



Workshop on methods and models for the preparation of GHG emissions projections up to 2050

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CONTENT

Background of transport planning and model(ling) in Slovenia

Development and upgrades of national transport model

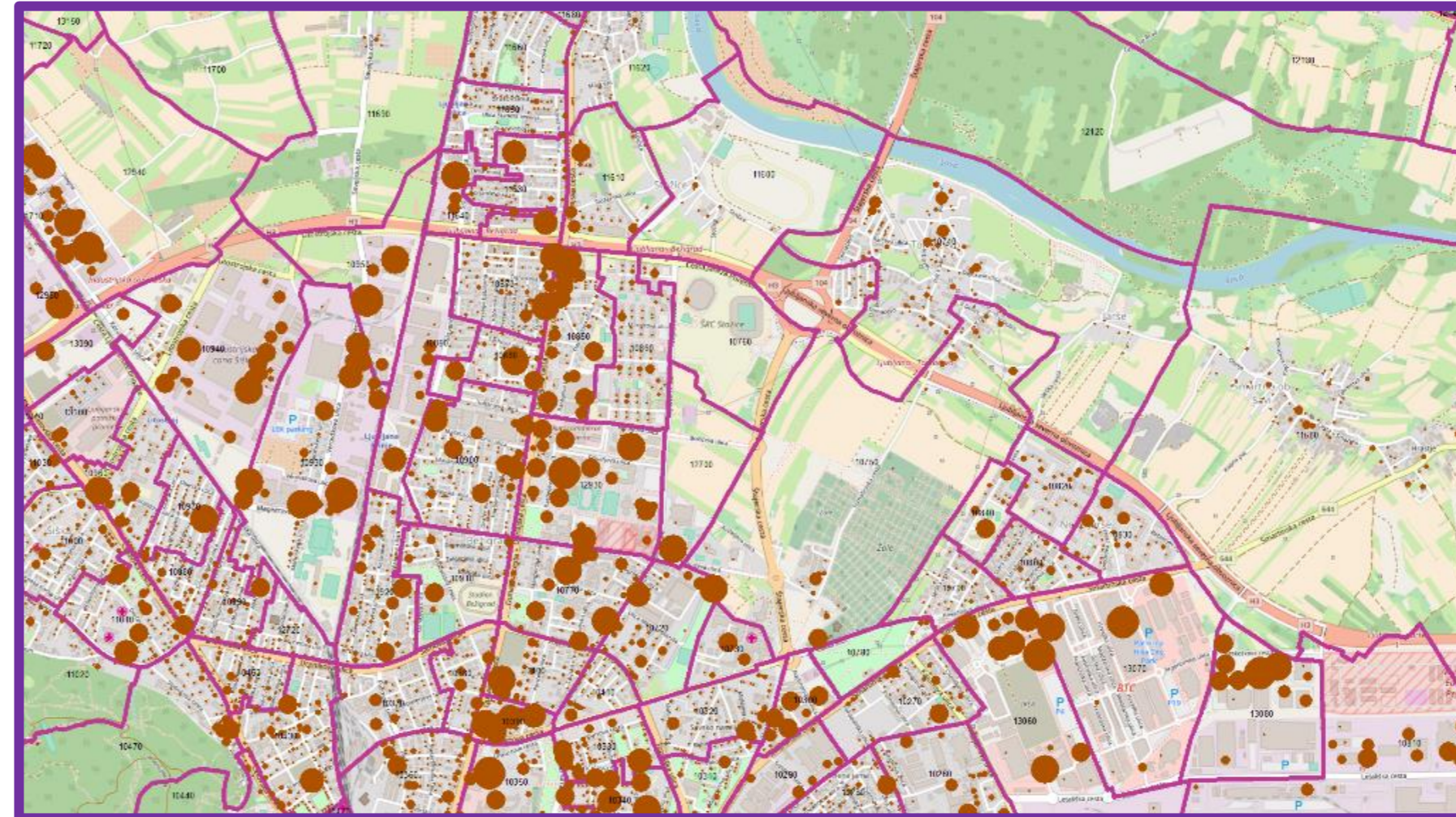
Use of transport model

SOCIOECONOMIC DATA

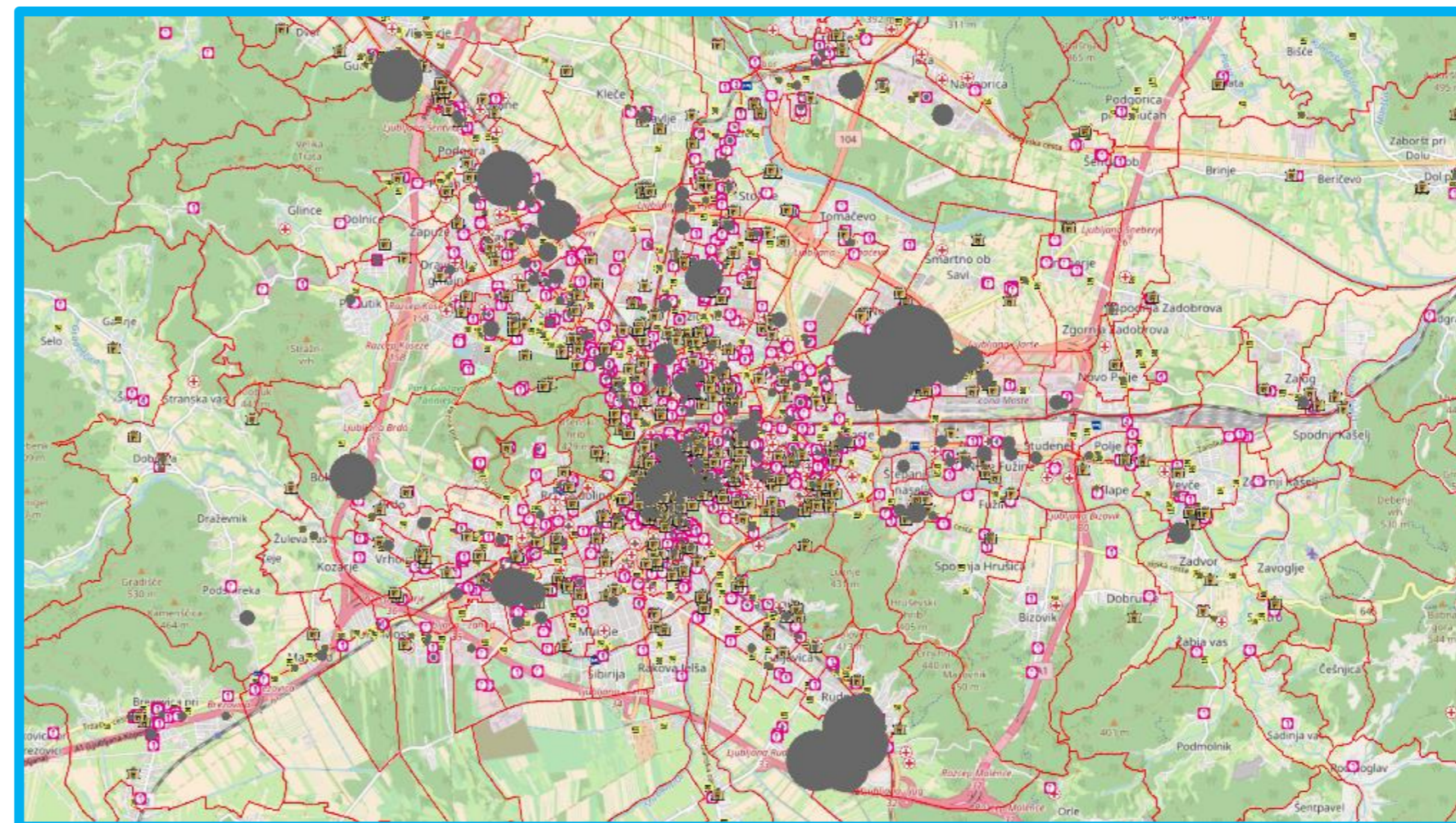
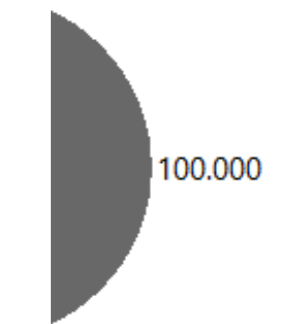
register of inhabitants

