

RESPONSIBLE MOBILITY MANAGEMENT FOR LIVEABLE BUDAPEST

László Sándor KERÉNYI

Head of Mobility Strategy
BKK Centre for Budapest Transport
4 September 2017, EWGT2017



CONTENT

- **Passengers – Customers – Partners (Who are they?)**
- **Mobility management in Budapest**
- **Development for a smarter city**



PASSENGERS – CUSTOMERS – PARTNERS



WHO ARE THEY?

THE ONLY THING THAT IS CONSTANT IS CHANGE

Pope election 2005 vs 2013:

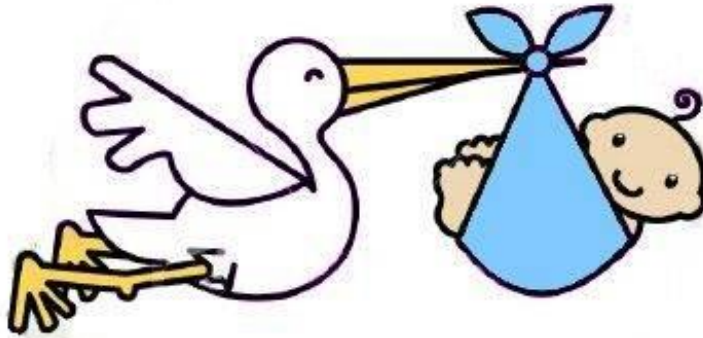


LEVELS OF DEMAND

What are the parent's responsibilities to provide a long and happy life for a newborn?

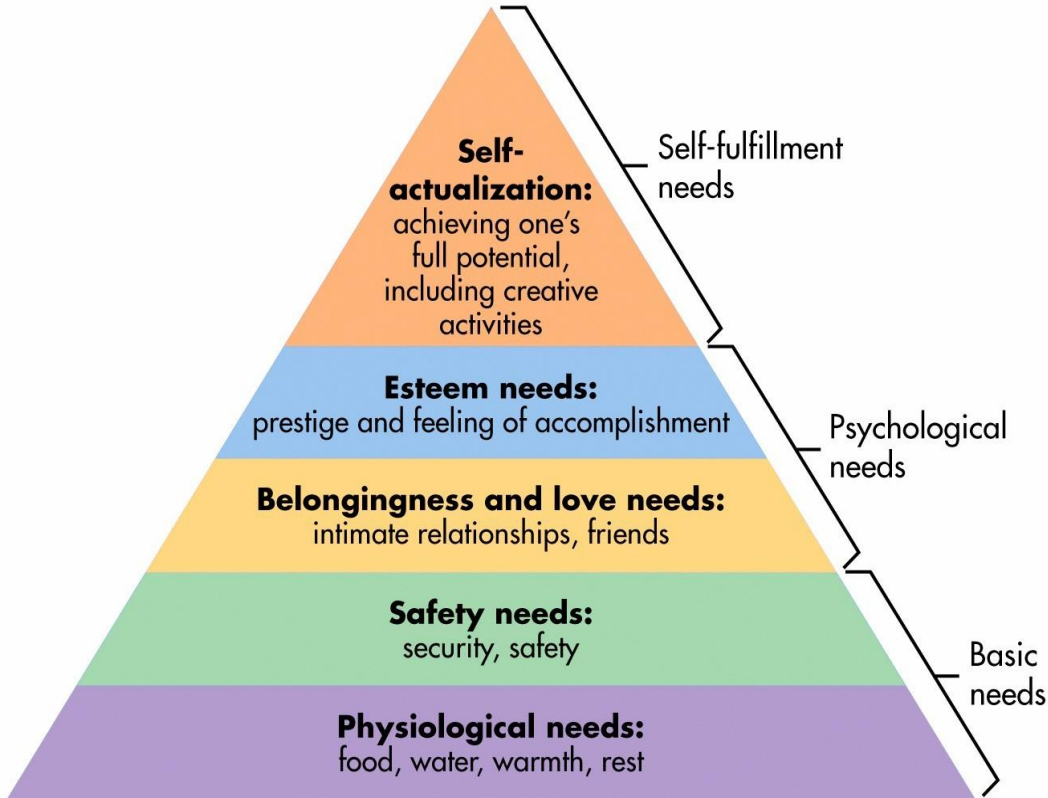
(for the next 20+ years):

- **Air, Food, Rest**
- **Safety and security**
- **Supportive relations**
- **Confidence, respect**
- **Education to become a creative and useful member of society (taxpayer)**



FROM DEMAND TO CHALLENGES

What is our responsibility, as mobility managers?



