

# Transforming public spaces with citizens involvement – examples from Budapest

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2nd December 2021,

POLIS Annual Conference 2021 - Gothenburg



# Budapest – City overview

**1.750.000 inhabitants, 525 km<sup>2</sup>**

**Economic** (40% Hungarian GDP), **touristic** (hotels), **social** (baths), **educational** (universities), **transport hub** (railways, airport, logistic centres) of the country

Divided to Buda and Pest by the River Danube

## **Complex, two-tier municipal system**

- Municipality of Budapest (Mayor of Budapest)
- 23 districts - 23 municipalities and mayor

## **Metropolitan region (FUA, 80 towns/villages)**

- Further 800 000 inhabitants



# BKK – Responsible mobility manager of the city

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



# Extensive public transport networks and shared mobility

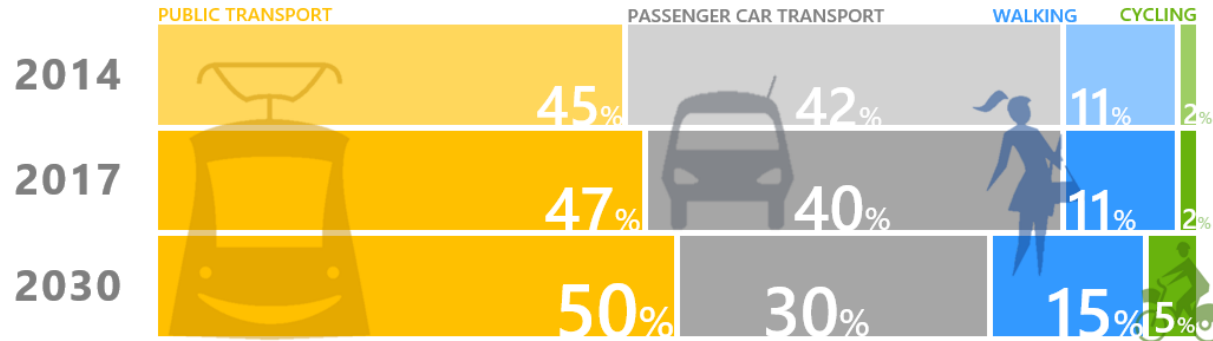
150 km long tram and 75 km long trolley bus network, 4 metro lines 240 day-time and 40 night bus lines



# Modal split objectives of Budapest

- According the Budapest Mobility Plan (SUMP) approved by Budapest General Assembly on **23rd May 2019**

MODAL SPLIT - BUDAPEST (DISTANCE BASED, WORKING DAY)



