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HUPMOBILE

Aalto University
School of Engineering

RESEARCHING MOBILITY BEHAVIOUR OF URBAN RESIDENTS APPLYING A MAPTIONNAIRE

Case from Turku

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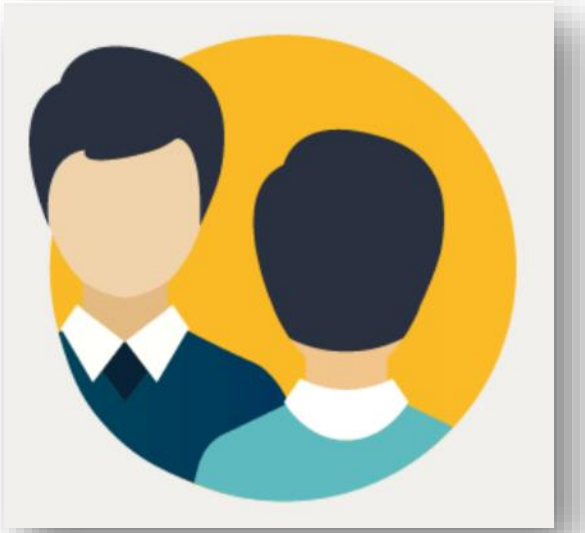
22.02.2022

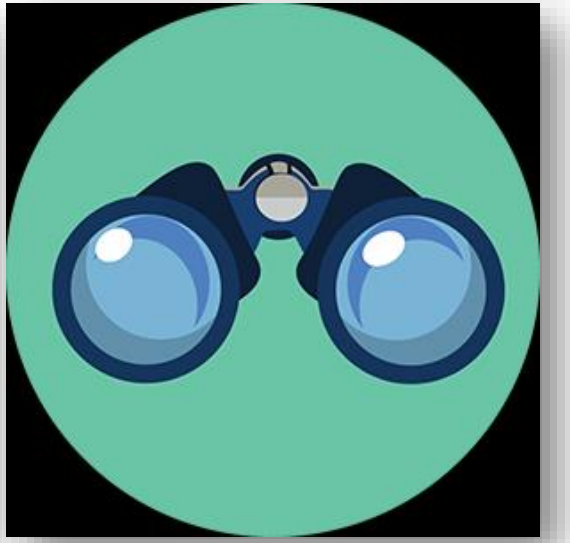
TRADITIONAL WAYS TO GATHER KNOWLEDGE FROM PEOPLE

Public hearings



Interviews

Surveys



Observations

PUBLIC PARTICIPATION GIS (PPGIS) METHODOLOGY

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SoftGIS knowledge layers

HardGIS knowledge layers

WHY PPGIS KNOWLEDGE?

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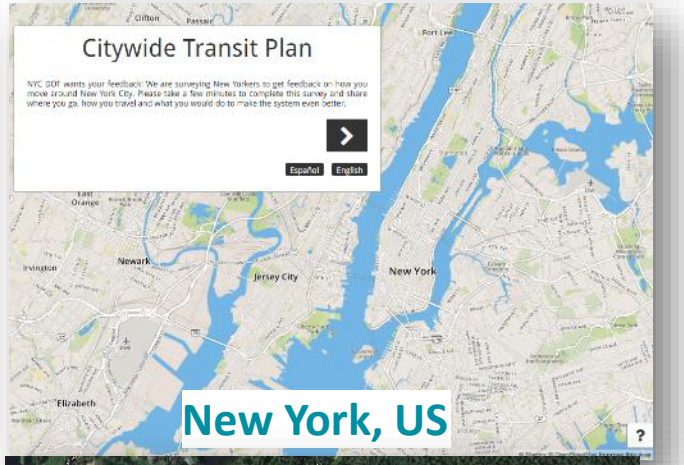
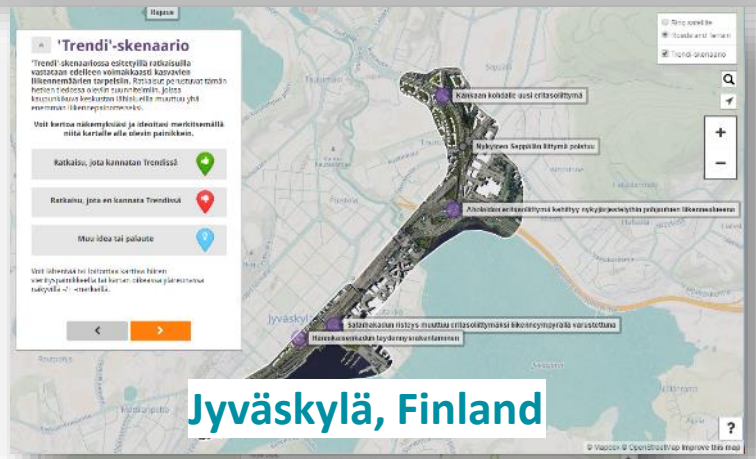
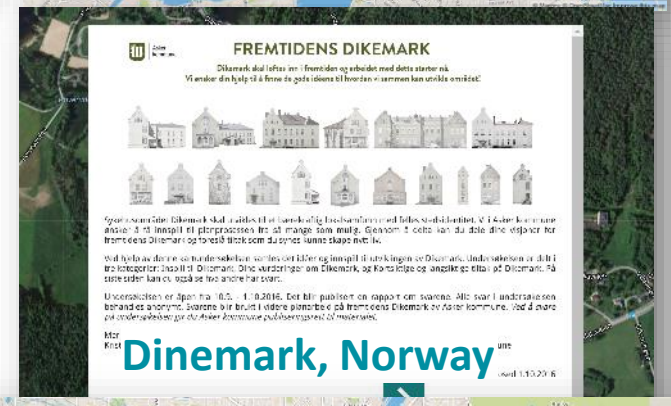
The analysis of ”soft” geographical information together with ”hard” GIS knowledge