„Smart citizens”, reliable partners
in changing demand and behavior

Proud and respected customers

Travel information and support

Travel safety and security

Passengers from „A to B” (tools)

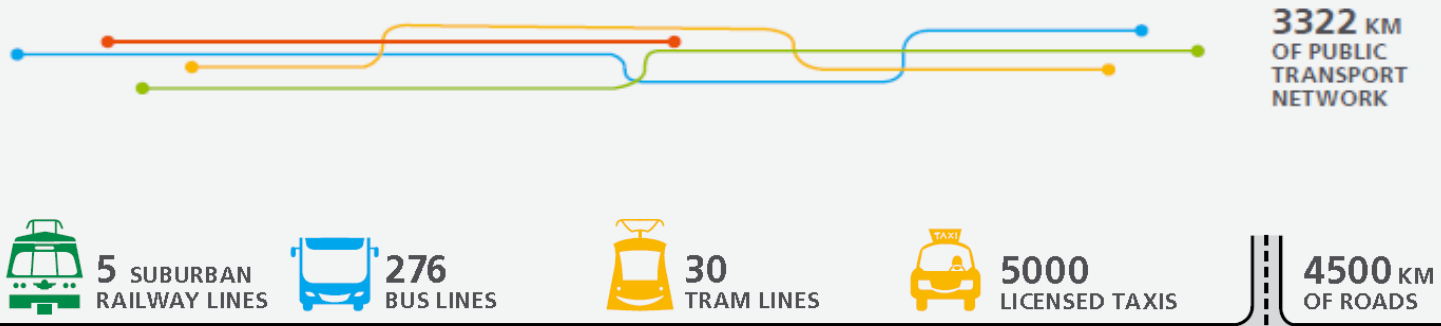
MOBILITY MANAGEMENT IN BUDAPEST



MANAGING A DENSE TRANSPORT SYSTEM

BKK is responsible for all travelers regardless the purpose, the aim, and the mode of transport. No absolute priority among transport modes.

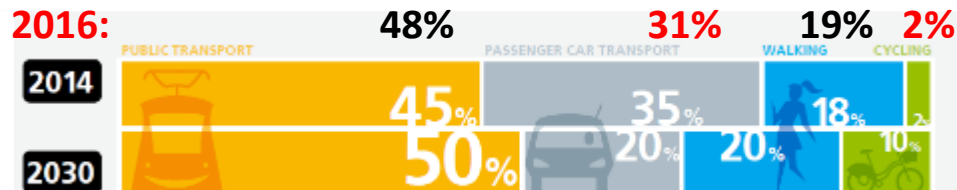
Travel demand is to be **influenced** based upon **sustainability principles, real society demands** and **reasonable economic costs**.



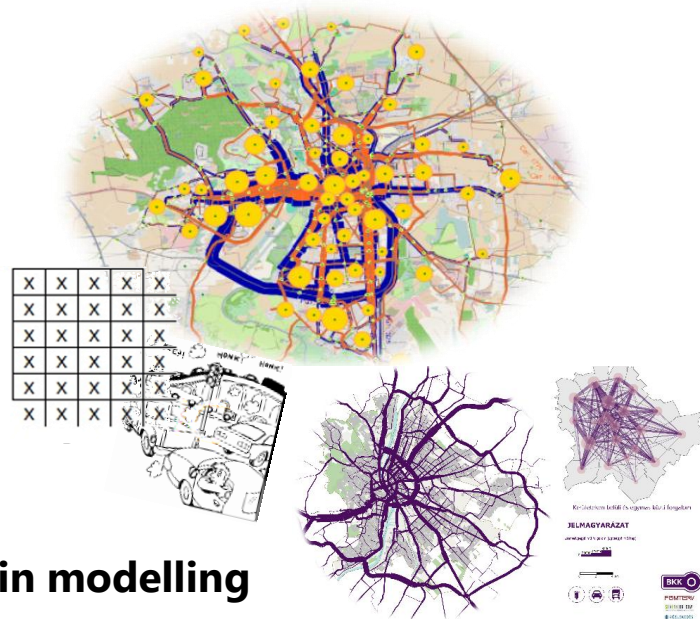
1,000 RESIDENTS:



