How far do we walk, and does the city structure play role?

With the help of travel data, walking behaviour is analysed in three different areas of a city. The results strengthen and contribute to previous studies.

In this study walking is analysed, mostly how distance varies depending on the city structure and errand. The analysis was done with the help of travel data collected with the smartphone application TravelVu developed by Trivector. The results strengthen what previous literature presented as good factors for a city structure to have for walking to be attractive. Factors such as density, land use mix and street connectivity. The results also contribute with a possible distance to how long the usual walking trip is, with the result being that trips on average are 450 meters. The typical trip distance had no consensus in the literature and the result here is on the lower side. It was not possible on the other hand to make a conclusion regarding how errands vary. This was due to there not being enough data for this category.

Understanding how walking varies depending on the built environment and errand will help with the planning and creation of our cities. Walking being our natural mode of transport and a physical activity gives the opportunity for a transport mode that is accessible and healthy. No money is needed for a person to walk, only sensible city planning.

This study can be used for the planning and creation of a city that is more suitable for walking. The result of the typical walking trip being 450 meters can be used as a baseline for the placement of everyday services such as grocery stores. This study also gives a useful insight to researchers that plan on doing something similar with travel data captured by smartphones.

An interesting find is how walking trips become less attractive to carry out the longer the distance is, and how this is manifested graphically. As can be seen in the picture many walking trips happen for the shorter distances, and much fewer happen for the longer distances.



Author: Lucas Sjösten Original language: Swedish Title: How does walking vary, mostly regarding distance, depending on errand and the city district's structure? Thesis work at Lunds university, LTH, Department of Technology and Society Traffic and road, spring 2024. Thesis XXX Thesis link: xxx