

BikeACCESS

INTERNATIONAL SUMMER SCHOOL

Ljubljana, September 2024

Group: 2

Home Location: Murgle

**Participants: Anastasija Blagojčević, Jelena Marković, Ema Dubrić,
Damjana Lamovšek, Jakub Starzak**



FGG

UNIVERZA V LJUBLJANI
Fakulteta za gradbeništvo in geodezijo



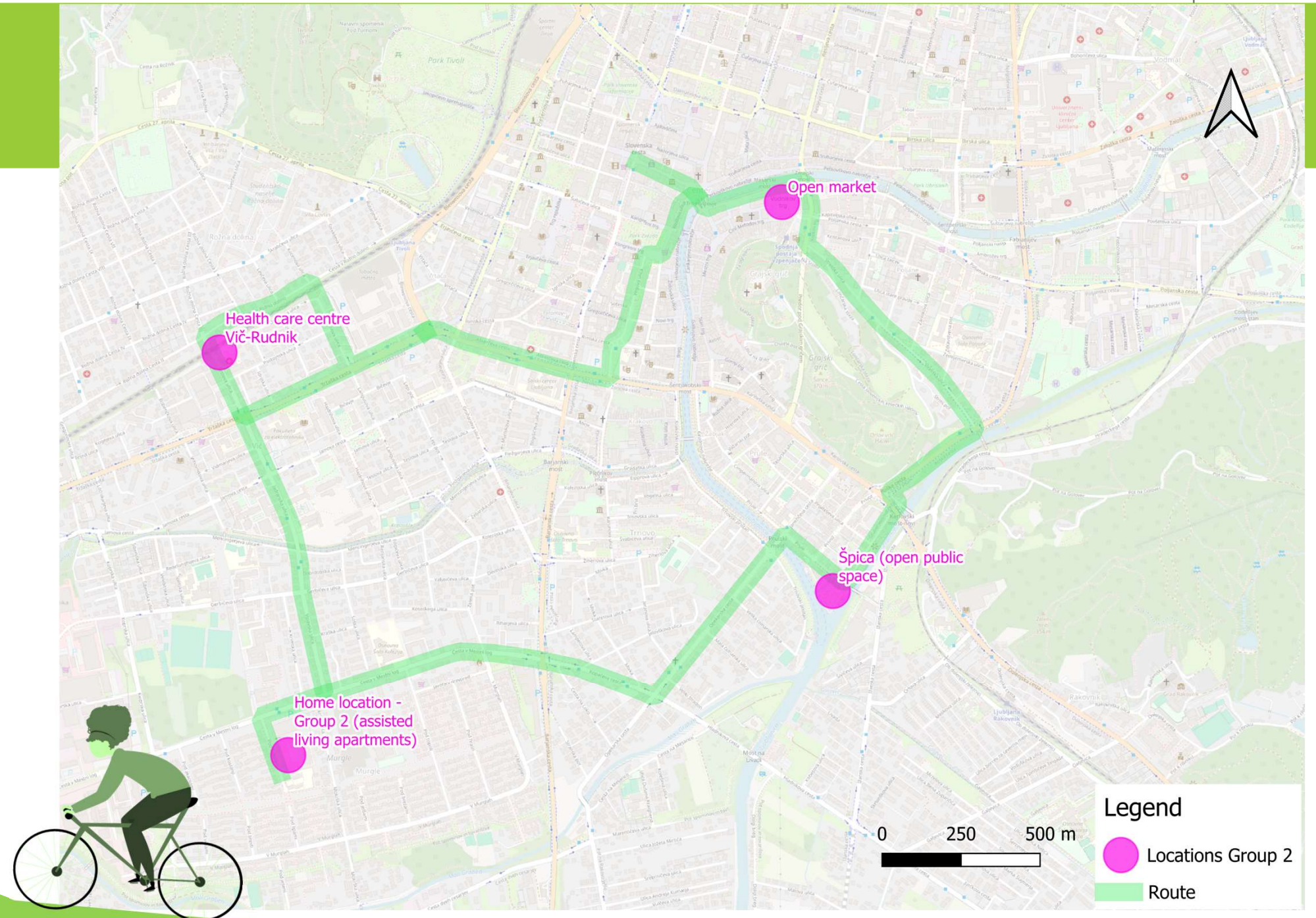
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REPUBLIC OF SLOVENIA
MINISTRY OF THE ENVIRONMENT,
CLIMATE AND ENERGY

