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'Walking the Dead' **A Critical Review of Pedestrian & Walking Provision in the UK**

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Introduction

'The freedom with which people can walk around is a measure of the civilisation of our cities...' **Traffic in Towns 1963**

Despite its apparent decline in national statistics, walking still accounts for over 80% of all journeys made, less than one mile in length. In most British cities, walking is a still key component of transportation with, for example, 40% of all inner London trips being made by foot (DETR 1999). In Scotland too, walking rates also remain high in the central belt cities. Scottish Transport Statistics published in 2002, confirmed that 13% of adults walked to work and 52% of pupils walked to school.

However, the continuing rise of private car ownership over the last 25 years and its impact on walking rates (an apparent drop of 9%) has led to a huge disparity between research into motorised and non motorised modes. As a result, the priorities afforded to motorised transport have become ingrained in UK and, indeed European transportation policy. We pay lip service to pedestrian provision, claiming to prioritise walking but continuing to ignore it as a formal mode of transportation.

We don't even collect data about walking as effectively as we do about motorised modes. As Lars Gemzøe¹ states, "...pedestrians tend to be invisible in the planning process - because there are no data about them" (2001). Whatever data does exist about the frequency, length and duration of walking trips is, by and large, inaccurate and based on erroneous surveys and flow measurements or distorted census figures.

This lack of relevant data about walking is one of the reasons why pedestrian modelling has been almost completely ignored by the transportation profession

until relatively recently. Indeed, as Werner Brög² points out "Walking is neglected in transport policy and planning because, even if it is included in behavioural transport surveys, the methods applied are very often inadequate and insufficient to show its relevance for everyday mobility."

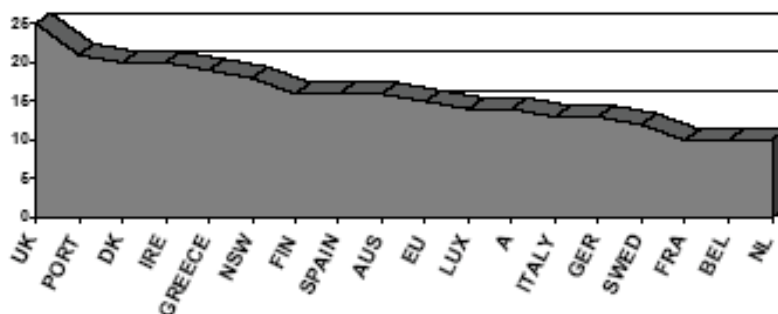
It is possible that the neglect of pedestrians in transportation research arose because modelling capability became established at roughly the same time as motorised vehicle dependence became a key feature of transportation. As a consequence of this neglect, however, walking as a mode of transport is greatly underestimated for transportation and town planning. Transport planners and civic organisations, that regulate and manage our urban networks, simply do not have the tools to help them understand and, thus plan for, pedestrian mobility.

A Change is "a Foot"

In the past few years, however, growing political pressure to develop more sustainable transport policies has begun to change the agenda for transportation. The International Council for Local Environmental Initiatives (ICLEI) formed in 1990, has had some influence on local government planning policy through the Local Agenda 21 campaign 'dedicated to sustainability, through participatory, multi-stakeholder sustainable development planning' (ICLEI 2000).

The OECD guidelines on environmentally Sustainable Transport (OECD 2000) includes 'a focus on reducing the number of long-distance trips and on much greater use of non-motorised means for short distance trips, with a large increase in the provision of supporting infrastructure for non motorized travel'.

At the European level, priorities for pedestrian safety have also highlighted the neglect that walking has suffered in transportation, with some EU studies demonstrating that even countries with so called 'pedestrian policy' in place have poor safety records³.



Source ; IRTAD 2002

Although car users continue to form the greatest proportion of overall road deaths (57%), the risk of death on EU roads for pedestrians is estimated to be

roughly 9 times that of travel by car for the EU as a whole. Pedestrian deaths comprise 15% of total road deaths in the EU, with the UK worst at 25% and the Netherlands best at 10% overall.

