Research question

How does the urbanization of a region affect the distance traveled by a mode of transport?

How does the urbanization of a region affect mobility patterns?
- distance traveled versus time traveled
- distance traveled per mode of transport
- time traveled per mode of transport
- distance traveled per motive
- time traveled per motive
-

We only focus on pre-corona data before march 2020 in the Netherlands. Datasets we might use:
- https://opendata.cbs.nl/statline/portal.html?_la=en&_catalog=CBS&tableId=84710ENG&_theme=1159
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Questions:
- We have some difficulties with finding a nice data set that fits our research question. We came up with some data files that provide us some of the data, but not all of it. Could you maybe provide more datasets? Maybe for other countries?

Project
- Research question (10%)
  - Must include data modelling and quantitative research in TIL domain
  - Data check and requirements
- Coding/Logic (30%)
- Narrative (20%)
- Code readability (20%)
  - Pep8 standard, modularity, creating libraries if necessary
- Individual contribution (10%)
- Technical quality and significance (10%)

Possible research questions:
- How did covid affect flight emissions?
- How did the defect of the Nord Stream 1 gas line affect the gas price?
- How does train ticket discounting affect the attractiveness of trains?
- How can discounting the ticket price of public transport affect the attractiveness of public transport?
- How can the mode of transport affect the distance traveled around the year?
- How does the seasons of a year affect the distance traveled by a mode of transport ?
- *How does the urbanization of a region affect mobility patterns?*
  - distance traveled versus time traveled
  - distance traveled per mode of transport
  - time traveled per mode of transport
  -

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- https://data.london.gov.uk/dataset/public-transport-journeys-type-transport
- https://www.cbs.nl/nl-nl/visualisaties/verkeer-en-vervoer/personen/hoeveel-reisden-inwoners-van-nederland-en-hoe-
- https://opendata.cbs.nl/statline/portal.html?_la=en&_catalog=CBS&tableId=84709ENG&_theme=1159
- https://opendata.cbs.nl/statline/#/CBS/en/dataset/84755ENG/table?ts=1664956971593

29 jan 2020 free use of trains in Luxembourg
Train mobility luxemburg before 2020 and after 2020
Average price train ticket before 2020 in Luxembourg

Gaan er echt meer mensen met het ov, of zijn het vooral de mensen die al met het ov reisden die meer kilometers gaan afleggen?"
Daarbij gaat het onder meer om de vraag in hoeverre een 'prijsprikkel' mensen de auto uit kan krijgen

Possible datasets
• EUROPE data - https://ec.europa.eu/eurostat/web/transport/data/main-tables
• CBS data - https://opendata.cbs.nl/statline/portal.html?_la=en&_catalog=CBS
• Dutch open data - https://data.overheid.nl
• Google mobility report - https://www.google.com/covid19/mobility/
• COVID data - https://ourworldindata.org/coronavirus, https://data.rivm.nl/covid-19/
• Flight data - https://opensky-network.org
• Public transport data -
https://travic.app/?z=12&x=260915.3&y=6251439.5&l=osm_standard&ol=
• Emission data - https://map.carbonspace.tech