INTRODUCTION

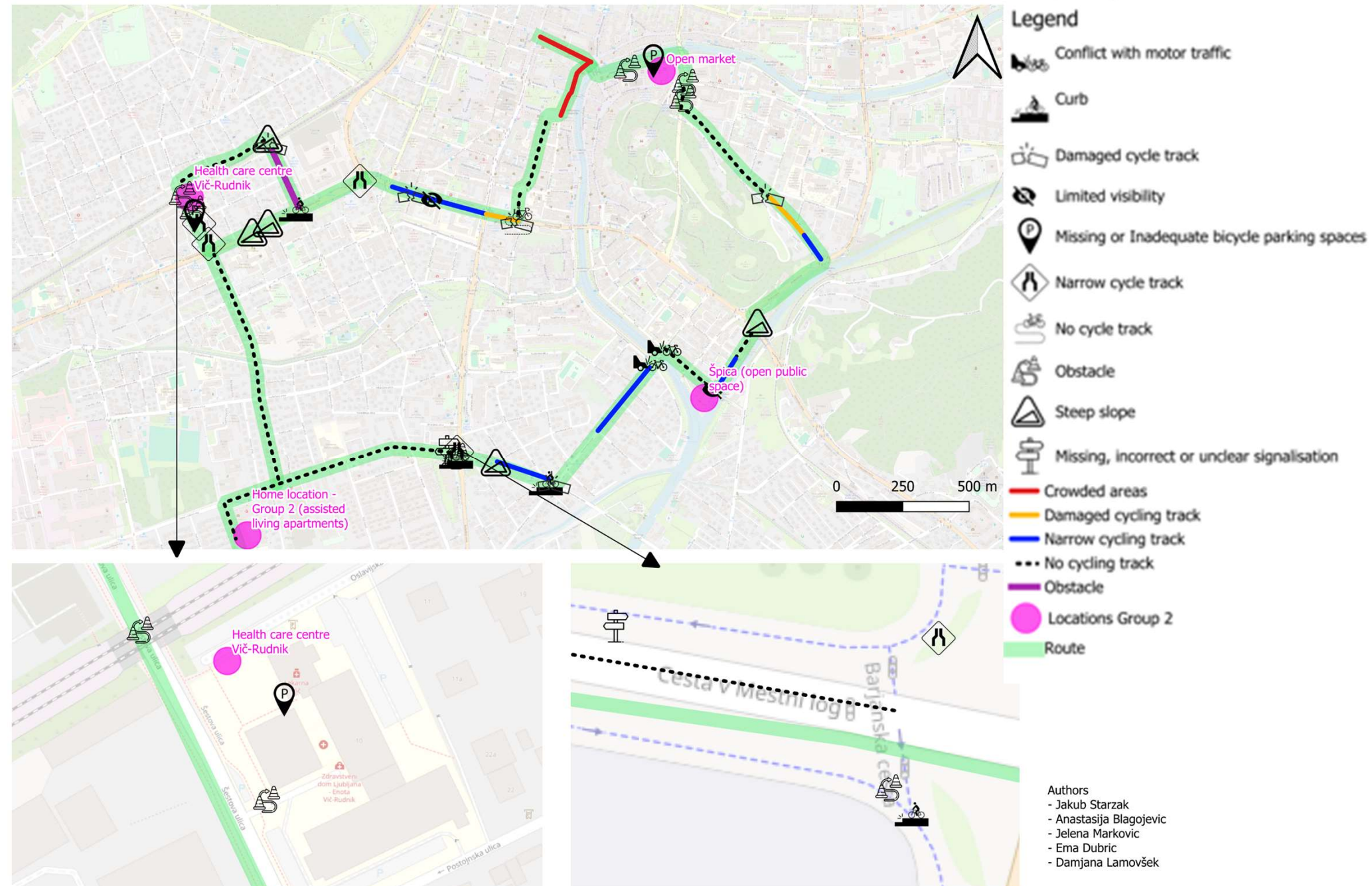
- **Cycling** is popular for its environmental, health, and economic benefits.
- Many areas lack safe cycling infrastructure, especially for **children, elderly and people with disabilities**.
- These groups face higher risks and need secure, accessible routes.
- This presentation identifies problem areas and suggests improvements to make cycling safer for all.



FIELDWORK

- Fieldwork was done in two groups, by bicycle and on foot.
- The studied route connects home with the health center, open market, and open public space in Ljubljana.
- **Goal:** Identify threats for vulnerable cyclists.
- QField app was used to map problem areas with points and lines.
- Taken photos showed missing cycle tracks, narrow paths, and poor access.

