

# Pedestrian Quality Needs - Country Report Finland

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## Introduction

In Finland, walking does not have a central position in planning, policy, or research. It is most often combined with cycling and other non-motorized modes of traffic. This so-called light traffic, often together with the promotion of public transport, is one of the expressed priorities in urban planning and design, as well as urban and housing policies. The arguments behind this are sustainability, promotion of urban quality, and public health - poor physical condition and obesity are growing concerns among health authorities. However, in practice investments in light traffic and public transport have to compete with investments in motorized traffic infrastructure, not always with success. In Helsinki, for instance, investments in light traffic are 1,8 Meuro in 2007, compared with 16,6 Meuro for new roads and streets for motorized traffic.

In research, pedestrian and light traffic are very marginal issues. There are few projects specifically about pedestrian issues, and even light traffic is marginal with respect to other general issues, such as safety, traffic forecasting and modeling, logistics, environmental impact analysis, etc. Existing results concerning pedestrians would thus have to be digested from these more general studies, together with research on housing, policy, planning, etc.

There are some specificities of Finland that should be taken into account. Its location in the north (even compared to Sweden and Norway) means that also southern parts of the country are exposed to snow and ice from November to April. Frozen lakes and the sea extend the pedestrian space remarkably during 1-2 months of the winter, but frozen streets and pavements make walking hazardous: slipping accidents are a major risk factor particularly for the elderly. It is estimated that there are two million such accidents yearly, resulting in 70 000 injuries that require medical care and about 20 deaths (Helsingin Sanomat 17.1.2004). This risk is reduced with sand, which, on other hand, creates dust in the air during a couple of weeks in the spring. Some pedestrian streets and stairs in the city centers are also warmed during the winter months. Global warming will probably make things worse, since the temperature in southern Finland will oscillate around 0 degrees Celsius during most of the winter months.

Finland has a low population density. The population of the country is 5.3 million in an area that is the sixth largest in Europe. The population density is only 15.5 persons per square kilometer (compared, for instance with 392 in the Netherlands or 232 in Germany). Most Finns, some two thirds, now live in urban areas, while one third remain in a rural environment (Virtual Finland). The density in urban regions is, however, lower than in most European cities, thus making it difficult to promote walking, cycling and public transport. In the countryside and also in smaller towns with less than 100 000 inhabitants, these modes of traffic cannot compete economically (or in people's perception) with the private car. In larger cities and in the Helsinki metropolitan region,

there is a functioning public transport system and a consistent pedestrian street network, but car-use is still growing for cultural reasons: it has become a norm among families with children, but also among many single households and couples. Also many suburban areas in urban regions are more or less car-dependent. In 2006 there were 2 505 543 private cars (Statistics Finland), and of the daily travel distance per person of 42 km, 32 was made with a passenger car, 6.1 with public transport, and only 2.1 km by foot, bicycle or other non-motorized modes (National Travel Survey 2004-2005). The number of trips on foot were 0.632 per person per day, compared with 1.664 with a private car.

The Finnish urban culture is relatively young: the country remained dominantly agricultural until the 1940's, but then the industrialization and urbanization process was very rapid during the 1960's and 1970's. Since these early decades also saw a rapid rise of car-ownership and even an 'americanization' of the general cultural atmosphere, the existing pedestrian spaces are mostly young, implemented during the last two decades when urban quality and sustainability were already on the agenda.

## **Legislation**

The obligations and rights of pedestrians are determined, for instance, in the general Road Traffic Act (3.4.1981/267). If there is a special pedestrian street or pavement, pedestrians should use it, otherwise they can use a cycle road or mostly the left side of the vehicular street or road, unless using the right side is safer. In the special roads in residential areas combining vehicular and pedestrian traffic, pedestrians can however use all parts of the road. In zebra crossings, drivers should give way to pedestrians who are about to use them, but the latter should use the precaution relative to the location and the speed of the vehicle (44§). In practice, this has created a culture where drivers seldom give way to pedestrians but consider themselves privileged in streets and also crossings.

