

SUSTAINABILITY PROJECTS OF THE CENTRE FOR BUDAPEST TRANSPORT

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BKK – the mobility manager

Sustainability

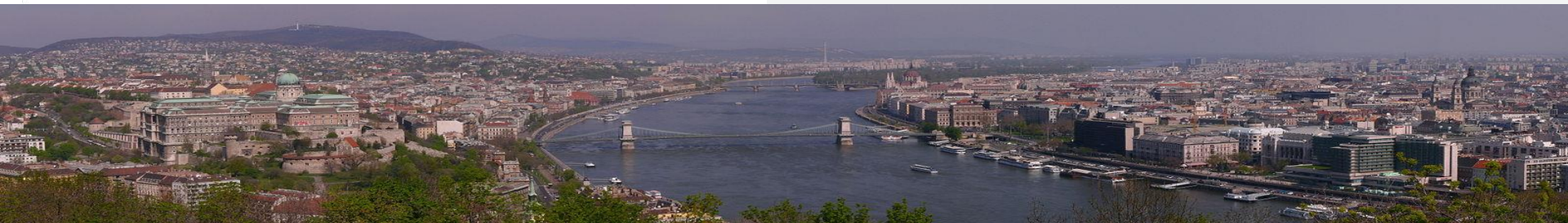
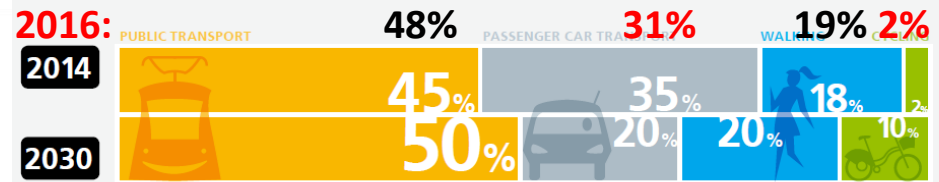
Projects



BKK – THE MOBILITY MANAGER

Budapest facts and figures

- 525 square km, **1 759 407 inhabitants** (stagnates)
- 329 cars/1000 inhabitants, **600 000 car trips per day**
- 4,7 travelers per workday
- 1,5 billion travelers per annum
- **Modal Split:**



BKK – THE MOBILITY MANAGER

The transport network of Budapest

Urban Transport System											
Non-motorized				Motorized							
Private		Private or Shared		Public							
Non-track based						Track based					
Connected with roads						Separated from roads					
Pedestrian	Bicycle	Car / motorcycle	Taxi	Bus	Trolley bus	Tram	Suburban railway (*to be national)	Underground	Boat	Special rail	Heavy rail (*national)
Number of lines/routes				276	15	30	8	4			
Lenght of lines (km)				1 045,0	57,5	159,9	97,9	41,7			
Number of stops				4 013	274	634	133	103			
Fleet volume				1 581	164	610	98	454			
Number of operators				4	1	1	1	1			

BKK – THE MOBILITY MANAGER

Need for an integrator...

„the road to hell is paved with good intentions..”



...the **City needed a Mobility Manager**, who can see the Big Picture!

BKK – THE MOBILITY MANAGER

Harmonising the demand/supply ratio of transport modes, based on

- real time information and
- long-term strategic values.

No absolute priority among transport modes, travel demand is to be influenced based upon

- sustainability principles,
- real society demands and
- reasonable economic costs.

Partnership – working together with the operators



BKK – THE MOBILITY MANAGER

Tasks and responsibilities regarding mobility

Strategy:

- Transport **strategy** and **development**
- **Organizing public transport** (Budapest & metropolitan area)
 - Determining routes, scheduling, traffic layouts
 - Passenger information service



Operation:

- Road Transport and traffic supervision:
 - Road network operation and reconstruction management
 - Traffic management
- Control and qualification of TAXI hire services
- Parking management
- Freight transport access management



SUSTAINABILITY

Following mobility needs (in appr. 100 years)

