

Landscape Forum Budapest & Danube Bend

Working Group 4

Between Here and There: Sustainable Peri-Urban Mobility

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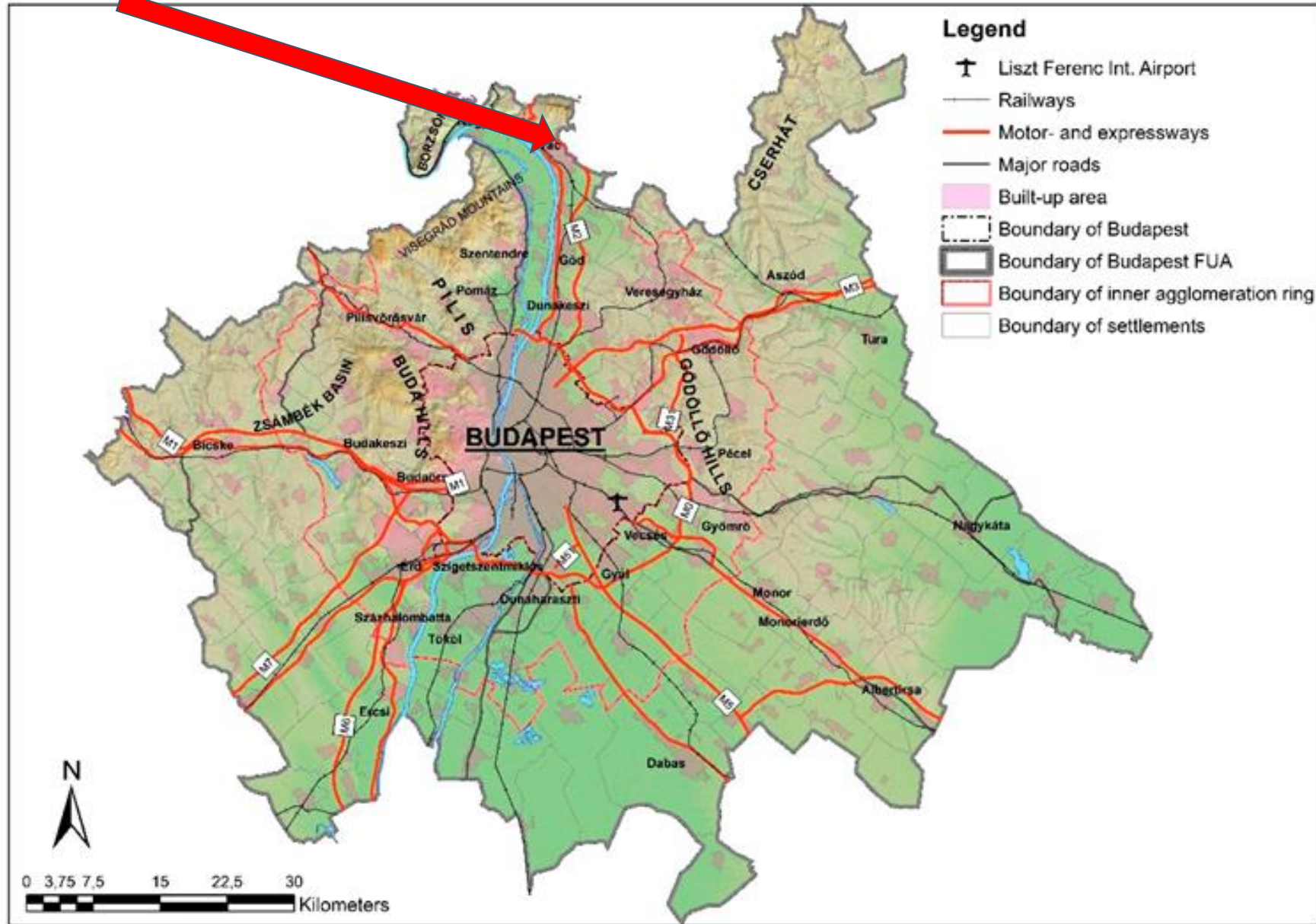
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Vác in the functional urban area (FUA) of Budapest



Budapest FUA:

199 Settlements

strong variety of density

3 million residents

272,000 daily commuters

Vác is itself a commuters' destination

Lennert, J.; Farkas, J.Z.; Kovács, A.D.; Molnár, A.; Módos, R.; Baka, D.; Kovács, Z. Measuring and Predicting Long-Term Land Cover Changes in the Functional Urban Area of Budapest. *Sustainability* 2020, 12, 3331.