The maintenance of pedestrian streets is divided between owners of the adjacent lots and the municipality: the municipality takes care of the combined cycle/pedestrian roads, while the landowners maintain the pavements and the ditches. This is an important obligation because of the ice and snow during the winter, in particular for the owners of one-family houses: in case of negligence the landowner can be sued by the pedestrian who hurts him/herself in a slipping accident, or because of snow or ice falling from the roof.

## **Literature on Pedestrian Issues**

Anttila, Virpi (2001) Talvijalankulku, liukastumiset ja kelitiedottamisen kehittäminen (Walking in the winter, slipping and developing the public information about weather conditions) Valtion teknillinen tutkimuskeskus, Espoo.

- special announcements about bad weather conditions for walking had most effects on the shoes selected and the time reserved. No systematic statistics on the number

of accidents from slipping, assumed to be a major risk for the elderly. Worst conditions during cold days after rain/snow and thaw (concentration of accidents).

Henkilöliikennetutkimus 04-05 (National Travel Survey 2004-2005).

<http://www.hlt.fi/english/index.htm>

The National Travel Survey provides an overall picture of Finnish passenger mobility and its background as well as demographic, geographic and temporal variations in mobility. The survey provides information required for transport planning such as information on travel modes in addition to an overall view of mobility and its influencing factors. The passenger transport survey provides base data for transport related research, surveys and decision making. The survey was conducted by interviewing over 13 000 Finns by telephone during the years 2004-2005. The response rate of the survey was 65 percent. The research report was completed in March 2006. Customer specific additional analysis can be performed on the data. The data is available for research use by obtaining permission from the Finnish National Road Administration. WSP LT Consultants Ltd is responsible for maintaining the data.

Kunnas Jouko & Annamari Ruonakoski & Johanna Taskinen (2006 Kotikuja.

Liikkumisen valinnat tiiviillä pientaloalueella (Modal choice in dense detached housing estates). Liikenne- ja viestintäministeriön ulkaisuja 5/2006.

- case study of four high-density low-rise housing estates in Helsinki, Vantaa and Espoo.
- residents use cars less than average, accept small lots and street parking, use public transportation in trips to work is suitable connections. Half could manage without a car but use it for recreational trips. One out of ten didn't own a car, and one out of four had two. Walking to reach the local shop was accepted if within 500 m.

Mannfors, Jan-Erik J. (1981) Autoilija ja jalankulkija suojatietä lähestymässä (The driver and the pedestrian approaching the zebra crossing). Helsinki: Liikenneturva (Tutkimusosaston julkaisuja / Liikenneturva ; 51)

Neuvonen, Samuli (2002) Kevyen liikenteen käyttöön vaikuttavat tekijät (The factors effecting the use of light traffic). MrSc Thesis at the Institute of Limnology and Environmental Protection, University of Helsinki.

- systems-theoretic approach, based on expert interviews, includes relevant statistics and large reference to existing research results
- results in a qualitative model of light traffic (pedestrian + cycle), factors studied: regional, urban and industrial structure, population structure, attitudes, the economy, light traffic infrastructure, other traffic systems, traffic safety, new technologies in light traffic, governance.
- controversial theoretical dichotomy between reductionism and systems thinking (also the chosen factors and subsystems require reduction).

Soosalu Laura & Ari Vandell (2005) Kävelyn ja pyöräilyn edistäminen kyläteillä (Supporting pedestrian and cycle traffic in village roads). Suomen Ympäristö 744, Ministry of the Environment.

-analyses the cultural features and safety problems, as well as possibilities of developing pedestrian and cycle traffic in low-density villages.

Sana Elina & Nina Karasmaa & Timo Ernvall (2005) Työmatkaliikkumisen ohjauksen mahdollisuudet Suomessa (Employers possibilities of supporting sustainable mobility in Finland) Liikenne- ja viestintäministeriön julkaisuja 94/2005.

-employees generally accept mobility management as part of the environmental strategy of their employer. Public transport tickets as employment benefits and better social spaces were most welcome.