1901



1963



1990

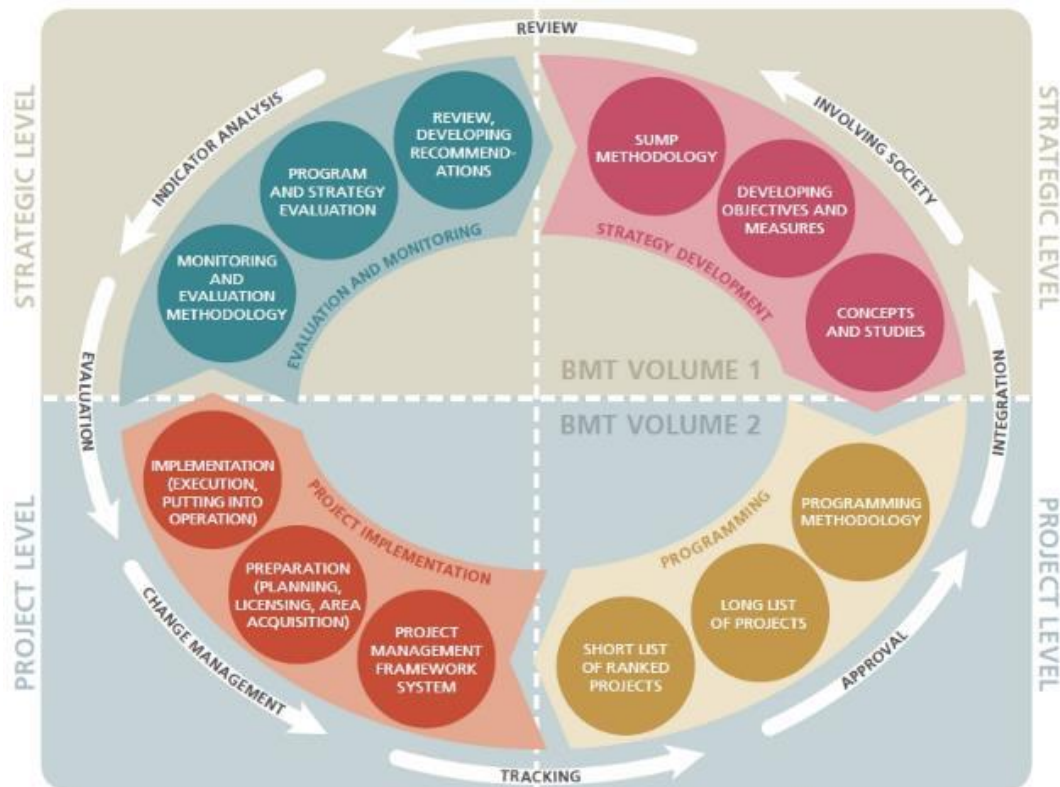


2015



SUSTAINABILITY

New strategic approach – the Balázs Mór Plan (BMT)



SUSTAINABILITY

Vision (from Budapest 2030)

„Budapest is a **liveable** and attractive capital city with unique character and is an esteemed member of the European urban network and intends to be **innovative** economic and cultural centre of the country and of the city region.”

General goal

The transport system has to improve the economy **competitiveness**, ensure the welfare, liveability of the Budapest region, promote of its and the sustainability conditions.



BUDAPEST 2030

HOSSZÚ TÁVÚ VÁROSFELJESZTÉSI KONCEPCIÓ

Étv. 9.§ (6) bekezdés szerinti eljárásra
(Étv. 2012. december 31-ig hatályos szabályai szerint)

2013. FEBRUÁR

BUDA  PEST

SUSTAINABILITY

Strategic objectives

- **Livable** urban environment
- Safe, **predictable** and dynamic transport
- **Cooperative** regional connections



SUSTAINABILITY

Priorities / areas of intervention

1 MORE CONNECTIONS
*Safe, high quality. integrated transport **infrastructure***

2 ATTRACTIVE VEHICLES
*Comfortable, environmental friendly **vehicles** and equipment*

3 BETTER SERVICES
*Efficient, reliable traffic coordination and **services***

4 EFFICIENT ORGANIZATION
*Consequent regulation and **governance**, regional cooperation*

PROJECTS – MORE CONNECTIONS

Széll Kálmán tér

- **Major transport hub** in Buda
- **Green, accessible space**
- Rehabilitated community area
- **Bike sharing** station, **customer centre**



Budaörsi út junction

- In line with **M4 Metro** project
- **Major intermodal hub in Buda** (M4 metro, trams, local bus, regional bus and national railway services)
- **P+R and B+R** services
- **Improved connectivity** in the area



PROJECTS – MORE CONNECTIONS

Renewal of metro and tram lines

- **M2 and M4 metro** infrastructure
- **Interconnected tram network** in Buda
- Renewed and extended **tram line 1** and upgraded **tram line 3**
- **Long routes**, direct connections
- **New, low floor vehicles, new depot**
- **Tram line 1 and 3 further extension**

MOL Bubi bike sharing scheme

- **112 stations** in operation
- **1250 public bikes**



PROJECTS – ATTRACTIVE VEHICLES

Metro vehicles

- New fleet on **M2 metro line**
 - Step-free access
- New fleet on **M4 metro line**
 - Step-free access
 - driverless operation since 2016
- Renewing fleet of **M3 metro line**
 - first prototype arrived in 2016
 - In service from 2017 Q2
- Renewal of **M1 line** fleet is discussed