# Budapest – Mobility needs

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

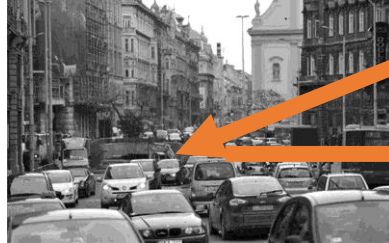
1901



1963



1990



2015

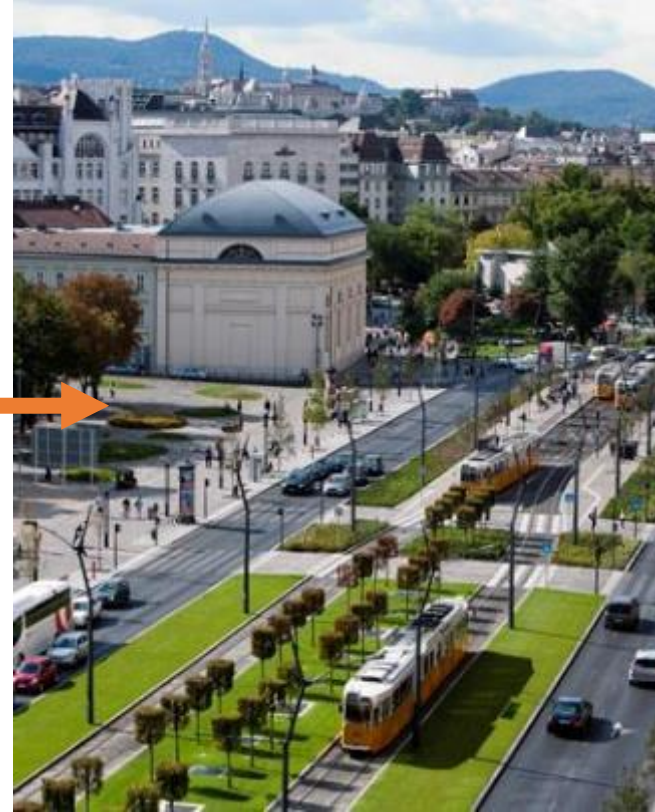
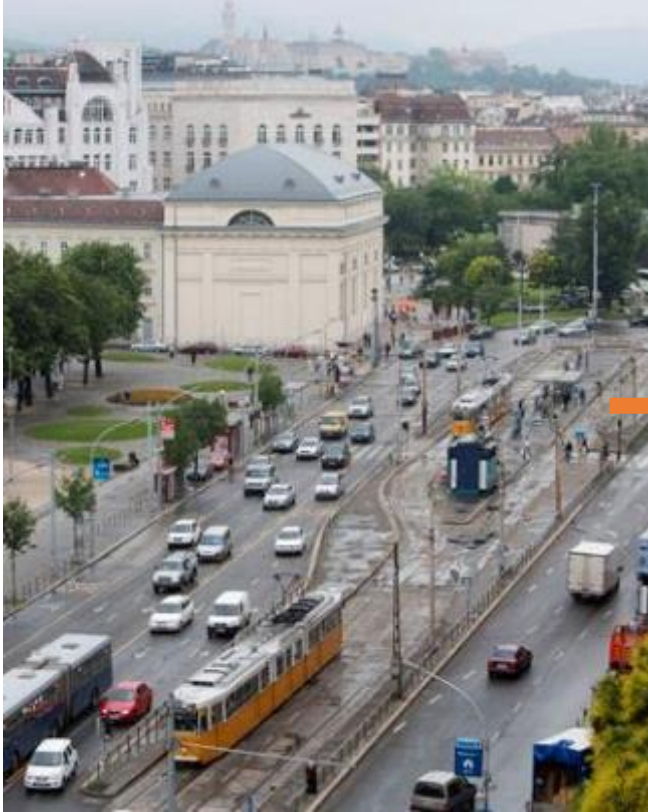


2025?



# Budapest – Mobility needs

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



# Heritage: Car oriented road design



# Impact of the COVID pandemic

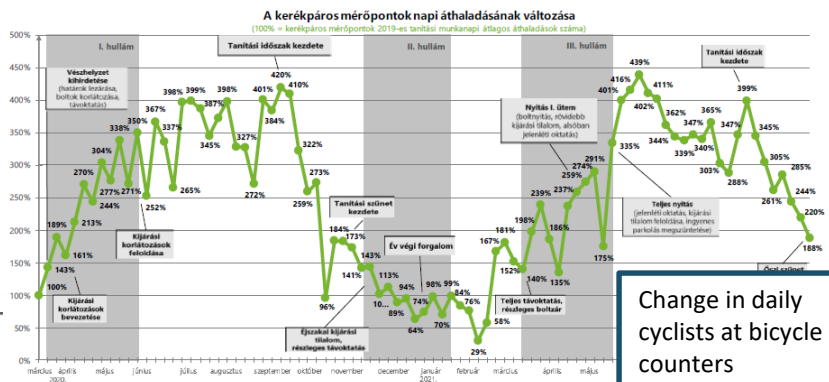
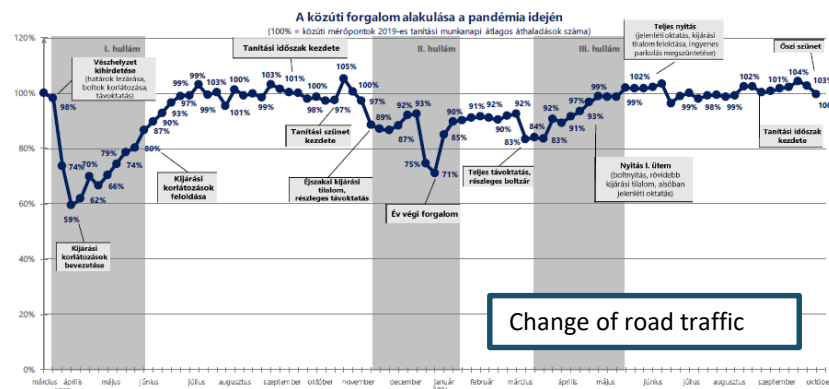
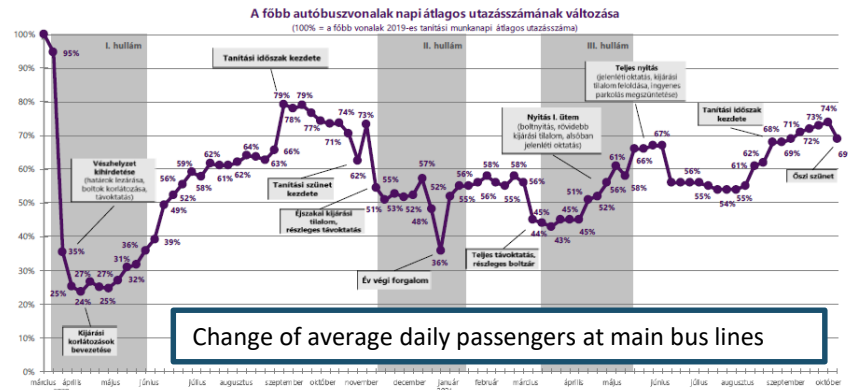
- Falling Public transport
  - Currently at 70%
- Car usage similar to pre-COVID times
- Cycling (+15% compared with 2020),
  - installing pop-up bicycle lanes