Granberg Mette, Kaisa Ronkainen, Ulla Loukkaanhuhta, Petra Rantalainen (2005) Esteettömän liikkumisen, ohjaavuuden ja turvallisuuden parantaminen valaistuksen avulla (Improving the fluency, guidance and safety of accessible traffic environments)

- Using LED technology in street lightning

[www.liikenneministerio.fi/oliver/upl564-Julkaisuja%2039\\_2005.pdf](http://www.liikenneministerio.fi/oliver/upl564-Julkaisuja%2039_2005.pdf)

Wiik Maarit, Jari Mäkynen (2004) Toimintamalli esteettömän ja turvallisen kävely-ympäristön kehittämiseksi. Case Espoon keskus. (A model of developing an accessible and safe pedestrian environment – case Espoo centre)

- Within the framework of this study, an operating model was developed to improve accessibility in regional centres. The model is based on interactive methods and a survey of the physical environment.

- The model is a good way of improving accessibility in pedestrian environments. To coordinate the work with the representatives of the municipality and consultants, the project group should have members from road maintenance and social services as well as from groups that represent people with reduced mobility or function. Based on the experiences in Espoo, this model can be recommended to both regional and village centres. The model works best in a defined area where it is easy to reach all parties. Accessibility improvements could easily be integrated into the several development projects that are in progress in the area of the Espoo centre. This way accessibility could be better promoted, both in terms of time and finance.

### **Indirectly Relevant Literature (Theoretical etc.)**

Lapintie, Kimmo (2007) Modalities of Urban Space. Forthcoming in Planning Theory 1/2007.

Space is generally regarded as one of the key concepts in urban design and planning. Theoretical approaches in the field of design have, however, remained fragmentary, often concentrating on only one or two of aspects of space (such as visual quality or functional requirements) and excluding others (such as social, cultural and political aspects of space). Within the fields of planning theory, geography, and urban sociology, on the other hand, there is much more theorizing

which, however, often remains too abstract to offer any real guidance to spatial practitioners. This article will work out a new theoretical approach to urban space informed by modal logic. In short, urban space is considered in terms of possibilities, that is, the activities that are opened up for the human agent and the possibilities of change, as well as the elements of trust and fear that will be perceived and conceived.

Mäntysalo, Raine (2000) Land-Use Planning as Inter-Organizational Learning. Academic Dissertation, University of Oulu.

The aim of the study is to reveal the nature of learning in local land-use planning activity and to examine the possibilities for the development of planning as a form of learning activity. The theoretical approach draws on the *pragmatist and dialectical reorientation of systems theory* and the related theory of learning organizations. The traditional, positivist systems approach to land-use planning is considered both to *depoliticize* planning and to make it *unreflective*. Critical theory as a basis of planning theory is also shown to be inadequate. Communicative planning theories that draw on critical theory are rather theories of emancipation in the context of planning than theories of planning *per se*. An alternative systems-theoretical view to land-use planning activity is presented, where critical and constructive aspects as well as ethical and pragmatic aspects are interlinked in the *dialectical dynamics of planning as organizational and inter-organizational learning activity*.

Three subsystems within the system of local land-use planning are identified: *expertise, politics and economics*. The subsystems of land-use planning build upon the *basic distinction between legitimate and illegitimate conduct*. For each subsystem, the context of its existence is formed by the interaction of all subsystems. By acting, each subsystem inevitably changes its dialectical relationship to this context. Harmful changes are felt within the subsystem as inner contradictions that interfere with its decision-making activity. If the subsystem is unable to face these contradictions but instead resorts to the use of *pathological power*, they may develop into paralyzing *double bind situations*. The resolution of a double bind situation requires *expansive learning* by the subsystem.

However, there are also contradictions in land-use planning that the subsystems are unable to resolve by expansive learning. Such *inter-systemic contradictions* stem from the dialectical relationship between the overriding requirement of legitimacy on one hand and the basic goals of expert knowledge and economic profit on the other. In the study a hypothesis is formulated, according to which these *basic - and, in the conditions of modern society, permanent - contradictions in local land-use planning require such inter-organizational learning, which enables the creation of planning solutions that provide means for their task-related harmonization, and, in the longer term, contributes to the emergence of a participative planning culture where the contradictions can be handled legitimately, if not resolved*.

Electronic version: <http://herkules oulu.fi/isbn9514258444/isbn9514258444.pdf>

## Committee Reports

Development of Pedestrian Safety. Committee Report 12.1.2005. Suggests a new intersectoral body for the advancement of pedestrian safety, collecting data on slipping accidents, better informing and precaution, and research on the experienced traffic, pedestrian and social safety.