Despite the overall trend in casualties falling, much of this is due to lower rates of walking. In recent years however, a number of member states have indicated increasing pedestrian casualties and this has increased the resolve of the EU to reach its targets of a 50% reduction in deaths by 2010.

Local authorities in Scotland are being encouraged by central government to produce walking strategies as part of their local transport strategies. The walking strategy is seen as a document to be prepared in isolation, since a greater practical impact is possible as part of an overall strategy to encourage healthier and more sustainable transportation.

Local transport strategies are expected to enable local authorities to;

- fulfil their Local Agenda 21/Sustainable Development strategy;
- meet obligations under the National Air Quality Strategy;
- meet the targets it sets under the Road Traffic Reduction Act; and
- integrate transport with land use, in accordance with NPPG17.

Yet despite these multi-lateral objectives and benefits, the emphasis placed on pedestrian planning is woefully inadequate, given the changes expected to the socio-demographic picture from now until 2030, the impact of land use changes in the past 5 years and proposed for the next 10 years and the ongoing growth in car ownership and use, expected to take place over the next 25 years.

'One small step...one giant leap'

To meet the challenges set for improvements in air quality, improvements in congestion, reductions in traffic and lower road accidents casualties, it is not sufficient to simply reword our policies and with a pedestrian friendly slant, or throw few more £'s in the general direction of vulnerable road users.

We need to make a concerted effort to elevate the mode of walking as a formal and primary form of transport – on average 25% of every trip is on foot – as a matter of priority. This means taking a small step backwards, from the mire into which we have got ourselves, attempting to increase walking by better signing, by encouraging healthy attitudes and building crossing facilities. Then we can take a giant leap forward, by modelling pedestrian movements as a function of land use planning, by engineering the environment to suit the pedestrian demands of 2020 and beyond.

Our so called pedestrian strategies, **MUST** now include formal measurement of pedestrian activity, formalised counts, focussed surveys of demand and

assessments of demand for new developments with provision for forecast levels of activity, be they targets or not.

This ISN'T pedestrian priority. (review of AV slides)

A Civilised Activity

We need to create environments where people select walking as their preferred choice of travel, for health and to relax and one which exhibits a high degree of 'walkability'. Walkability is defined as the extent to which walking is readily available to the traveller. The quality of the mode is defined by its safety, coherence and accessibility which, in turn affects its attractiveness.

The London Planning Advisory Committee's (LPAC) Walking Strategy for London summarises a city's walkability as the 5 'Cs' and these have already been adopted as key indicators of walkability for inclusion within the Mayor of London's Walking Plan. The 5 C's are;

- Connectivity
- Convivial
- Conspicuous
- Comfortable
- Convenient

Connected

The extent to which the walking network is connected to key generators such as public transport facilities, homes, employment and leisure destinations is vital. No location should be inaccessible on foot, yet we still design even supermarkets without adequate pedestrian facilities. Furthermore, walking routes should connect with each other. Pedestrians require a consistent logic and a level of coherence in the walking network, e.g. routes which let them walk from origin to destination safely, easily and by the most direct route.

Convivial

This describes the extent to which walking is a socially pleasant activity, by merit of the interaction with other people, including road users, as well as the built and natural environment. Aspects which affect this might be the levels of lighting, including artistic lighting, the amount of litter, graffiti and other indicators of anti-social problems, which reduce the aesthetic quality of the walking environment.

The result is the creation of high quality public spaces that make being 'out and about' a pleasant and therefore attractive activity.

Conspicuous

This covers the extent to which walking routes are obvious to the traveller and to which routes and public spaces appear safe and inviting. Attention must be paid to lighting, visibility and surveillance. These are often aspects that the

pedestrian will not comment on in any survey or census. He or she will simply just not think of the walking trip as viable because of its negative factors. Conspicuity therefore covers not only the availability of mapping and signage, but also safe, obvious routes where people feel secure at all times of the day.