BUDAPEST



BUDAPESTI  
KÖZLEKEDÉSI  
KÖZPONT



# How to move forward from the car based city to the city of places?

- **Creating** traffic-calmed residential areas
- **Giving** priority to public transport
- **Improving** cycling and other active mode facilities
- **Protecting** vulnerable active road users
- **Reducing** the number of road accidents
- and **listening to** citizens' opinions

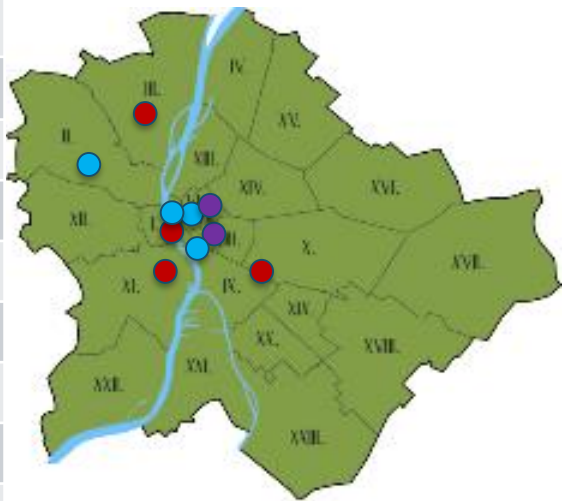


# Testing future interventions with pilot actions

- In the **spring of 2020 Budapest decided**, to prepare a road safety and traffic calming **action plan** to achieve a more liveable city.
- In connection with the plan, **pilot projects have been set up in several parts of the city**. These were accompanied by a **public consultation involving the citizens** concerned and the users of the area.
- **The pilot interventions were carried out as a test during the summer and autumn of 2020**. Based on good experiences, several interventions have been retained.
- In connection with the pilot interventions, **the public had the opportunity to comment on the individual interventions on the website** [www.kozossegitervezes.Budapest.hu](http://www.kozossegitervezes.Budapest.hu)
- **With piloting, we can be testing** the physical interventions and we can **listen to people's views** about it (before implementing hard infrastructure elements).



| Pilot interventions  | Location            | Type    |
|--|---------------------|---------|
| Opening of the Danube quay at the Pest side for the people | V., IX. Districts   | Section |
| Traffic calming in Pasarét                                 | II. District        | Area    |
| Traffic calming at Szentendrei road and Vörösvári road     | III. District       | Section |
| Traffic calming at Downtown                                | V. District         | Area    |
| New public spaces on Andrásy Avenue                        | VI. District        | Point   |
| Traffic calming in Erzsébetváros                           | VI., VII. Districts | Area    |
| Traffic calming in Ferencváros                             | IX. District        | Area    |
| Traffic calming in Üllői road                              | IX., X. District    | Section |
| Traffic calming in Budafoki road                           | XI. District        | Section |
| Redesign of Népszínház street's junctions                  | VIII. District      | Point   |