## **Projects and Programmes**

Esteettömän liikkumisen tutkimus- ja kehittämisohjelma ”Elsa” 2003–2006 (Program for research and development of unhampered mobility for all). The Ministry of Transport and Communications.

Kävelyn ja pyöräilyn edistäminen Suomessa. Jaloin-hanke 2001–2004 (Promoting pedestrian and bicycle traffic in Finland. The JALOIN programme 2001-2004). Ministry of Transport and Communications.

The promotion of walking and cycling is of great importance. Conditions in Finland are not the best possible for this purpose, however. In particular, the country’s fragmented urban structure is not the most conducive to increasing the modal share of walking and cycling. The promotion of walking and cycling has so far consisted largely of building pedestrian and cycle routes and facilities. The task of the JALOIN (On foot) programme has been to make the various decision-makers more aware of the importance of pedestrian and bicycle traffic and to influence the future course of development. The JALOIN programme was based on the transport policy programmes for promoting walking and cycling drawn up earlier by the Ministry of Transport and Communications and was carried out in cooperation with all the main parties concerned. Through the programme, the ministries, administrative units, relevant municipal authorities and other organizations in the sector have worked with each other and have found an issue that they can promote collectively, despite being responsible for seemingly different functions. The work included consideration of the different means by which the status of walking and cycling can be promoted. The most important of these is the design of the urban structure. However, efficient promotion of non-vehicular traffic must rely on a range of effective and mutually supportive measures. Communication in different forms and at all stages is a key part of this, and international contacts are also important. The JALOIN programme included an extensive research programme aimed at promoting the status of walking and cycling to a level equal to that of other modes of transport. Research topics were chosen on the basis that they would fill information gaps, provide examples or assist implementation of the main methods chosen. The results have been put into practice and have been made available for application by the parties concerned. Model municipal practice in sustainable transport, new in Finland, has been planned to provide practical examples of the promotion of non-vehicular traffic and as an operating model for other municipalities. The first part of the report deals principally with a description of the JALOIN programme, the experience gained and evaluation of the results. Conclusions on the importance of further work and how it should be carried out are presented at the end of each chapter and at the end of the report. The most important of the further measures identified is the production of a transport policy document on walking and cycling to be drafted by the Ministry of Transport and Communications, which will guide its own actions and those of other bodies involved. The other partners in the

programme have also set out their own objectives for promoting walking and cycling. (Report 2004).

### **Political Statements and General Atmosphere**

Finland will have its next parliamentary elections the 18th of March 2007. Pedestrian or even light traffic is not mentioned in the programs of the major parties. The Social Democrats mention global warming as a major problem, but as solutions they would support environmental technologies, public transport, and biological fuel. The long-term objective is Finland that is independent of fossil energy sources. Also the Liberal/Conservative party (Kokoomus) mentions global warming, but would only support international treaties, new and cleaner cars, and hydro- and nuclear energy. Similarly the Center party concentrates on global warming, new energy sources and nuclear energy, without any urban or transportation policy. Only one of its major candidates, prime minister Matti Vanhanen, chose investments in light traffic as his opening theme for the election, but it could not be found on his web-page. Even the environmental Green party concentrates on global warming and energy - criticizing the actual policies of the existing government - but only mentions public transport and reduction of car-use.

The public is generally positive towards walking: for instance 56 % of the citizens in the Helsinki metropolitan region would support a car-free center (Helsingin Sanomat 2.1.2007). Political decisions have been slow, however, probably because pedestrians (including children and adolescents) are either not eligible to vote or politically passive, and thus not properly represented in local or national governments.

In planning and urban design, pedestrians seem to have an established position, usually the pedestrian network is made consistent, except in some detached housing areas. Cyclists, on the other hand, often feel that they have to defend their position in the planning system.

There is no pedestrian association, but the 1968 founded association for traffic policies Enemmistö ry (Majority registered association) supports pedestrians, cyclists and public transport. It is nowadays not very active or visible, and only supported financially by its members. Also Suomen liikenneliitto ry (Finnish traffic registered association) is mainly concentrating on public transport.