Map 1. Problematic areas



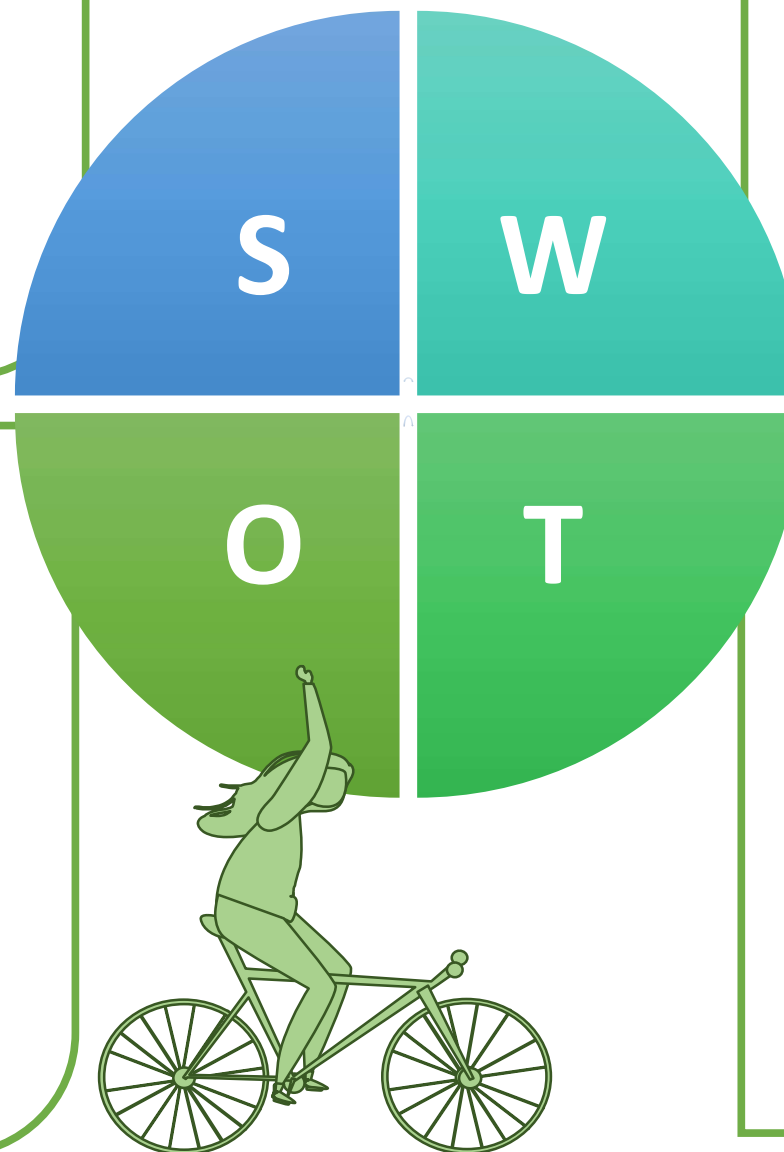
SWOT

- The existence of bicycle tracks that form a network
- The existence of parking spaces for bicycles
- Good traffic signage and lights
- Suitable terrain
- Faster moving through the city in rush hours