FINDING THE RIGHT BALANCE – FROM OWNERSHIP TO ACCESS



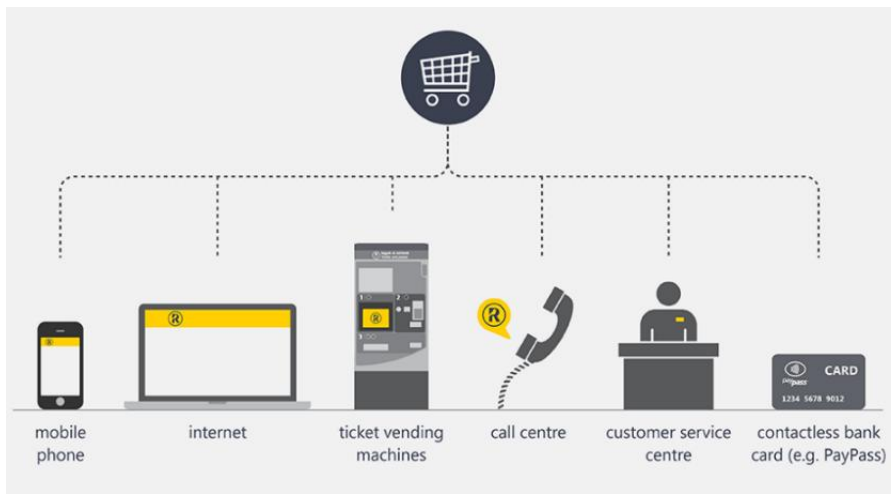
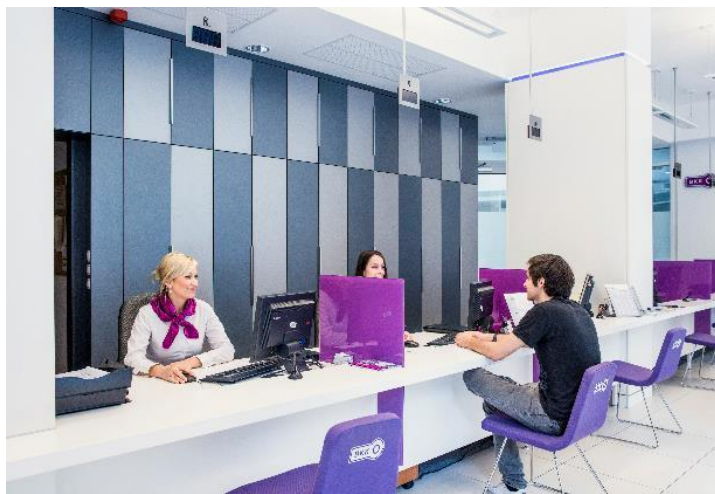
Urban Transport System											
Non-motorized				Motorized							
Private		Private or Shared		Public							
Non-track based					Track based						
Connected with roads					Separated from roads						
Pedestrian	Bicycle	Car / motorcycle	Taxi	Bus	Trolley bus	Tram	Suburban railway (*to be national)	Underground	Boat	Special rail	Heavy rail (*national)
Number of lines/routes				276	15	30	8	4			
Length 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			



IMPROVING THE INFRASTRUCTURE AND ROLLING STOCK



IMPROVING THE SERVICES



IMPROVING THE ORGANIZATION

Before 2010

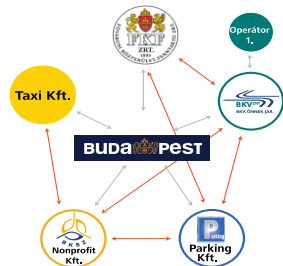
2010-2014

After 2015

Before BKK

- No control
- No willingness to change
- The aim is daily survival

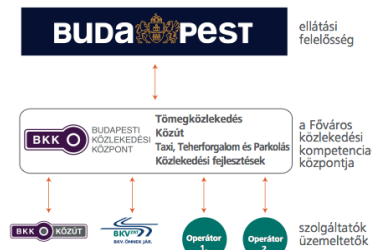
Passengers to carry



Forming – Storming...

