ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE

LASUR

Laboratoire de sociologie urbaine

When walking peters out

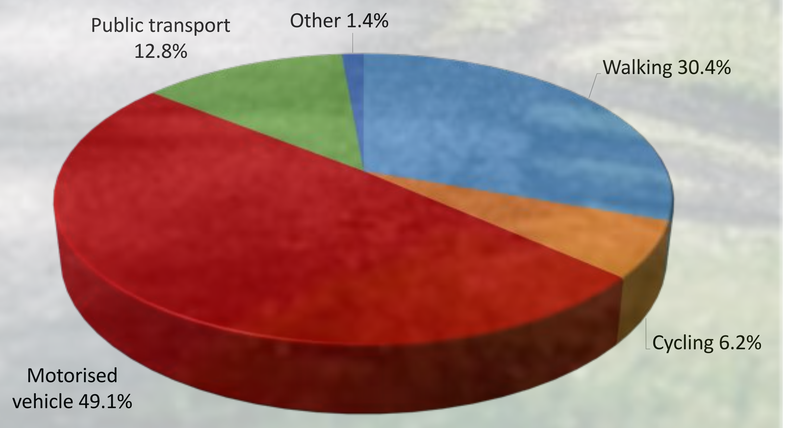
Derek P. T. H. Christie
Dominic Villeneuve, Fernando Simas
Emmanuel Ravalet, Vincent Kaufmann

Background / Methods

In Switzerland, walking accounts for 30% of trips and 44% of single-mode bouts. This is higher than in many countries but says nothing about walking distances or durations, which tend to be short according to evidence from North America. This contribution investigates distances and times at which walking peters out, comparing Switzerland, Canada and the USA.

We used the 2010 Swiss mobility and transport micro-census, a country-wide representative sample of 62'868 residents who underwent a telephone and computer-assisted interview relating to their mobility behaviour on a single day. We extracted single-mode walking trips, excluding those starting and terminating at home. We analysed walking bouts for motive, time and length (in kilometres) and compared results with similar information found in the literature.

Mode share of complete trips in Switzerland
Swiss mobility and transport micro-census (MRMT2010)



Results / Limitations

Among the 66'071 identified single-mode walking episodes, 45% were leisure-related. Mean and median values differed considerably due to negative exponential distributions. Mean values were around 550-930 metres for most types of destination; only leisure-related walks were significantly longer, at 1.8 km (overall average: 1.3km). Mean walking time was 20 minutes, strongly influenced by leisure-related walking whose duration (33 minutes) was 2-3 times higher than for other motives. Mean walks to work took six-and-a-half minutes, over 581 metres; shopping-related walks averaged 9 minutes for 613 metres.

	Switzerland (national values)		Canada (Halifax values)	
Percentile	Time (minutes)	Distance (m)	Time (minutes)	Distance (m)
25	5	300	3	230
50	10	600	6	480
75	20	1500	12	860

Investigation of USA-wide travel survey results (Yang and Diez-Roux, 2012) yielded mean and median walking distances (all purposes combined) of respectively 1.13 km and 800 m, with mean and median durations of around 15 and 10 minutes, respectively. However, the USA data included walks originating and finishing at home, which tend to be longer. Comparisons are difficult to draw due to methodological differences, but in all 3 countries walking peters out quickly, in time and in space. Spikes in the graphs below show the limitations of methods relying on self-declaration (spikes are at 1, 2 or 3 km, respectively 10, 15 or 20 min, etc).

Policy discussion

Up to now, the global walking-promotion agenda has concentrated on increasing mode shares. This research suggests that emphasis should be put on increasing walking times and distances, especially for non-leisure destinations. The question now is, should municipalities support this alone?

In Switzerland, our investigations for Geneva and Lausanne show that walking policy is the purview of municipalities, whereas health policy is controlled at the provincial/cantonal (i.e. state) and national/federal levels. This was confirmed by a review of policy documents in France (Strasbourg) and Canada (Québec City), where the national level was active in only one of 15 sub-topics related to walking (Villeneuve 2017). It follows that there is a mismatch between the level at which walking is promoted and the levels where much of the policy resources and financing are available.