business register

register of buildings



- Prodajne_površine
NETO_TLORI
0,1
100

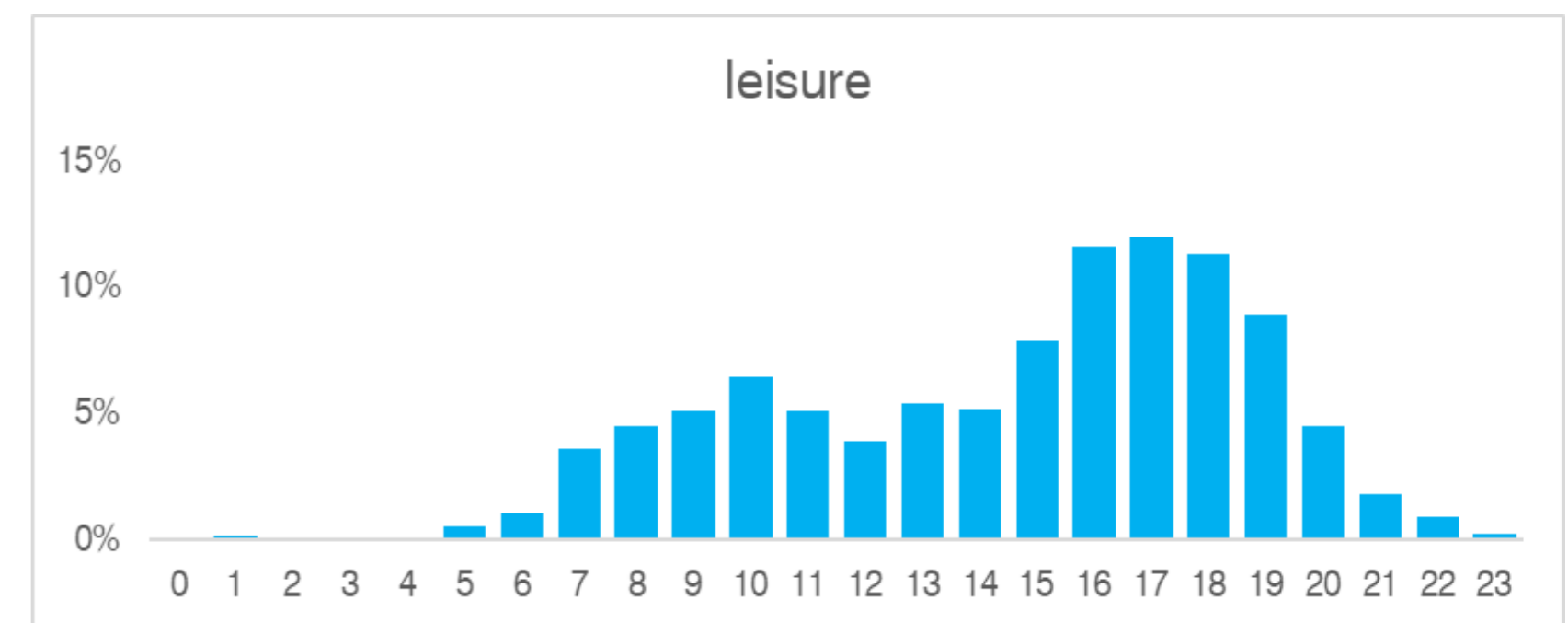