- „Engineer”
- Creation of a competence center
- The aim is to keep the system running, projects

Customers to serve



...Norming – Performing...

- „Mobility Manager”
- Keeping and improving the existing knowledge
- The aim is to have an innovative and effective company

Partnerships to maintain



DEVELOPMENT FOR A SMARTER CITY



UNDERSTANDING RESPONSIBILITY – DECISIONS EFFECT DAILY LIFE



UNDERSTANDING THE PAST – NO SILVER BULLET



THINKING INTEGRATED – FROM SILOS TO SHARED



CHANGING THE PLANNING APPROACH

TRADITIONAL DESIGN		SUSTAINABLE STRATEGY
TRAFFIC	↔	THE HUMAN BEING
KEEPING THE CITY MOVING, SERVING TRAFFIC NEEDS	↔	LIVEABLE CITY, INFLUENCING MOBILITY NEEDS
FOCUS ON TRANSPORT MODES, MAIN FOCUS ON ROAD TRAFFIC AND PUBLIC TRANSPORT	↔	COMPLEX APPROACH, SUPPORT OF SUSTAINABLE TRANSPORT MODES
INFRASTRUCTURE IS THE FOUNDATION OF THE SYSTEM	↔	MOBILITY AS A SERVICE
SEPARATE DESIGN FOR ALL SUBSECTORS	↔	COORDINATED DESIGN INVOLVING ALL SUBSECTORS
SHORT AND MID-TERM DEVELOPMENT PLAN	↔	DESIGN PROCESS BASED ON LONG TERM VISION AND GOALS
WITHIN THE OFFICIAL CITY BOUNDARIES	↔	WITHIN THE FUNCTIONAL BOUNDARIES, WITH REGIONAL APPROACH
ENGINEERING APPROACH	↔	INTERDISCIPLINARY APPROACH, WITH PUBLIC INVOLVEMENT
DESIGN IS DONE AND DISCUSSED BY EXPERTS	↔	DESIGN IS DONE WITH INVOLVEMENT OF ALL STAKEHOLDERS, FINALIZED AFTER PUBLIC HEARINGS
SUBSECTORAL EFFECT ANALYSIS, PROJECT FOCUS	↔	OVERALL STRATEGIC EFFECT ANALYSIS, WITH MONITORING AND ASSESSMENT PROCESSES

BECOMING SUSTAINABLE IN VISION, GOALS AND MEASURES



- 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*

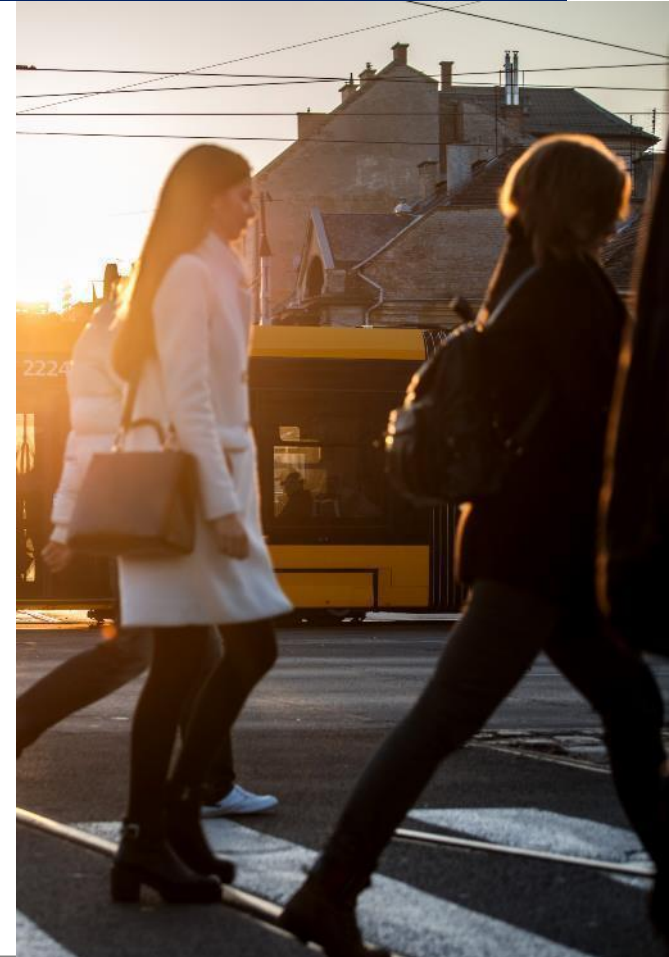


SHAPING EUROPE

International connections for two way information flow (EMTA, EUROCITIES, UITP, POLIS etc.)