<https://doi.org/10.3390/su12083331>

Where we were: At the edge of the edge



Location of the Vác' secondary school center with 2000 students from all over the region on the former military ground

Some impressions from our case study area

Iskolaváros literally means "School Town" and refers to a **dedicated educational district** in **Vác**, where several schools and training institutions are concentrated.

It developed after 1990 on the grounds of a former **military barrack**.



Bernáth Kálmán Reformed Secondary School



Váci Madách Imre Gimnázium

Identifying challenges for sustainable mobility

blocking the pedestrian route



no respect of public space



Identifying challenges for sustainable mobility

tight space



no lighting



Identifying challenges for sustainable mobility

no shelter for sun/rain



only one train per hour



Identifying challenges for sustainable mobility

inconvenient space for bikes park, no shelter, no bike lanes



Identifying challenges for sustainable mobility

Only one bus per hour



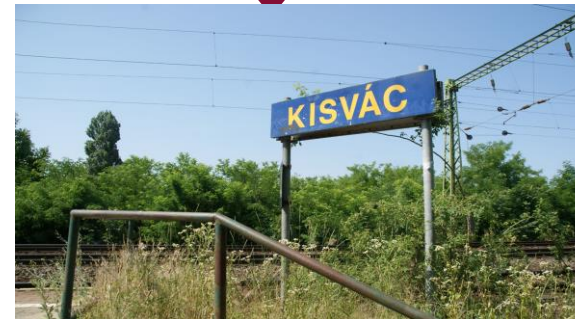
No traffic light, unsafe crossing



Natural Paving and Seating Spaces



other facilities



landscape and street tree spaces

transportation system

Focus of our inquiry

How does the **landscape** affect mobility?

How does **mobility** affect the landscape?



Our focus question

How might we encourage more sustainable, in particular more active mobility (i.e., walking & cycling) for the high school campus of Benáth Kalmán at the northern edge of Vác?

What do we need to know?



What is the **current state** of the landscape? How does it **determine** mobility? *we need to do a spatial analysis, expert oriented & participatory, with multiple methods*



Which distances do the school students, teachers and employees have to **overcome every day**? What **determines** their mobility behaviour? *we need to conduct surveys, interviews, focus groups*



What are the needs, constraints and perspectives of the **public transport providers**? *we need to do expert interviews, analysis of itineraries and frequency of services*