Comfortable

The degree of comfort available to the travelling public is not such a strange factor. We look to take away the feeling of comfort from motorised road users travelling too fast or carrying out dangerous movements, through traffic calming. We already measure the performance of cycling facilities using a level of comfort criteria.

Comfort can be derived from a combination of all of the other criteria and is measured by the extent to which walking is made more enjoyable through high quality pavement surfaces, attractive landscaping and architecture, the efficient allocation of road space and control of traffic. This means appreciating that pedestrian delay DOES affect the choice and operation of facilities.

It also requires well-maintained footpaths, the provision of places to rest, attractive landscaping and those factors which make the public realm a more comfortable place to be.

Convenient

Convenience is often suggested as a competitive factor, against which walking is measured against other modes in terms of efficiency, directness and journey time. However, it is important to consider walking as complementary to ALL other modes and a fundamental part of their use.

Walking is often UNable to compete with other modes in terms of journey speed, privacy, status/image and is it is erroneous to design on that basis. The creation of walking routes and environments which are immediately available and offer benefits greater pedestrian priority increases the convenience of walking as a sustainable mode of travel.

Futurising the Walk Trip

If we can describe the walking activity and ways to evaluate it, enhance it and encourage in these terms then surely we can plan, design and provide for walking in a much more scientific way. We have done it for decades with motor traffic, why not with walking?

If we can model motorised vehicle use, including behavioural factors, we can surely model pedestrian activity. This is already happening in some demonstration projects, but could be applied on a much wider basis by civic authorities. In fact, there is no reason why planning authorities should not already be seeking evidence in support of new land use development that the

level and character of walking associated with the developments can be achieved, encouraged and sustained.

The components of walk/pedestrian models are fairly well established;

- **Capacity factors**

Ability of footways (walkways), carriageways and highways to accommodate volume and character of walk trips.

- **Land Use factors**

Empirically derived data for land use types, retail, commercial, employment, residential, public buildings, vacant plots, open space and parking.

- **Geometric factors**

Visibility splays, alignment, cross section and gradients.

- **Intermodal factors**

Impact of rail stations, bus stops and taxi ranks and peak demands.

Levels of Service & Capacity

The influence of footway capacity on pedestrian comfort, convenience and the attractiveness of a particular route is well established. Studies by J J Fruin in the early 1970's formalised the Level of Service (LOS) concept for walkways. Similar work was carried out by M. Heath for London Docklands Development Corporation in the mid 1980's.

The measure of capacity is important to the pedestrian modelling concept as it objectively tests the importance of physical constraint on the distribution of pedestrian flow. Reduced capacity leads to congestion, which in turn results in discomfort, lack of convenience and reduced attractiveness.

Improving Pedestrian Safety

ETSC has identified key strategies for improving pedestrian safety:

- Land use planning which minimises exposure to risk in the course of pedestrian journeys;
- Creating safer, attractive, connected pedestrian routes within urban safety management framework;
- Managing traffic mix, by separating different kinds of road use to eliminate conflicts, where conditions are favourable to separation;

- Creating safer conditions elsewhere for integrated use of road space, e.g. through area-wide speed and traffic management, increased pedestrian and vehicle conspicuity, and vehicle engineering and technology;
- Mitigating the consequences of crashes through car crash protective design;
- Modifying the attitudes and behaviour of drivers of motor vehicles through information, training and the enforcement of traffic law;
- Consulting and informing pedestrians about changes being made for their benefit, and encouraging them in steps that they can take to reduce their risk.

It is clear from these objectives that the role for a more scientific approach to pedestrian planning, design and provision is fundamental to the achievement of a wide range of transportation, health and safety goals as well to the development of civic amenity and a more attractive public realm.

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