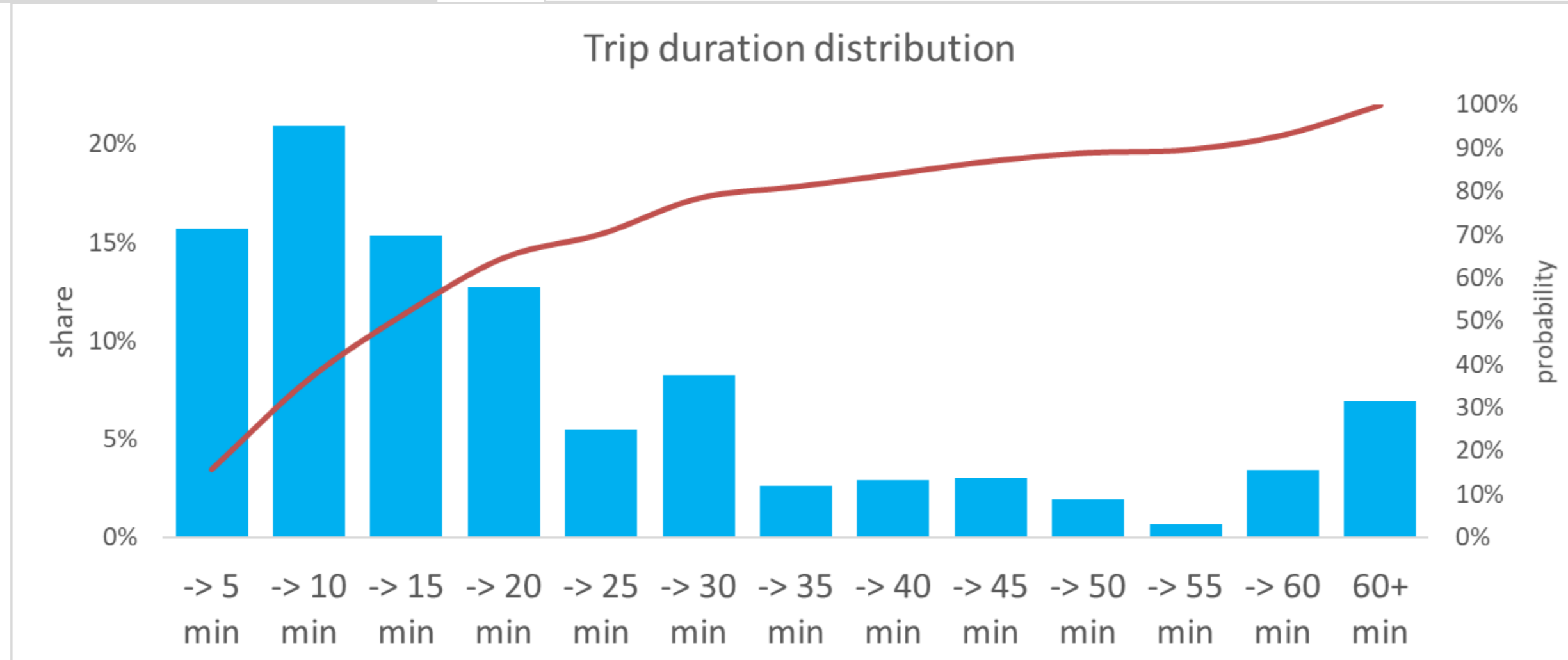
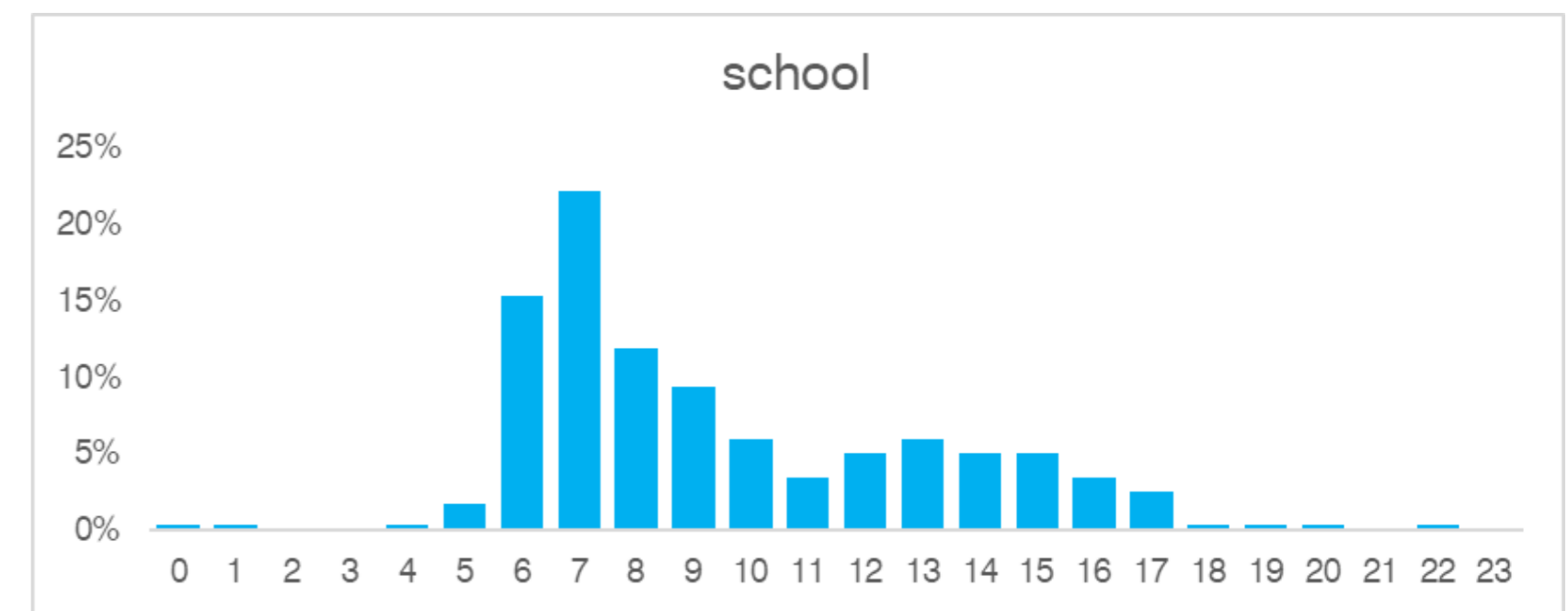