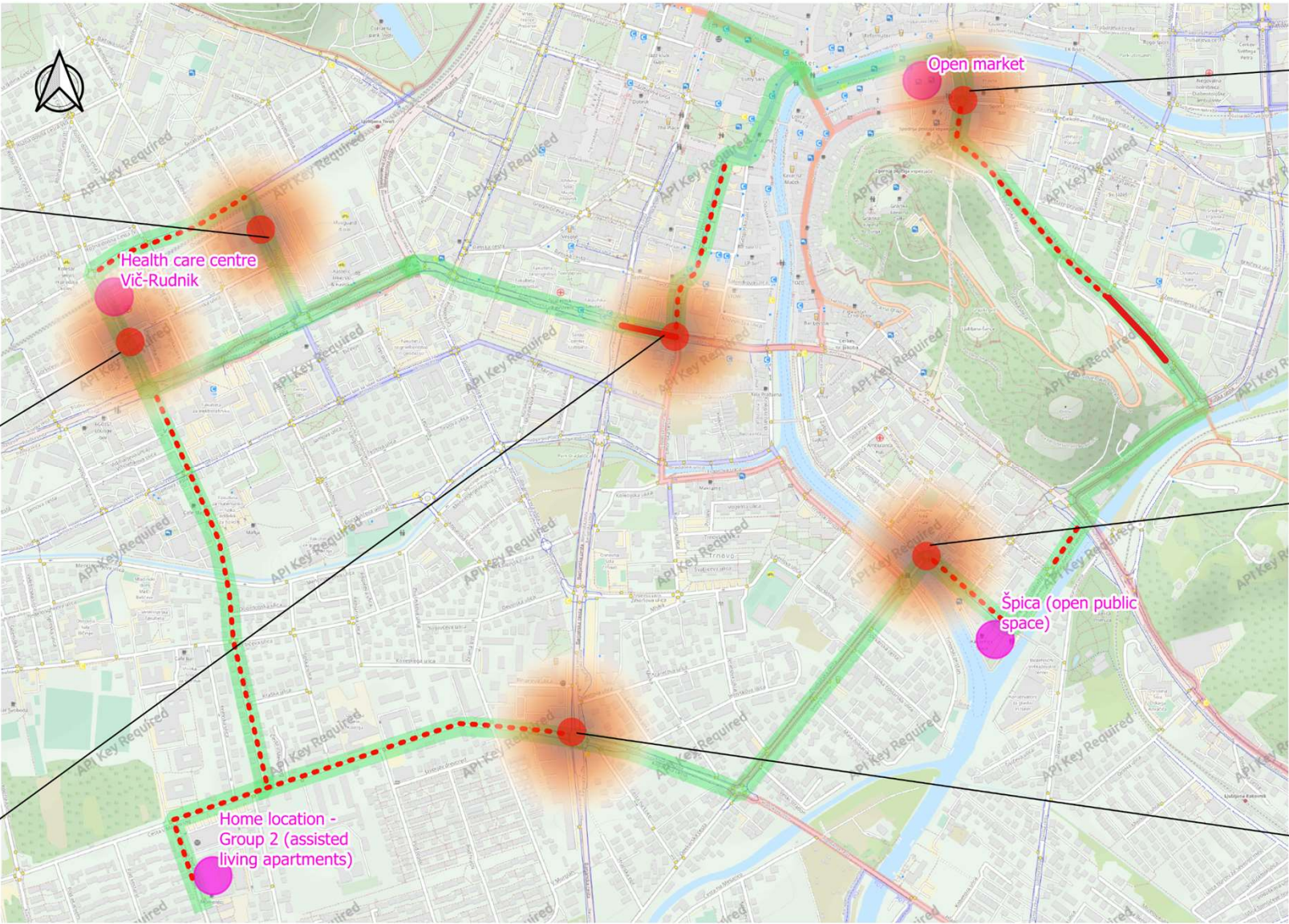
- Narrow tracks
- Damaged tracks
- Possible conflicts with the motor traffic and pedestrians
- Not friendly for vulnerable groups
- Missing bicycle tracks in some areas
- Limited visibility
- Steep or challenging gradients
- Inappropriate use of materials (bricks)
- No space for new/better tracks

- Planned bicycle tracks by the authorities
- Possibility for easy bike renting
- Bike-friendly mindset
- Tourism potential
- Environmentally sustainable
- Educated and skilled users
- Event hosting
- Improvement of existing infrastructure
- Expansion of parking facilities

- The inconsistent maintenance can reduce the use of bicycles
- Possible accidents
- Increasing popularity of e-scooters
- Dual use of tracks by bicycle and scooters can cause accidents
- Increasing maintenance costs due to improper use and life span of bicycles
- Ignorance among bicycle users



BIGGEST PROBLEMS



- Legend
- Biggest problems
 - Damaged cycling track
 - No cycling track
 - Route

0 250 500 m

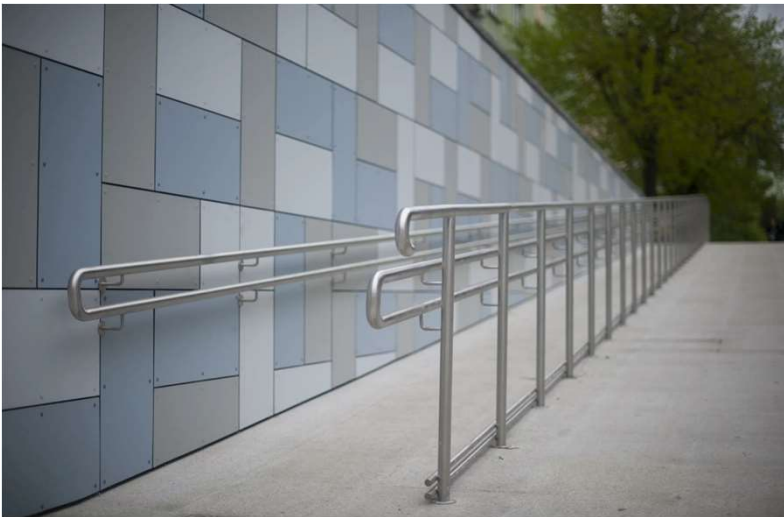
Authors
- Jakub Starzak
- Anastasija Blagojevic
- Jelena Markovic
- Ema Dubric
- Damjana Lamovšek