Point-based



Section-based



Area-based



# Point-based pilot intervention

## Redesign of Népszínház street's junctions

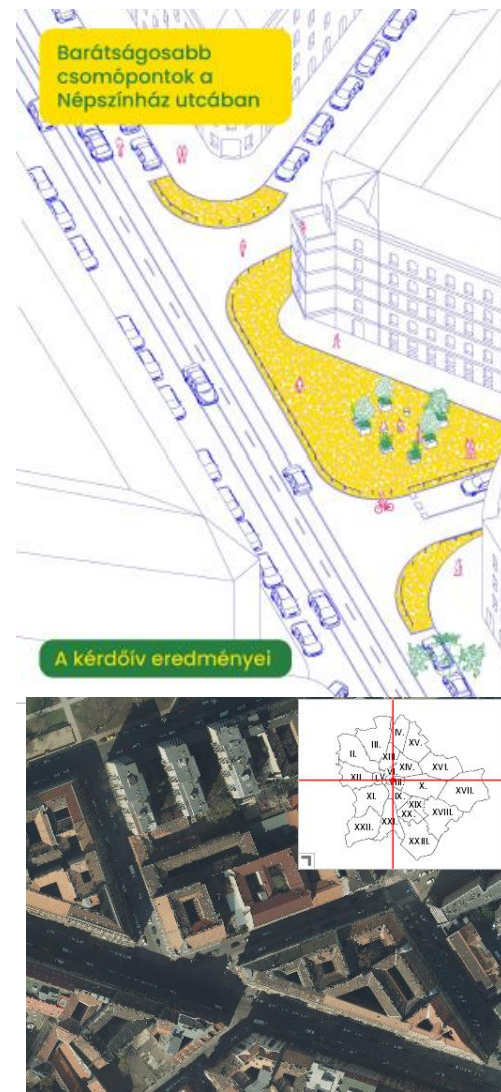
Irregular intersections in the street (diagonal street in a grid-based street network)

- Reducing the space available for road traffic at the junctions
  - Narrowing the junctions
  - Safer traffic, more visible junctions
- Larger area for pedestrians, possibility of greening
  - Elimination of irregular parking

After the intervention, the residents were asked to give their opinion on the Népszínház street and the interventions carried out.

The biggest problems in the area are **pollution** (air, dust), **lack of green spaces**, poor **public safety**, **cycling difficulties** and **irregular parking**.

- 41.5% of respondents think that modifying the curb at the junction have clearly helped walking.
- In addition to walking, cycling and public transport (bus, tram) were the most helped by intervention.
- Car users also think that traffic has improved, get safer.



# Section-based pilot intervention

## Traffic calming in Budafoki road

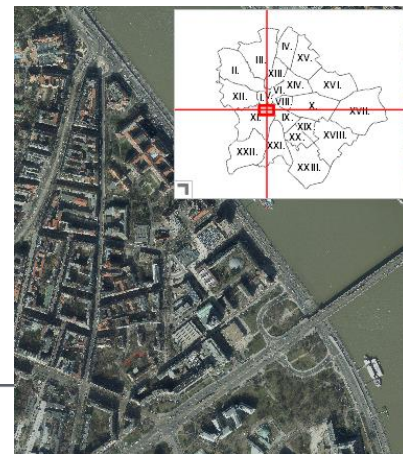
Densely built street close to the Technical University (BME)

- Making one-way street
  - It is not possible for cars to drive through the street,
  - Two-way interoperability provided for bicycle and public transport
- Opening turning left in every junction
  - Accessibility of the area has not changed
- Reducing speed to 30km/h
  - improving safe transport

Based on questionnaires at [kozossegitervezes.budapest.hu](http://kozossegitervezes.budapest.hu) website, the **5 main problems**: **air pollution**, **noise pollution from traffic**, **densy street**, **too many parking spaces** at the expense of pedestrian traffic, **difficult to find** parking spaces for local residents

**Based on the survey after piloting, the participants think:**

- 74% of respondents perceived a positive change in the volume of traffic (37% experienced a spectacular improvement).
- 51% said the neighbourhood of street was quieter and 51% said it was more liveable.
- 44% said the air was cleaner after the intervention, while 28% felt no change.
- 46% of car users, 65% of pedestrians, 59% of cyclists and 45% of motorcyclists think that the new traffic signals are clear.



## Area-based pilot intervention - Traffic calming in Erzsébetváros

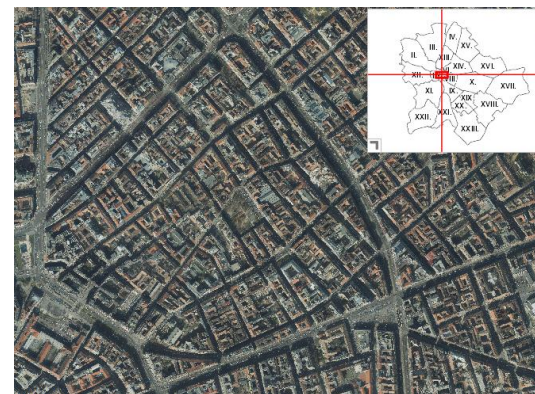
## Densely built area

- Intervention in two phases
  - Interventions refined based on 1 month of experience and feedback from residents (August 2020 → September 2020)
- Special traffic rules with one-way streets
  - Making interoperability difficult for cars
  - Through traffic banned with traffic engineering items
  - Ensuring locals to reach their home
- Car traffic banned at some parts of the area
  - Protection of pedestrians

The first phase **reduced road traffic by 7%** and the second phase by **a further 4%**.