We suggest that frequent urban walking should become a global priority, supported at international, national/federal and provincial/state levels, as well as by municipalities.

Bibliography

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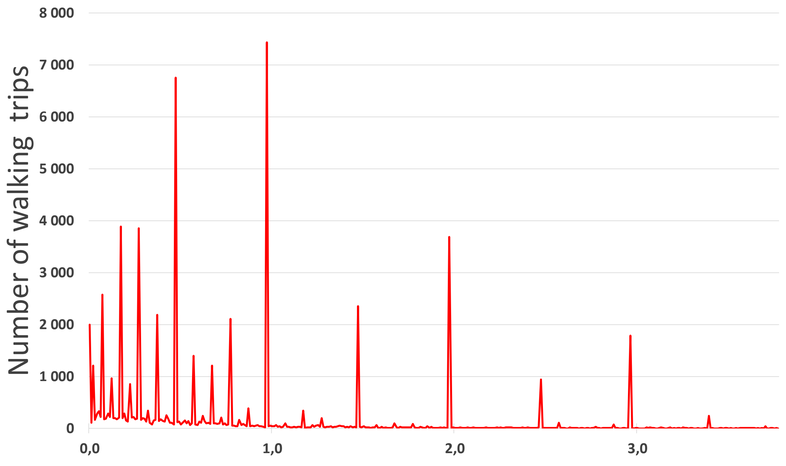
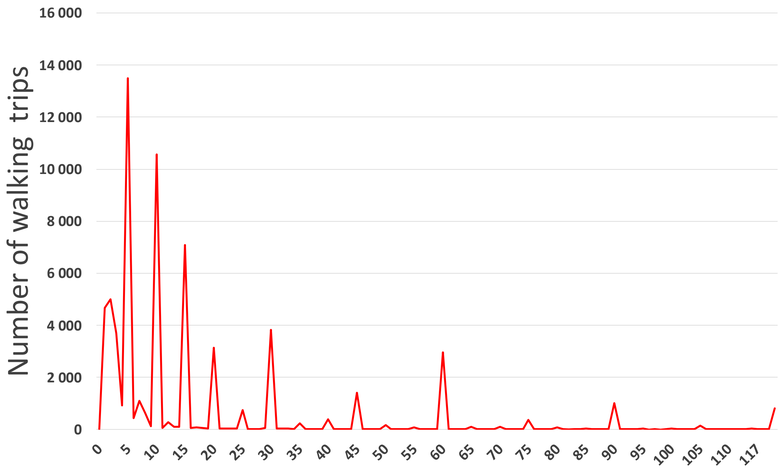
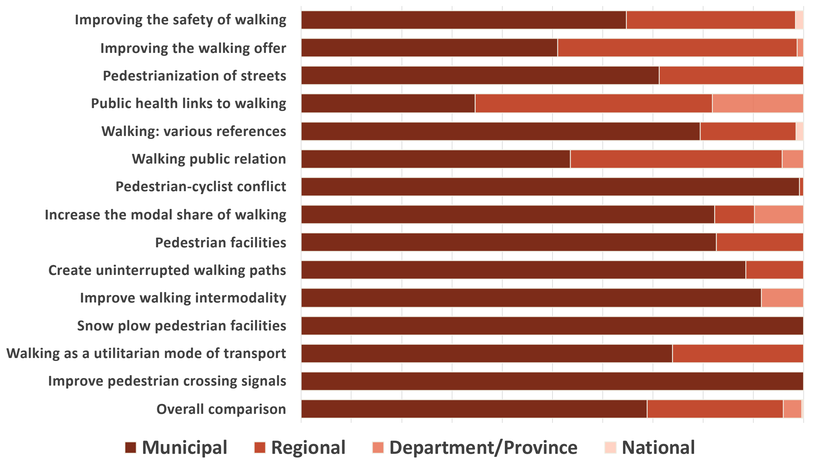


Distance walked in km (Switzerland)



Walking time in minutes, pauses included (Switzerland)



Walking in policy by government level (France/Canada)