Participating in international policy making:

- **Developing EU directives and policies**
(Urban Mobility Package, ITS Directive, Mobility as a Service, Clean Vehicles Directive, SUMP)
- **Widespread professional working group activity**
 - **Environment and Health** in Transport
(Bike sharing, „Clean“ vehicles, Alternative fuels)
 - **Mobility and Traffic Efficiency**
 - **Social and Economic Challenges** of Transport
 - **Transport Safety and Security**
 - **Urban Freight** Transport



COOPERATING IN RESEARCH AND INNOVATION

Hot topics include **SUMP**, **participatory planning**, **MaaS**, **liveable city**, **e-mobility**, **Big Data**, **Open Data**, **intermodality**...

- **9 ongoing projects** (FLOW, SMART-MR, SUMP_s-UP, EMPOWER, SUNRISE, MaaS4EU, Cities4People, INCLUSION, VITALNODES)
- **2 proposals in 2nd phase** (MORE, SMARTIFY)
- **SUMP related activities rewarded** (Milan 2015, Shenzhen 2016, Brussels 2017)



OBSERVING AND FOLLOWING FUTURE TRENDS

Observing and following transport development trends:

- **Mobility-as-a-service** (MaaS)
- **Participatory planning**
- **E-mobility**
- **Internet of things** (IoT)
- **Smart city** solutions
- **Automation**
- **Sharing economy**
- **Sharing based mobility**

All these require partnerships!



CLOSING WORDS

A responsible mobility manager has to be committed to **helping citizens to become smart travellers with reasonable mobility choices**, and be aware and implement the latest trends in mobility.

CAR OWNERSHIP – SMART AND REASONABLE?



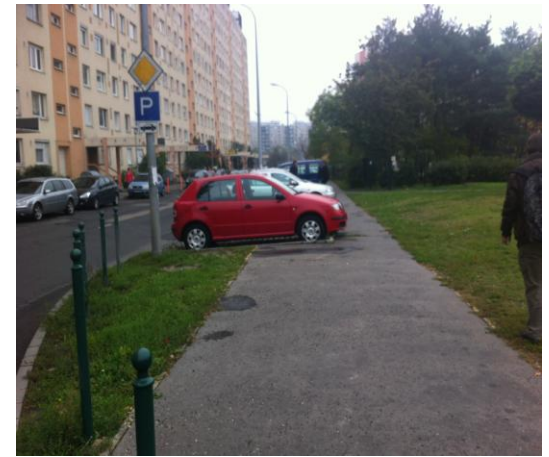
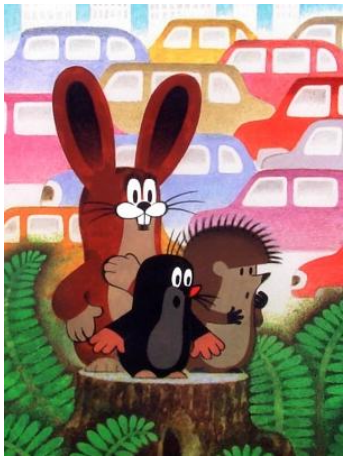
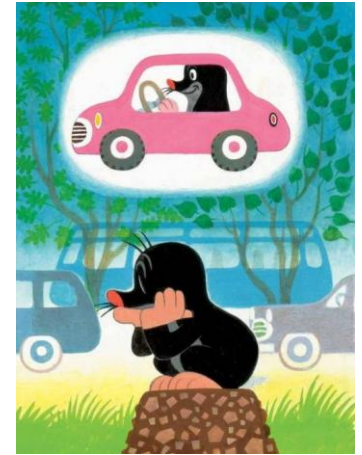
From this car forward,
THERE'S NO GOING BACK.

The All-New GS surrounds you with performance. In the corners. And also in the driver's seat. With the available Lexus Enform™ App Suite™—the most connected information and communication technology available in an automobile featuring apps like Facebook Places, Yelp®, and OpenTable®. This is the all-new Lexus GS. The car that will raise your standards of what's possible. And spoil you for everything else.