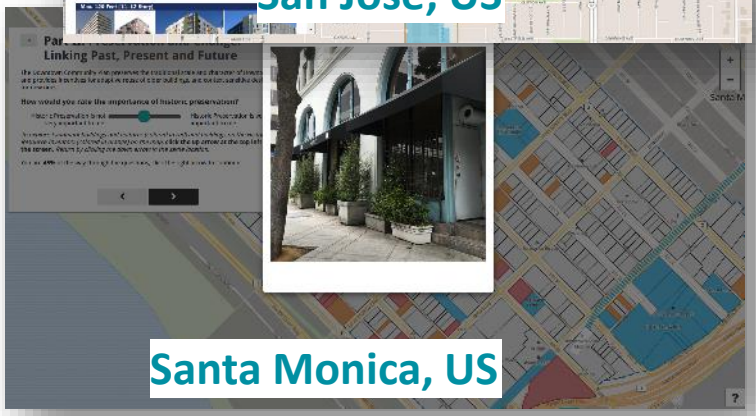
Linking the user knowledge to planning and design solutions and making large-scale participation possible

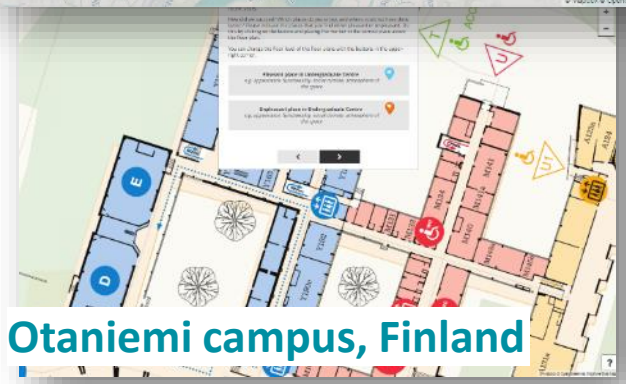
EXAMPLES OF PPGIS (MAPTIONNAIRE) PROJECTS