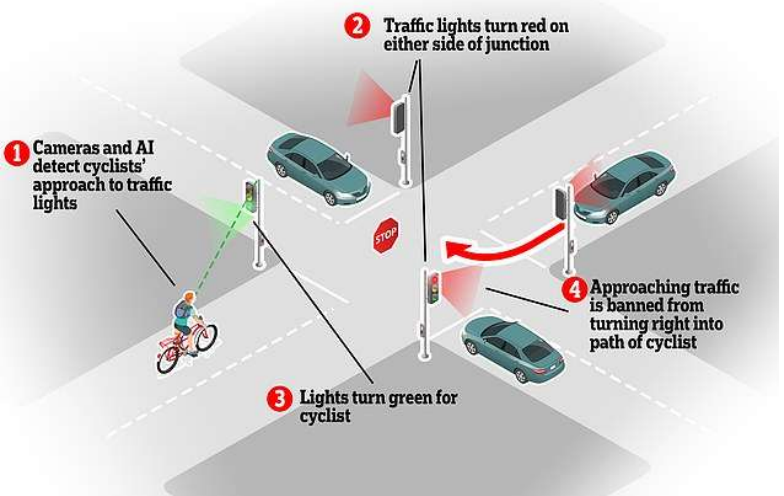
SPECIFIC



Separated cycling and pedestrian paths for safety with color distinct to improve clarity

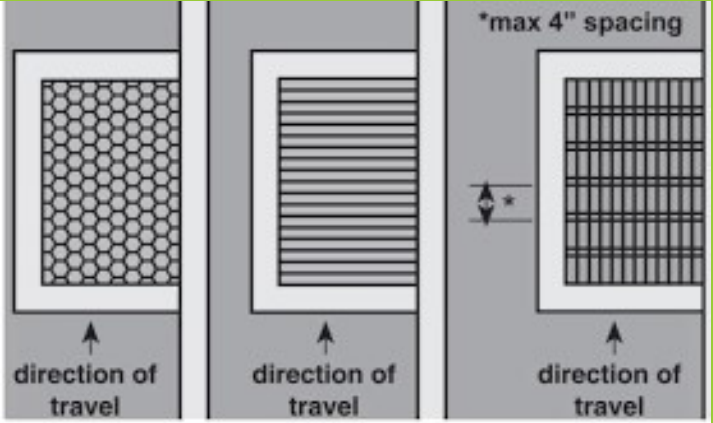


Installing adequate approach for people with disabilities in front Health Centre Vič Rudnik



Smart traffic lights for cyclists - use sensors to detect cyclists and adjust the duration of the green light

Improving sewage drainage, which eliminates potential dangers for cyclists and improves their riding comfort.



Reconstruction of paths with inadequate material and avoiding high curbs



GENERAL

SOLUTIONS



Improved sustainability through solar-powered cycling tracks



Pre-Fab bike lane barriers could help keep cyclists safe



Creating friendly spaces for cyclists by: planting trees, developing bicycle infrastructure

Using reflective materials and barriers to separate the motor traffic from the bicycles and make cyclists more visible to drivers



Organizing campaigns for people with disabilities



Introducing regulations for electric scooters and bikes, which pose a particular risk to vulnerable groups



CONCLUSIONS



Renovation

- Many existing cycling tracks are in poor condition, compromising their daily usability.
- Urgent track renovation is necessary to ensure safety and comfort for cyclists.



Signalization

- Clear and visible signage at tracks and intersections is crucial.
- Dedicated traffic signals for cyclists help with navigation and alerting drivers.

Widening

- Numerous tracks are too narrow, often less than the recommended width of 1.5 meters.
- Expanding tracks to a minimum of 1.5 meters due to the narrowing of the street or constructing on free space



Accessible Bicycle Parking

- Current parking spaces are often too small or inaccessible.
- Designing flat surfaces for bicycle parking will make them easily accessible for all users.



THANK YOU!

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DISABILITY