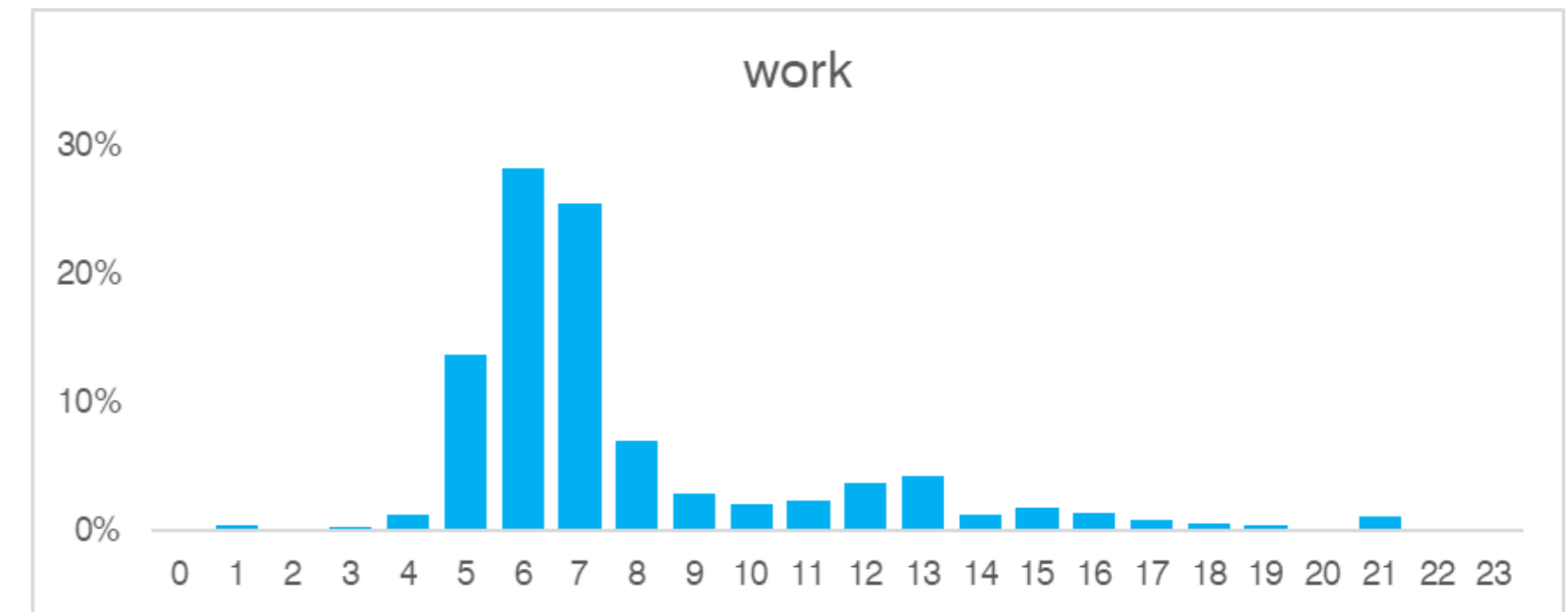
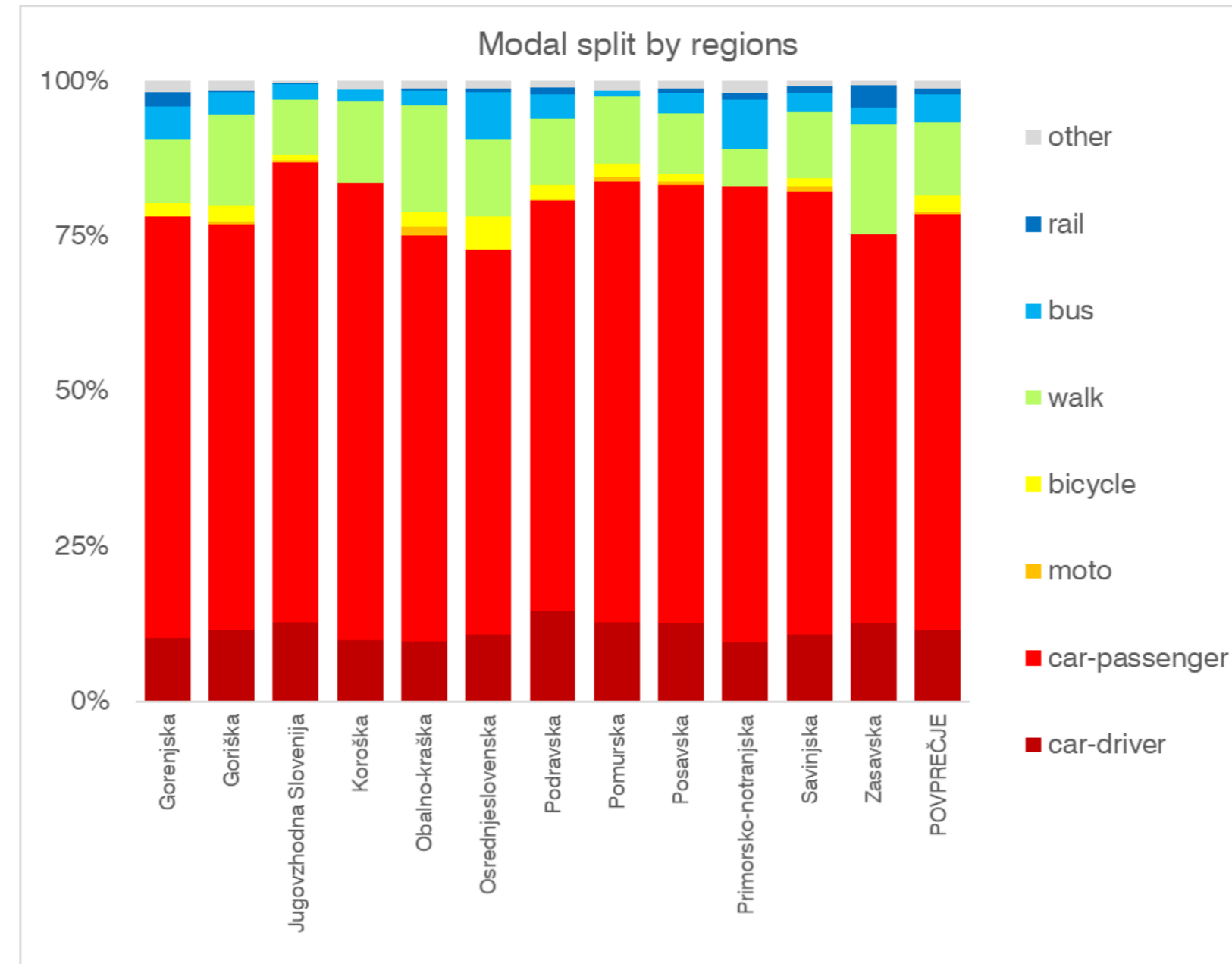
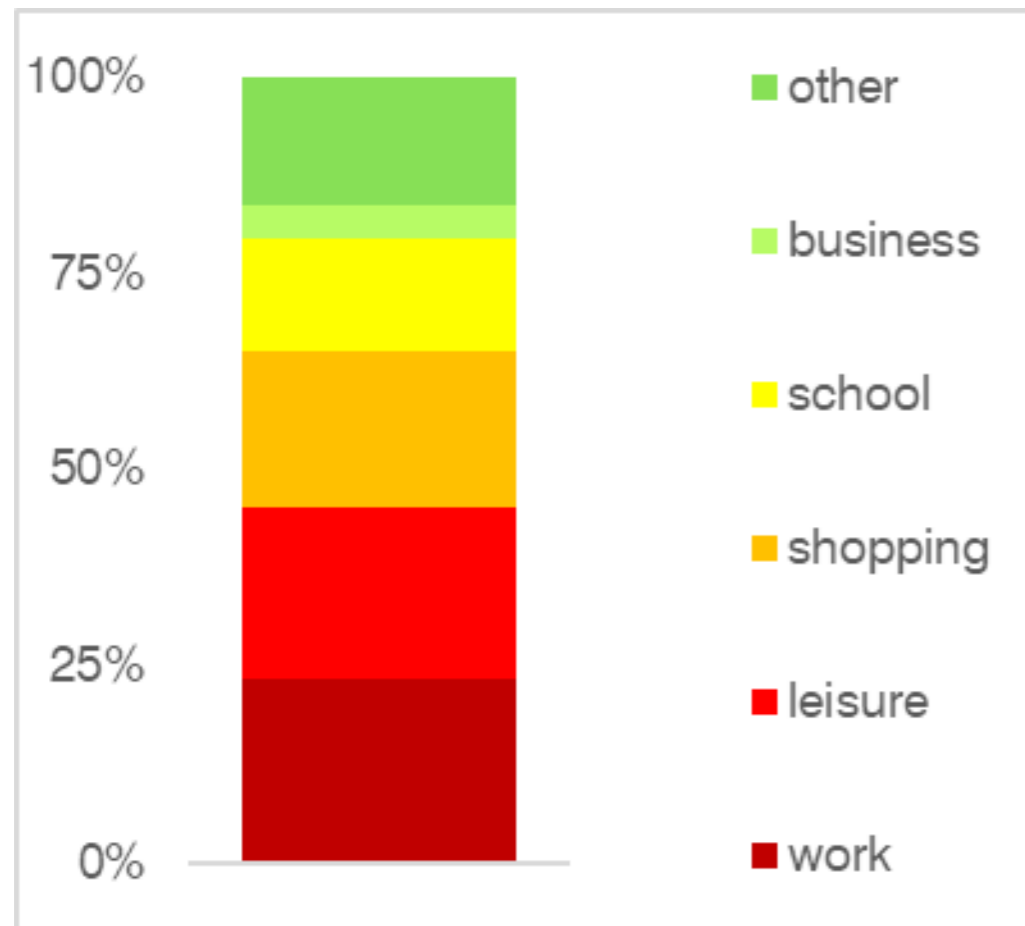