PROJECTS – ATTRACTIVE VEHICLES

New trams

- **47** (35 + 12) **new, low floor CAF trams**
- 17% of the entire fleet
- **new depot** completed in 2017 Q2
- **Built-in power storage** – bigger range and service area (without overhead cables)



New trolley buses

- **36** (20 + 16) **new, low floor Solaris-Skoda trolley-buses** (21% of the whole fleet)
- **Built-in power storage** – bigger range and service area (without overhead cables)



PROJECTS – ATTRACTIVE VEHICLES

New bus fleet

- **New bus operation model** (3 private operators)
- Nearly 1000 air conditioned, **low floor buses** in 6 years (more than 300 second-hand low-floor, more than 600 new)
- **16 electric midi buses** for environmentally sensitive areas (inner city, Castle Hill)



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PROJECTS – BETTER SERVICES

New customer interfaces

- **Customer centres** in major hubs
- **Customer points** in more locations (including Budapest Airport)
- **New visual communication** (maps, static information)
- Use of **social media** (Facebook)

For more informed, connected, empowered and active customers.



PROJECTS – BETTER SERVICES

FUTÁR system

- **Dynamic passenger information**
- **Traffic management and journey planning**
- **Vehicle location (GPS), real time data**
- **Traffic control centre**

Ticket vending machines

- **360 new TVM's** around Budapest
- **Web support** (TVM map to find nearest)
- **Increase in ticket revenues**



PROJECTS – BETTER SERVICES

RIGÓ AFC system (automated fare collection)

- In progress, planned launch in several phases
- **E-ticket format** (safe and convenient)
- Anytime, anywhere
- **System plan, basic hardware and software, control units** available
- 800 gates, 10000+ validators, 470 cameras



PROJECTS – EFFICIENT ORGANIZATION

Integrated governance

- **Integration**, holistic approach
- Clear **competences**
- **Efficiency**, overall quality
- **Participatory planning**
- Consistent **regulation**
 - Parking
 - Freight transport access
 - Tourist buses
 - Integrated transport safety database
- Local and regional **cooperation**



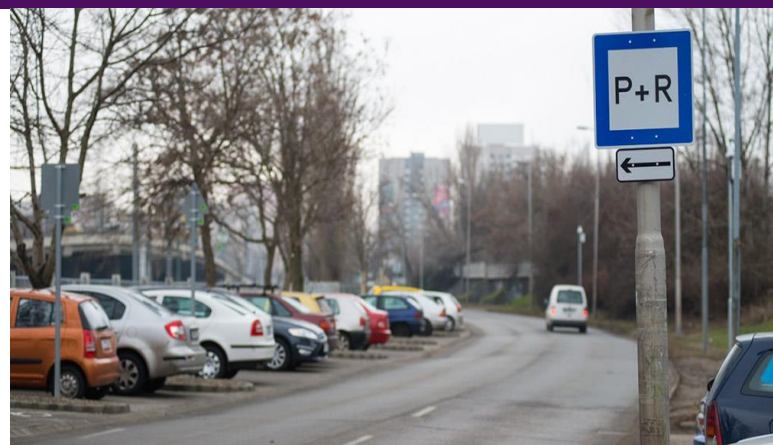
PROJECTS – EFFICIENT ORGANIZATION

P+R and B+R development

- **7 P+R locations completed**
- **5 P+R locations in process**
- **Review of parking strategy** advised (in cooperation with the ***Districts***)

Renewal of infrastructure

- **Complex design** of road and bridge renewals (in cooperation with the ***Districts*** and the ***Road Operator***)
- **Pedestrian and bike friendly** solutions, improved accessibility, visibility, safety



PROJECTS – EFFICIENT ORGANIZATION

E-mobility and Car Sharing

- **Preparation of possible regulation** of E-mobility and Car Sharing services
- **1100 charging units to be installed** (currently discussed with the ***Districts, MOL Group and Ministries***)



Regulation of City Logistics

- **Control** based on current regulation (in cooperation with the ***Road Operator***)
- **New regulation to be developed** to make urban freight greener, smarter and less pollutant.



SEEKING THE FUTURE...

Research & Innovation: hot topics include **SUMP**, participatory planning, MaaS, liveable city, e-mobility, Big Data, Open Data, intermodality...

- **7 ongoing projects** (FLOW, SMART-MR, SUMPs-UP, EMPOWER, SUNRISE, MaaS4EU, Cities4People)
- **7 proposals submitted** in 2017 (PURE, SMARTIFY, MORE, BD4T Big Data 4 Transport, OPPORTUNITIES, INCLUSION, VITALNODES)
- **SUMP related activities rewarded** (Milan 2015, Shenzhen 2016, Brussels 2017)



Thank you for your kind attention!



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