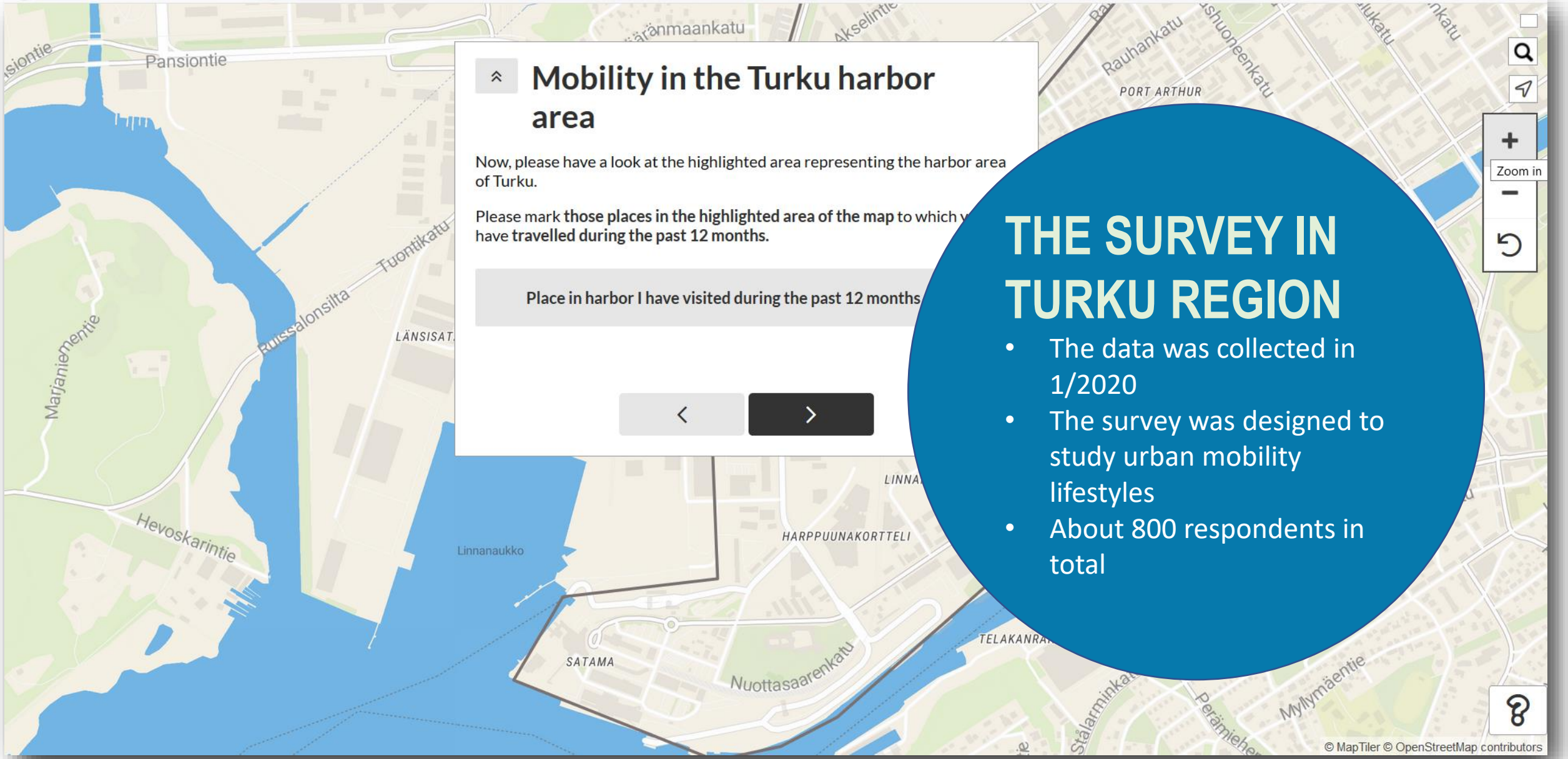








TURKU SURVEY



THE SURVEY IN TURKU REGION

- The data was collected in 1/2020
- The survey was designed to study urban mobility lifestyles
- About 800 respondents in total

FOUR PERSONAS

PRO-SUSTAINABLE URBANITES
23%

- Value green and beautiful neighborhoods
- Prefer walking and cycling and good accessibility to public transportation and city center
- Often females and rather young
- Most likely to live in intensive transit zones

MULTIMODAL PRICE-CONSCIOUS RESIDENTS
32%

- Omnivorous but cost-sensitive in their travel mode choices
- Value functionality over attractiveness
- Often males and highly educated but have limited budget.

THE FIRST TWO GROUPS…

- Walk more than the following two groups – even in winter
- Also cycle more and use car less– regardless where thev live

TIME-CONSCIOUS SUBURBANITES 24%

- Value suburban, quiet and green neighborhoods with good proximity to schools and recreational facilities
- In their travel they are time-sensitive and car-oriented
- High-income residents who have often children
- Own one or more cars
- Least likely to live in intensive transit zones
- Use car more than other groups regardless of where they live

AUTO-ORIENTED RESIDENTS 22%

- Prefer good access to the main roads and district shopping center
- Value the cleanness of the neighborhood and spacious housing
- Are rather old and live alone or with a partner
- Live car-dependent life, but decrease their use of car if they live in intensive transit zone

WHO ARE YOU?

