with each other within certain limitation; however, a better balance of cooperation and competition, coopetition shall be sought for the good of the passengers. The closer and real cooperation of private and public mobility service providers is necessary for making the accessibility of the Budapest Airport more attractive in many fields including fare system, route planning, travel comfort and conditions. Furthermore, considerable infrastructural and IT developments shall be implemented to keep up with the competition set by other competing airports such as Vienna Airport. Some mobility related problems and gaps are coming from high level authorities, while for others could be influenced by the airport operator, therefore in any future development of the accessibility, the Budapest Airport Plc., relevant mobility stakeholder and higher authorities shall follow consequent mobility policy in enhancing the accessibility of the Budapest Airport.

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