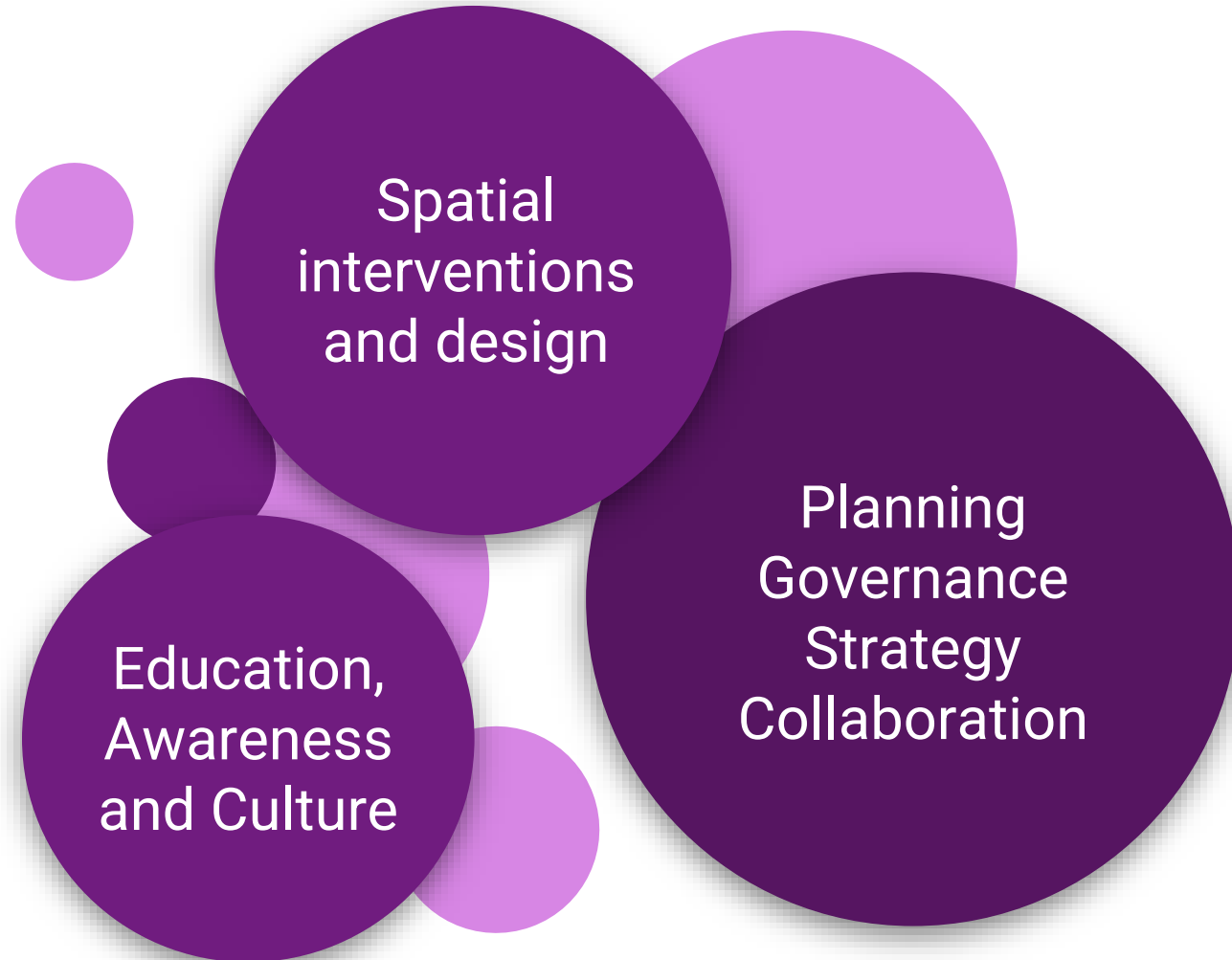
What is the current mobility **planning & policy framework** within the Functional Urban Zone of Budapest? *we need to conduct expert interviews, analysis of planning and policy documents & processes*

The landscape context of the school district



- Secondary Schools
- Wetland
- Potential park
- Sports Field
- Bus & train stop
- Railway track
- Main Road
- Internal Road
- Bicycling path with walking trail

Mobility transition pathways are multisectoral



Some possible measures on the campus:

Create a high-quality bicycle parking at the school, include green roof and photovoltaics for charging ebikes.

