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:
# The transport network of Budapest

## Urban Transport System

<table>
<thead>
<tr>
<th></th>
<th>Non-motorized</th>
<th>Motorized</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-track based</td>
<td>Track based</td>
</tr>
<tr>
<td>Private</td>
<td></td>
<td></td>
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<tr>
<td>Private or Shared</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Connected with roads</td>
<td>Separated from roads</td>
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<tr>
<td>Pedestrian</td>
<td>Bus</td>
<td>276</td>
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<tr>
<td>Bicycle</td>
<td>Trolley bus</td>
<td>15</td>
</tr>
<tr>
<td>Car / motorcycle</td>
<td>Tram</td>
<td>30</td>
</tr>
<tr>
<td>Taxi</td>
<td>Suburban railway</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Underground</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Boat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Special rail</td>
<td></td>
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<tr>
<td></td>
<td>Heavy rail</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>Number of lines/routes</th>
<th>Lenght of lines (km)</th>
<th>Number of stops</th>
<th>Fleet volume</th>
<th>Number of operators</th>
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</thead>
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<tr>
<td></td>
<td>276</td>
<td>1045.0</td>
<td>4013</td>
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<td>634</td>
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<td>41.7</td>
<td>103</td>
<td>454</td>
<td>1</td>
</tr>
</tbody>
</table>

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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!
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
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
Following mobility needs (in appr. 100 years)

1901

1963

1990

2015
SUSTAINABILITY

New strategic approach – the Balázs Mór Plan (BMT)
**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.
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
**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)
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)
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.
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
**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**
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
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, SUMP-s-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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