GENTLEMEN, START YOUR IPHONES.
Download the Ten 500 game for iPhone, and see what it's like to race the all-new Lexus GS around Sports Illustrated's Swedish Moab Iron Prever.

Vehicle shown with optional equipment. © 2011 Lexus North America Inc. All rights reserved. Lexus and Lexus Enform are registered trademarks of Lexus North America Inc. All other trademarks are the property of their respective owners. For full details regarding the use of the iPhone and the Ten 500 game, please visit www.lexususa.com/ten500. The use of the iPhone and the Ten 500 game is subject to the terms and conditions of the iPhone and the Ten 500 game. The use of the iPhone and the Ten 500 game is subject to the terms and conditions of the iPhone and the Ten 500 game. The use of the iPhone and the Ten 500 game is subject to the terms and conditions of the iPhone and the Ten 500 game.

THE CAR IN THE CITY AS WE KNOW IT



THE „CAR” OF TOMORROW IN THE CITY? (AUTOMATED, ELECTRIC)

	VERTICAL	HORIZONTAL
PUBLIC MASS TRAVEL FIXED TIMETABLE	 A photograph of a crowded subway platform. A train is visible in the distance. A large green checkmark is overlaid on the bottom left of the image.	 A photograph of a modern, automated train at a station. The train is white and blue. A large green checkmark is overlaid on the bottom left of the image.
SHARED PERSONAL TRAVEL ON DEMAND	 A photograph of a modern, automated train at a station. The train is white and blue. A large green checkmark is overlaid on the bottom left of the image.	 A photograph of a line of white taxis. Below the taxis is a small, futuristic car. A large red question mark is overlaid on the bottom left of the image.

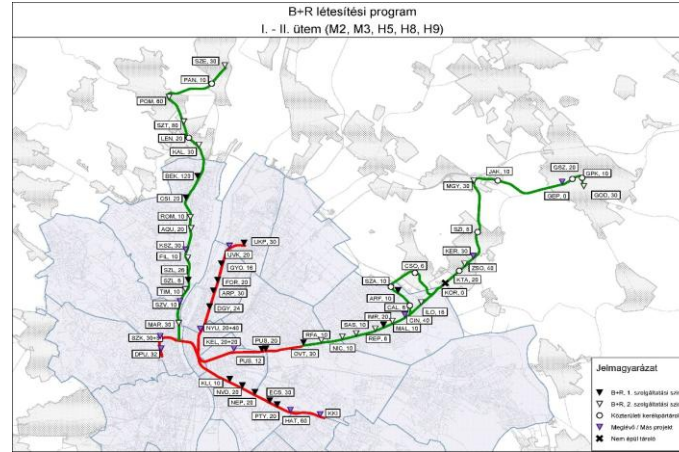
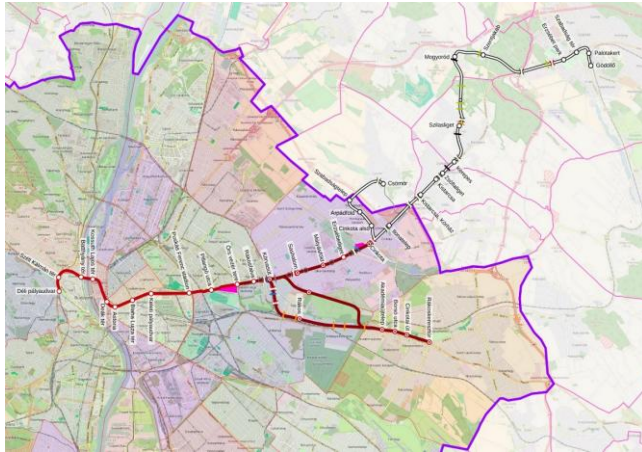
CAR FREE CITY CENTERS – HUMAN AGORA (ESSENCE OF A CITY)



INNER AREAS WITH SHARED SPACES



OUTER AREAS WITH PREDICTABLE CONNECTIONS



THANK YOU!



BUDAPEST



BUDAPESTI
KÖZLEKEDÉSI
KÖZPONT

laszlo.kerenyi@bkk.hu