- Prosti_čas
- Gostinstvo
- Zdravstvo
- Prodajne_površine
- Hoteli-apartmaji
- nove cone_zone
- Basemap
- OpenStreetMap

Projekt LIFE ClimatePath2050 (LIFE16 GIC/SI/000043)
je financiran iz finančnega mehanizma LIFE, ki ga
upravlja Evropska komisija, in iz Sklada za podnebne
spremembe Ministrstva za okolje in prostor RS.

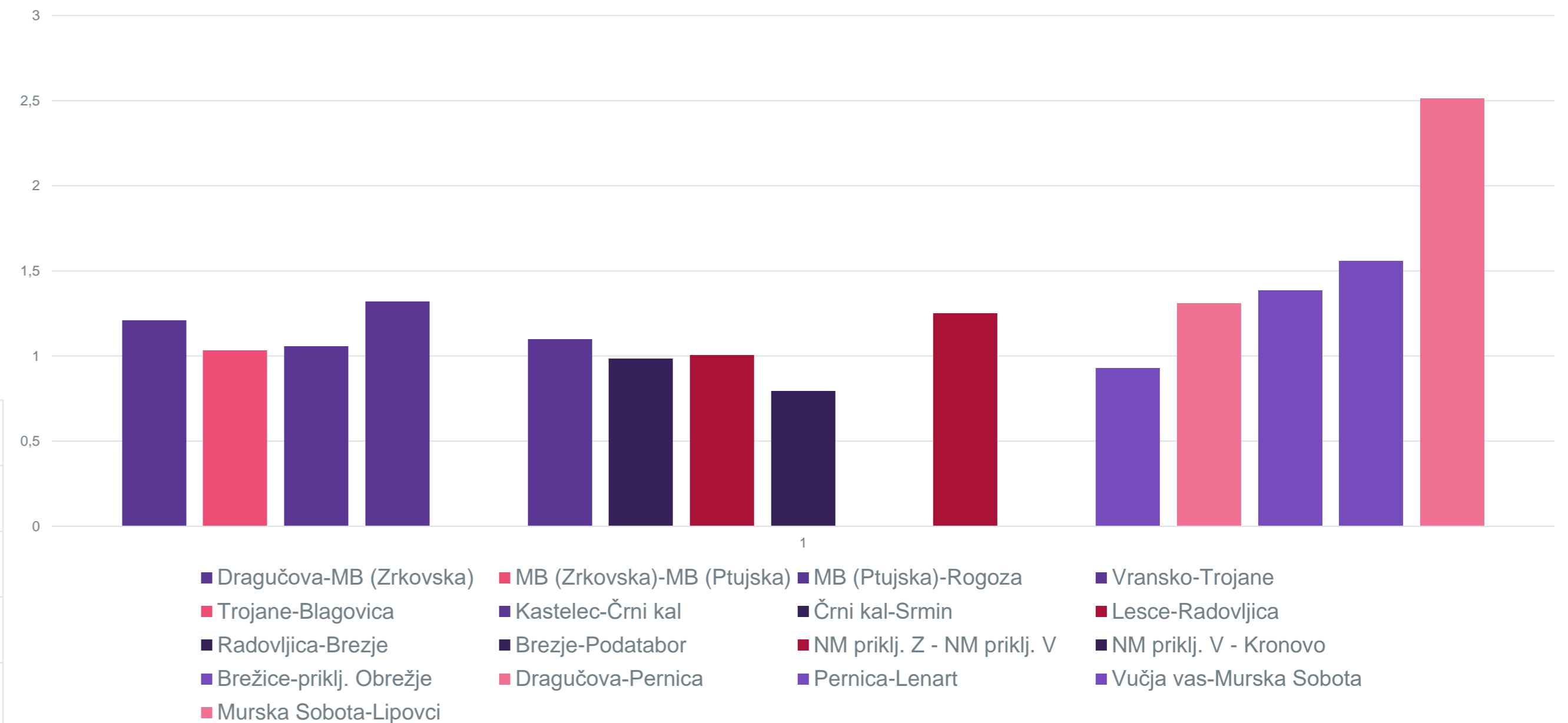
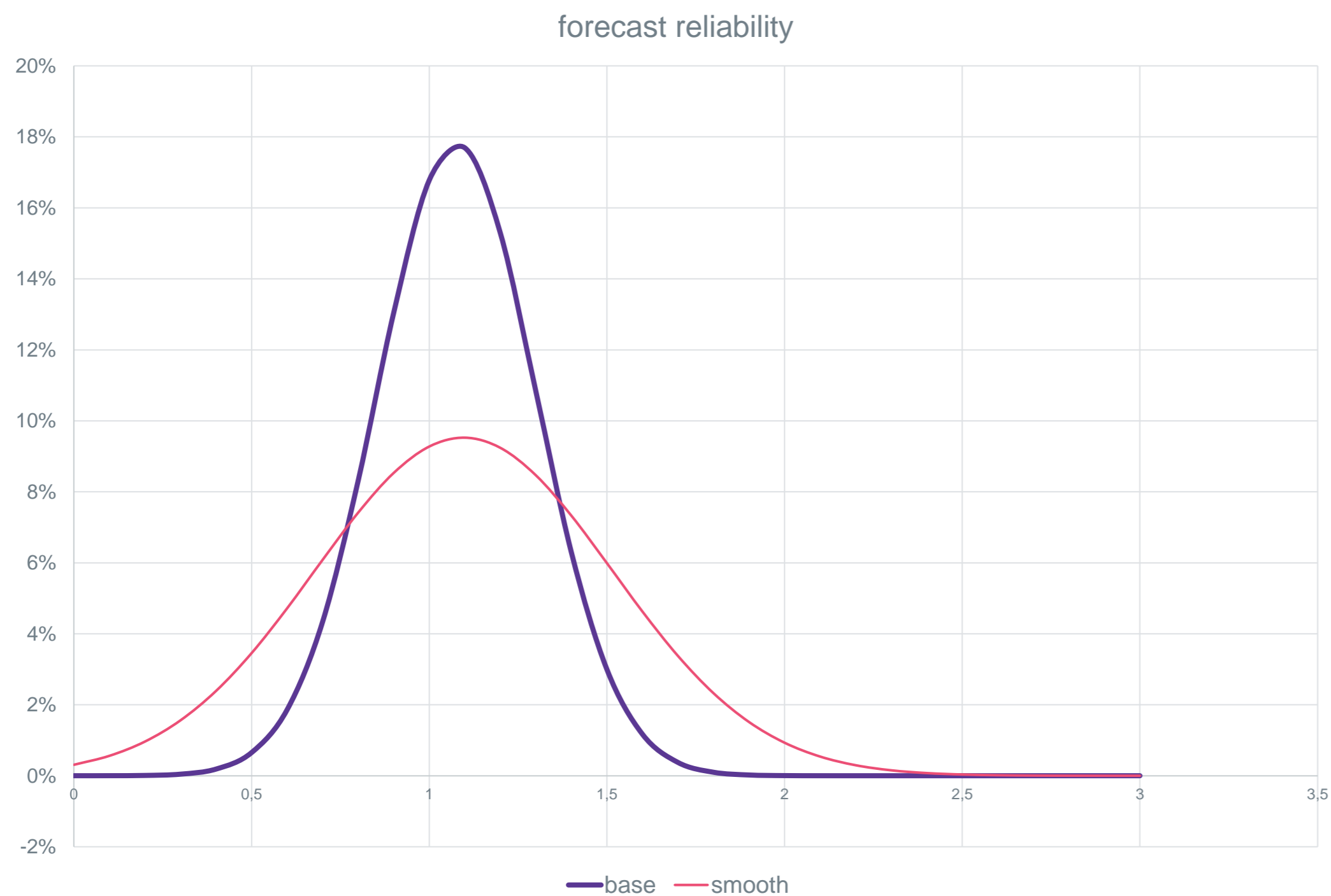
BEHAVIOURAL DATA