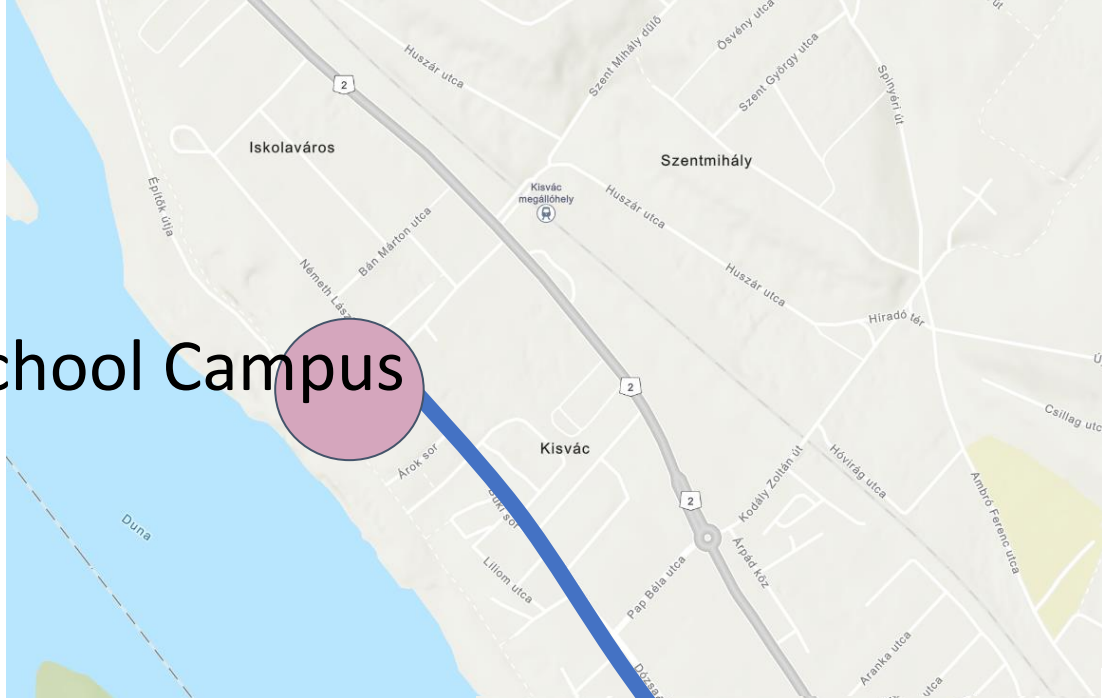
Improve the walkability overall

Add traffic lights and introduce speed reduction at the main road bus stops



Improve bus and train stops by adding solar panels, natural shading, covered seating, ventilation, and full accessibility.

School Campus



source: infravelo

Introduce **priority to bicycles** on the secondary road

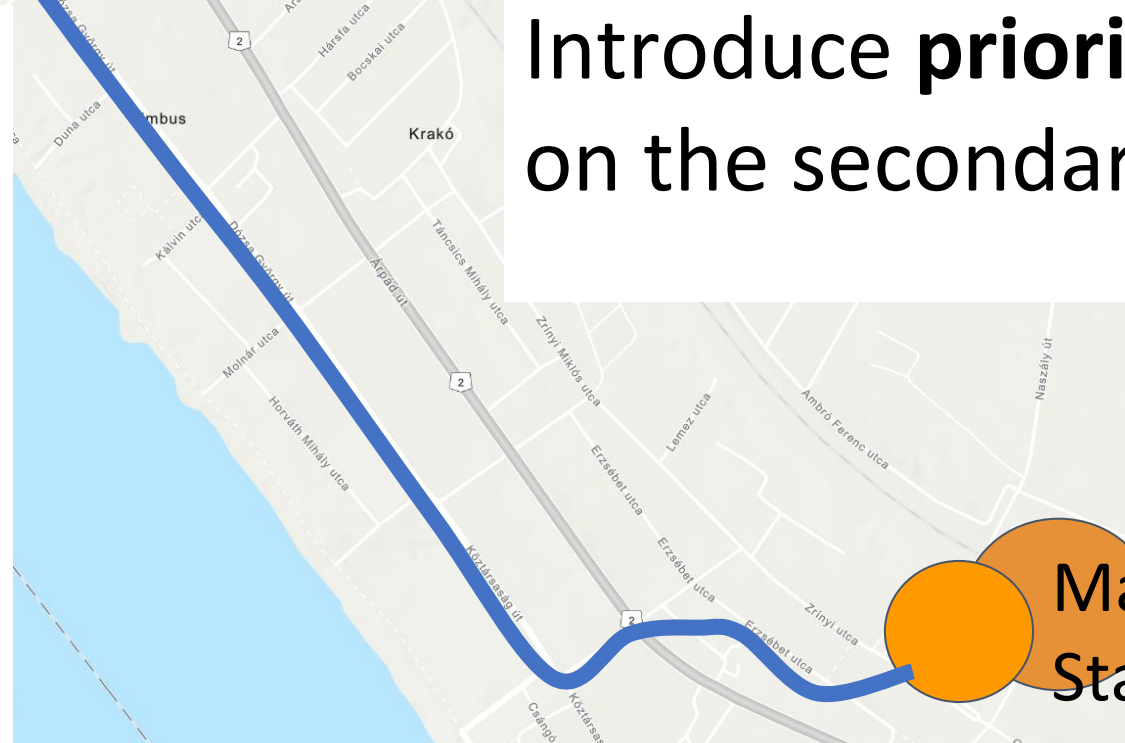
Introduce a **bicycle priority street** along Dósza György út and Köztársaság út (side roads).