Pro-sustainable urbanites

Multimodal price-conscious

Auto-oriented

Time-conscious suburbanites

PERCEIVED HEALTH

PERCEIVED QUALITY OF LIFE

PRO-SUSTAINABLE URBANITES

MULTIMODAL PRICE-CONSCIOUS RESIDENTS

AUTO-ORIENTED

TIME-CONSCIOUS SUBURBANITES

HOW ABOUT FUTURE MOBILITY TO TURKU HARBOUR?

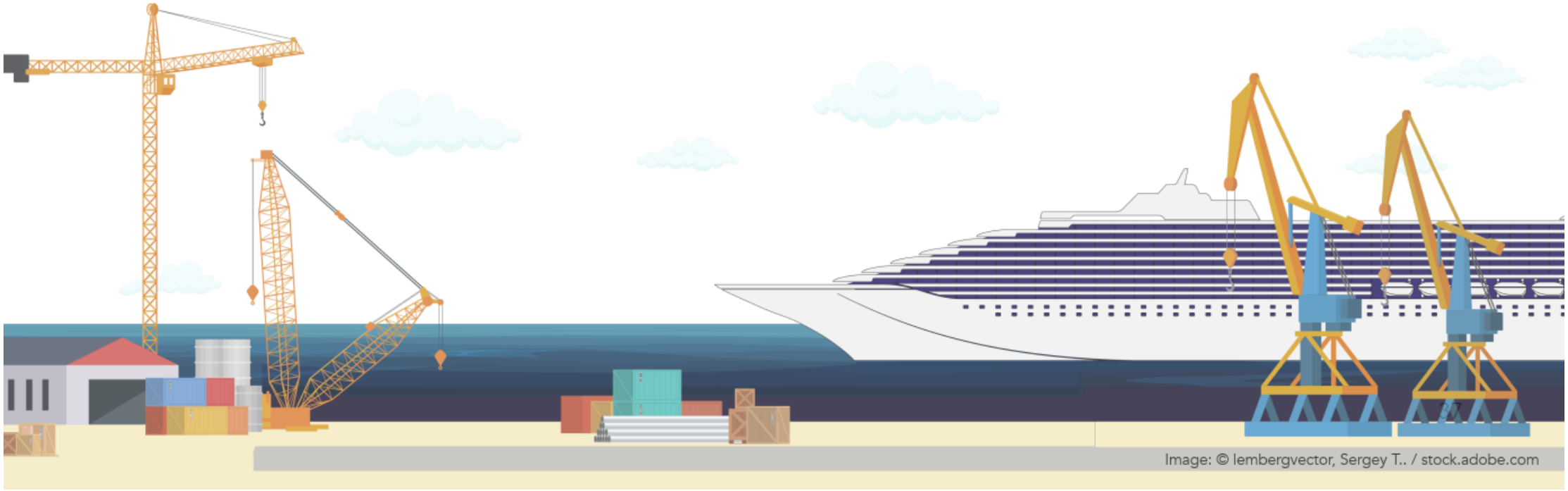


Image: © lembergvector, Sergey T.. / stock.adobe.com

THE LIKELIHOOD FOR USING…

- Walking and cycling infrastructure
- Bike sharing
- Scooter sharing
- Electric bike services
- Improved transit services

- Ride sharing
- Car sharing
- Car rental services

for their harbor related trips in the future

This research has been presented also in:

CUPUM conference 2021 by Ramezani et al (2021)

Abstract submitted to AESOP conference 2021 by Ramezani et al (2022)

MASTER THESIS by Leila Soinio (2021)

AIM

- Residential self-selection was taken into account in a study that aimed to examine, to what extent are built environment and attitudes associated with car use, walking, and cycling

CONCLUSIONS

- Urban zone of residence, travel attitudes & car-ownership are all significant predictors od car use and walking
- A positive attitude towards sustainable travel modes is likely to increase active transportation in all urban zones
- Living in intensive transit zone is likely to increase walking and decrease car use regardless of travel attitudes and preferences

NUDGING!

THE RESULTS CAN BE USED…

In transportation and land use planning:

- The identified personas can be targeted **as different market segments** for different mobility management strategies or policies aiming at increasing sustainable and active travel behavior
- The results can be considered when **investing to the improvements** of certain travel modes or when deciding about the maintenance levels of routes during various seasons
- The findings can also **inform land use policy** when estimating the best balance between supply and demand of various types of urban neighbourhoods: More people should be able to live in intensive transit zones, and target changing residents' attitudes towards sustainable modes of travel.

REPORT AVAILABLE (48 pages)

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