mobility survey



EXPERIENCE WITH USING TRANSPORT MODELS

- ex-post analysis



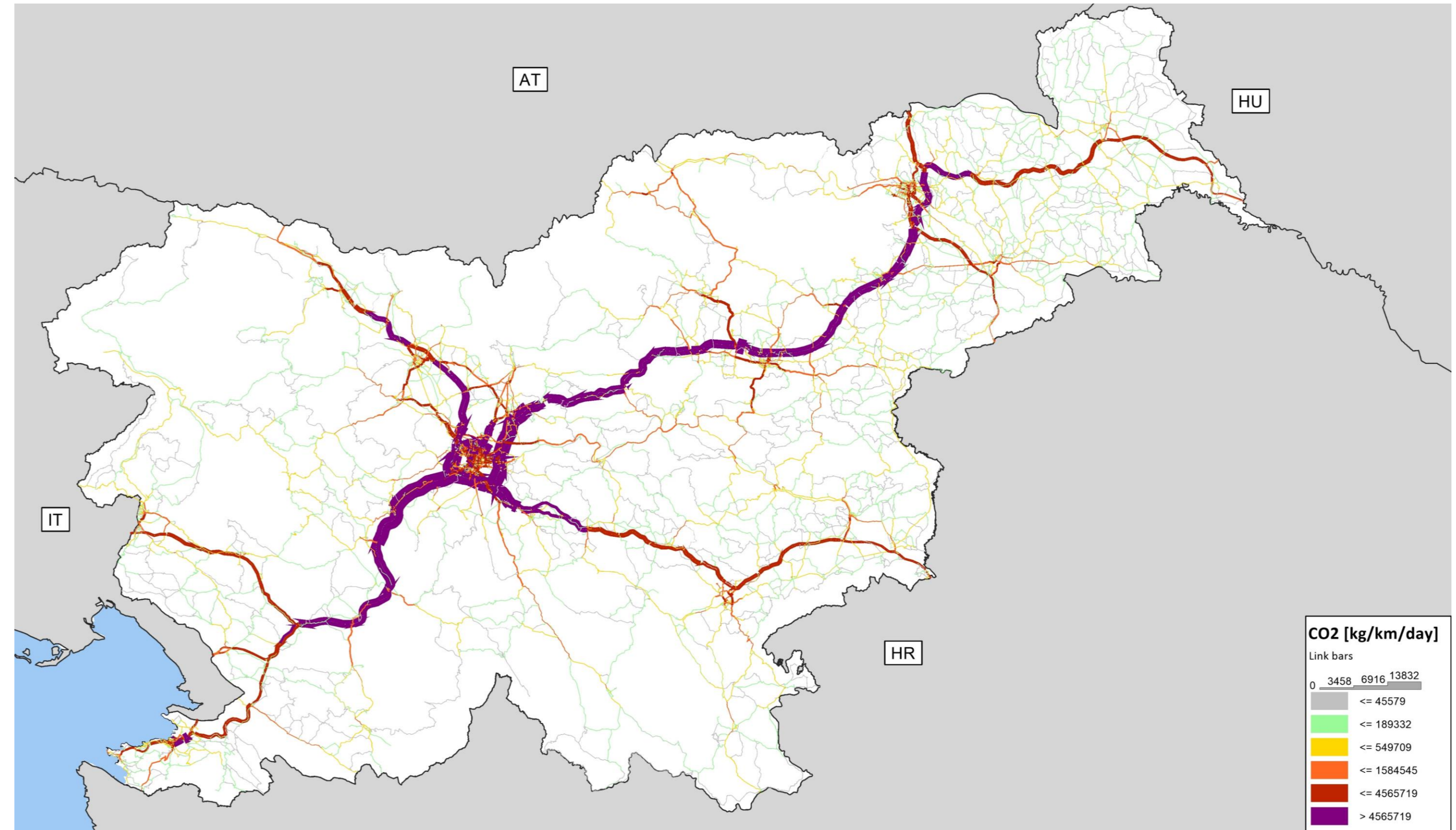
UPGRADE OF NATIONAL TRANSPORT MODEL

- Integration of HBEFA 4.1
 - The Handbook of Emission Factors for Road Transport (HBEFA) was originally developed on behalf of the Environmental Protection Agencies of Germany, Switzerland and Austria. In the meantime, further countries (Sweden, Norway, France) as well as the JRC (European Research Center of the European Commission) are supporting HBEFA.
 - provides emission factors, for all regulated and the most important non-regulated pollutants as well as fuel/energy consumption and CO2 are included.
- Analysis of external drivers for projections
- Projections up to 2050
- Testing scenarios

HBEFA 4.1

Changes in:

- Hot emissions factor
- New traffic situations
- Real-world fuel consumption and CO₂ emissions
- WTT emission factors
- Updates of cold start and evaporation emission factors
- Updates of non-regulated emission factors
- Adapted vehicle layers
- Updated country data
- Software updates of Diesel PC



EXTERNAL DRIVERS FOR FORECAST

| Slovenia | | EC-EPC (AWG) 2018 projections | | | | | | | |
|--|----------|-------------------------------|------|------|------|------|------|------|--|
| Main demographic and macroeconomic assumptions | | | | | | | | | |
| Demographic projections - Eurostat 2015-based population projections | | | | | | | | | |
| | Ch 16-70 | 2016 | 2020 | 2030 | 2040 | 2050 | 2060 | 2070 | |
| Fertility rate | 0.2 | 1.58 | 1.62 | 1.66 | 1.70 | 1.74 | 1.78 | 1.81 | |
| Life expectancy at birth | | | | | | | | | |
| males | 7.6 | 78.2 | 78.9 | 80.4 | 81.9 | 83.3 | 84.6 | 85.8 | |
| females | 6.3 | 83.8 | 84.4 | 85.7 | 86.9 | 88.0 | 89.1 | 90.1 | |
| males | 5.4 | 17.7 | 18.1 | 19.2 | 20.3 | 21.3 | 22.2 | 23.1 | |
| females | 5.0 | 21.4 | 21.8 | 22.8 | 23.8 | 24.7 | 25.6 | 26.4 | |
| | 2.4 | 0.2 | 4.2 | 4.1 | 4.3 | 3.8 | 2.8 | 2.5 | |
| | 0.1 | 0.0 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | |
| | -0.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | |

| | Ch 16-70 | 2016 | 2020 | 2030 | 2040 | 2050 | 2060 | 2070 |
|-------------|----------|-------|-------|-------|-------|-------|-------|-------|
| (thousands) | -264 | 1,372 | 1,330 | 1,268 | 1,201 | 1,116 | 1,098 | 1,108 |
| 1) | 0.8 | -0.8 | -0.7 | -0.5 | -0.7 | -0.5 | 0.1 | 0.0 |
| | -271 | 1,278 | 1,237 | 1,155 | 1,103 | 1,021 | 992 | 1,007 |
| | 0.9 | -0.8 | -0.8 | -0.5 | -0.6 | -0.7 | 0.1 | 0.1 |
| | -175 | 985 | 980 | 930 | 877 | 822 | 806 | 810 |
| | -176 | 975 | 971 | 918 | 867 | 812 | 796 | 799 |
| | 3.1 | 76.3 | 78.5 | 79.5 | 78.6 | 79.6 | 80.2 | 79.4 |
| | 1.3 | 71.8 | 73.7 | 73.3 | 73.0 | 73.6 | 73.5 | 73.1 |