Only by remarking and signs.

Create missing linkage to **central bus and main station**

Make sure shifting from bike to train is working smoothly.

Focus car & bus on the main road.



Main Train & Bus Stations

Include the school students proactively in these design questions and involve them in the co-creation of **transformative actions**.

We learn co-creation with kulturaktiv!



source: freepik



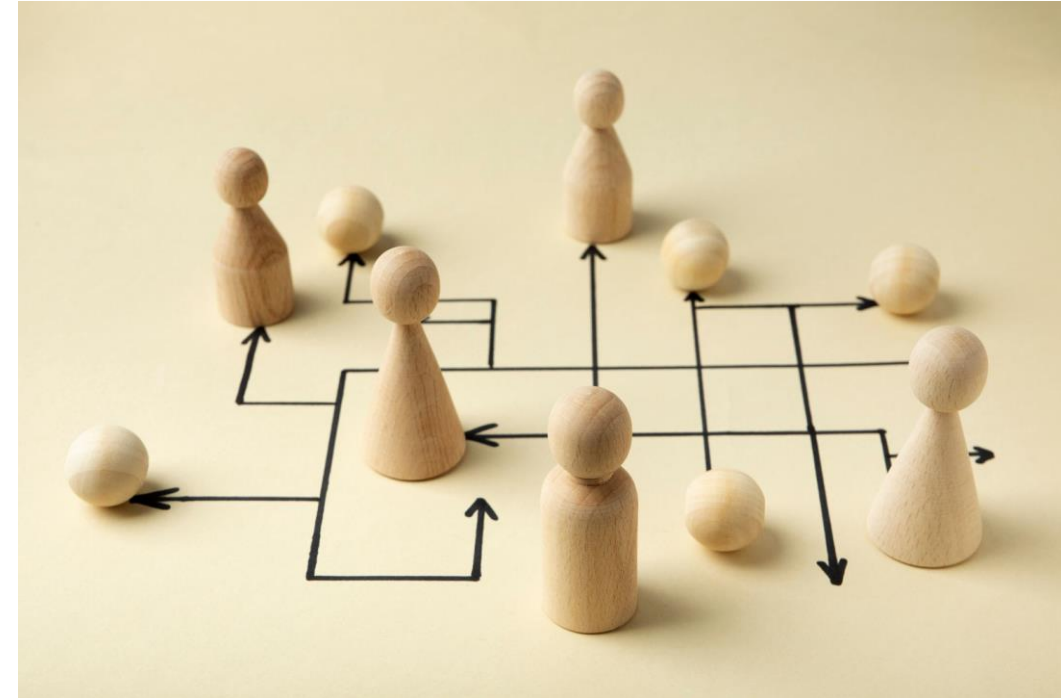
Some possible **STRATEGIC** measures:

Develop and implement an **integrated sustainable mobility policy** with strategic goals and coherent measures

Set **clear targets** on how to improve active mobility (i.e. increase the overall share of walking and biking)

Apply a **multi-level approach** for the functional urban area of Budapest, integrating all actors at county and municipal level

Ensure **proactive governance** and **effective collaboration** of all actors



source: freepik

Some possible **EDUCATIONAL** measures:

The highschool could promote **education for sustainable development**.

Include **sustainable mobility** in this educational programme.

Teachers are **role models**.

A **‘school cycling day’** to motivate and learn.

Make sure all students **learn how to cycle** safely in urban environments.

Interact creatively with the transnational cycling route that passes the school.



source: freepik

Limitations

Within the short time of the forum we could only outline a draft research agenda for this problem and some ideas to start with.



Key messages for the forum outcome statement

The transition towards a sustainable and active mobility needs an integrated process at the interface of spatial design, strategic planning, education and cultural production.

The school campus in Vác has a great potential for becoming a reference case for promoting sustainable mobility.

Such integrated transition pathway can create various co-benefits for recreation, health, social coherence and spatial quality.