Based on the survey ([kozossegitervezes.budapest.hu](https://kozossegitervezes.budapest.hu)) after piloting, the participants think:

- The interventions have made the area safer for **pedestrians**, according to 55% of respondents, and more comfortable for 52%; 53% said that **cycling** was safer and 65% said that it was more comfortable; 29% said it was more comfortable, but 50% felt no change in the comfort of **public transport**;
- 18% said that driving had become safer, 42% felt no change and 29% felt it had got worse;
- 50% said the air got cleaner, 65% said the area got quieter;
- 61% think the area has become more liveable overall.



# +1 example for section based traffic calming

- Typical example of how to manage traffic calming with citizens is what BKK is learning from MORE project (H2020 project).
- The **aim of MORE** project is how to change street with busy road traffic to street for locals, and thinking about the streets as complex ecosystems, participating
- **BKK is managing** one of the most busiest roads in the Budapest downtown to make friendlier environment for locals and visitors also.
- **Kossuth Lajos utca - Rákóczi út**
  - Wide carriageway (2 lanes for private transport, 1 lane for public transport each direction)
  - Relatively narrow space for pedestrians, fence between carriageway and footways
  - There are no parking bays on the corridor
  - The number of public transport users and car users similar at each direction (approx 20000 users)
- It is an **ongoing project**, so BKK hasn't got all of the results, but we have some experiences.



# Managing participation planning at MORE project

- **Analysing** the current (traffic) situation
  - Stakeholders, shops, locals, transport, neighbourhoods,
- **Learning** from the past
  - The street used to the main commercial are is the city which appeared the last decades
  - Former plans to reallocation of the street helped our thinking
- **Managing** public consultation about the street section by using Traffweb
  - Asking locals for their views
  - Making problem trees



# Managing participation planning at MORE project

- **Organising** stakeholder events, design days for the main stakeholders by using blocks and acetates to determine current and future (cross-section) scenarios
  - Current (1-2 years ahead), future (2030) conditions
  - Technical vision, Transport vision, Impersonalization, Identification
- **Creating** different scenarios (traffic engineering, urban engineering aspects) for 1-2 years ahead and upto 2030
  - Pilot interventions can help in to future to fixing the street problems in a long term.
- **Making** VISSIM micro simulation for car traffic, pedestrian traffic, public transport traffic
  - Comparing the results, using Appraisal tool
- **Consulting** with the results
- <https://www.roadspace.eu/>



# Main messages

## 1. **Transparency** is important when transforming urban spaces

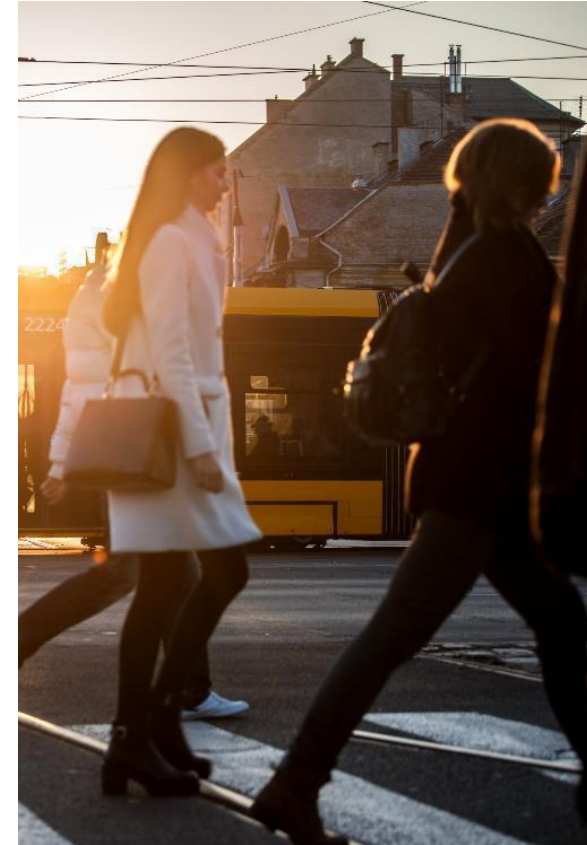
- Listening to the views of local residents
- Communication helps people understand the interventions

## 2. **A good relationship** can be built between stakeholders

- Local residents feel ownership of the reallocated public space
- Close cooperation between professional and steering organisations

## 3. **Pilot interventions** are useful

- Traffic problems can be solved with temporary signage as a pilot, with limited budget
- Experiences can be used to finalise (other, similar) projects



# Thank you for your attention!



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