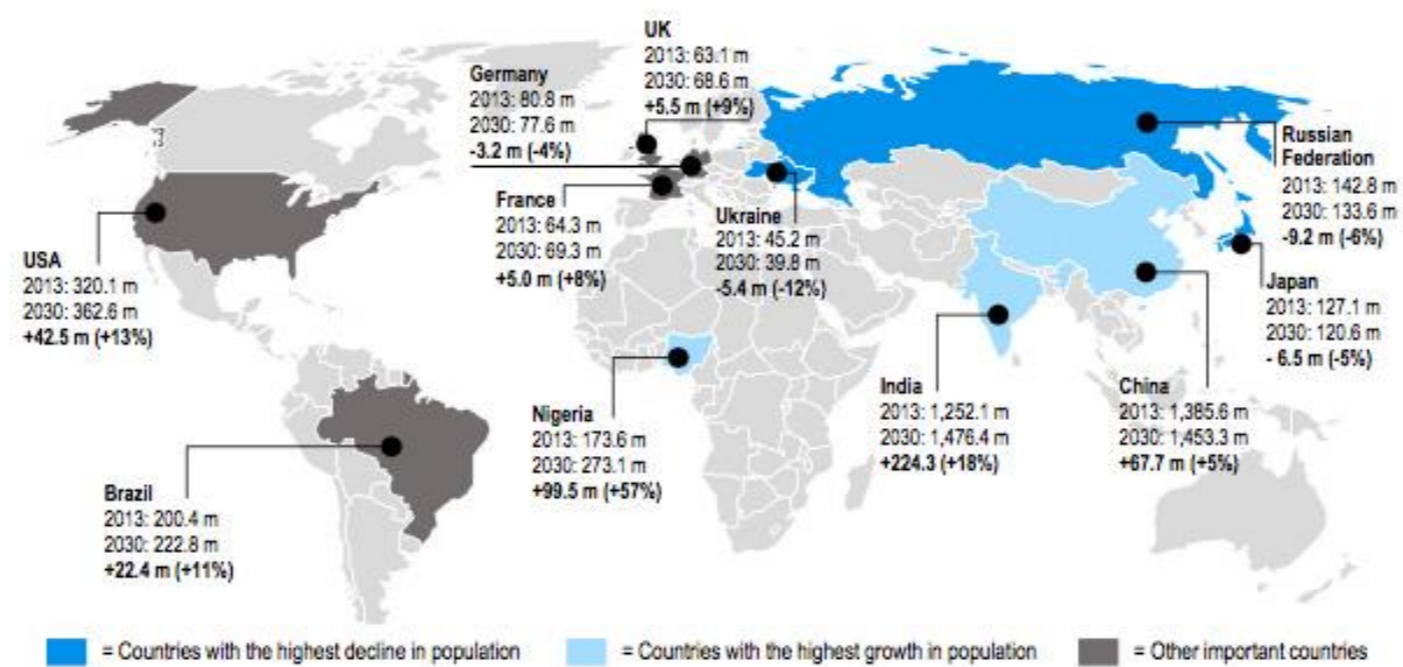
The 2018 Ageing Report

Underlying Assumptions & Projection Methodologies

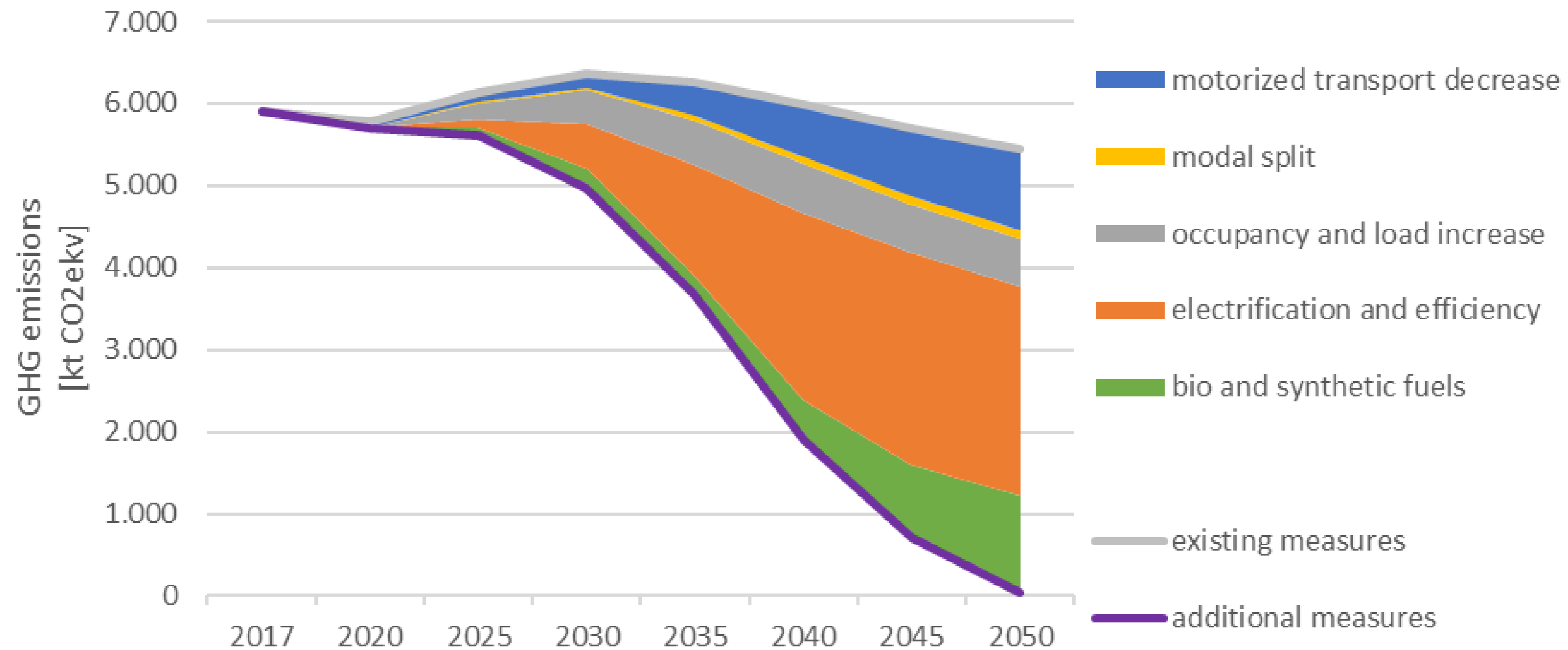
INSTITUTIONAL PAPER 065 | NOVEMBER 2017



Key countries in terms of population growth/decline between 2013 and 2030



TESTING DIFFERENT TRANSPORT AND SPATIAL POLICIES



USE

Action plan for investment 2020-2025

National Energy and Climate Plan (NECP)

Climate strategy