



## What is PERS?

- PERS or 'Pedestrian Environment Review System' is a walking audit tool. It is also now part of the multi-modal Streetaudit assessment tool.
- PERS and Streetaudit have been developed by TRL (previously Transport Research Laboratory) in co-operation with Transport for London (TfL).

### THE PERS TOOL

PERS as a walking audit tool consists of two main parts:

- **Checksheet(s)** with accompanying guidance for use in the field to score environments and note comments *and*
- **Software** that is used to store results and produce outputs such as graphs and reports

PERS is used to assess the level of service and quality provided for pedestrians across a range of pedestrian environments.

### PERS USERS

PERS has been used by TfL since the mid-2000's. Increasingly, London boroughs are using PERS to better understand pedestrian environments before they commence improvement schemes.

TfL now requests that companies and organisations planning new developments undertake a PERS or similar walking audit as part of their planning application, to demonstrate that the needs of pedestrians have been considered from the outset of the proposed development.

TfL has used PERS to audit the Transport for London Road Network (TLRN, also known as Red Routes), the surrounding areas of mainline London rail station termini and as part of the 2012 Games preparations.

### PEDESTRIAN ENVIRONMENTS

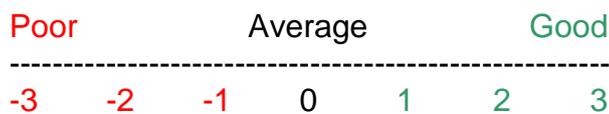
PERS is used to review the following types of pedestrian environment:

1. **Links** – Any footway, footpath or highway. Links can be divided into sections if very long, into sides of a street or reviewed in their entirety.

2. **Crossings** – Any designated or undesignated crossing where a pedestrian route intersects with a highway. Side road junctions can also be considered as crossings.
3. **Routes** – A route is comprised of links, crossings and other PERS pedestrian environments and forms a trip from start to finish, such as from home to the library.
4. **Public Transport Waiting Areas** – Any designated area where people are required to wait in order to use public transport, such as bus and train stops. Larger public transport waiting areas, such as termini rail stations may be considered as interchange spaces.
5. **Interchange Spaces** – The areas around and between public transport stops or termini. They allow people to change between transport modes.
6. **Public Spaces** – These vary in size from small plazas to parks. These may not be specifically for pedestrians, but they can be used as part of a pedestrian's route.

## PERS SCORING

- Although quantitative methods are used when reviewing some elements of the pedestrian environment, such as footway widths, dropped kerb gradients and so forth, within PERS some of the auditing is also qualitative. Factors such as personal safety and quality of the environment use the judgement of the auditor. This dual approach to assessing walking environments allows the 'feel' of an environment, as well as it's physical form to be gauged and assessed.
- The PERS scoring system, used for all pedestrian environments ranges from -3 to +3, where 0 is an average score as below:



- The PERS software uses weighting so that particular walking environment factors can be prioritised, e.g. footway width can be made a more important factor when assigning a PERS score than footway gradient. This allows for flexibility according to local circumstances and needs.
- PERS also factors in the relative importance of some criteria compared to others (e.g. Strategic routes, for example the Transport for London Road Network or Red Routes) are considered most important and so must score more highly to be rated the same as local routes, such as residential streets.

## THE REVIEW PROCESS

The key stages and process for conducting a pedestrian audit, such as PERS, are detailed below:

- **Stage 1 – Definition of the Study Area**

The study area should be defined on a base map, with all the pedestrian environments – links, crossings, public spaces etc. to be reviewed all displayed. All auditors should have a copy of the base map.

- **Stage 2 – Identification of Review Stages**

The complete list of pedestrian environments should be broken down and divided up amongst auditors. The guidance for auditing these environments should be reviewed.

- **Stage 3 – On-Street Evaluation**

The auditors review their assigned environment using the PERS checklists and PERS scoring guides. Scores and comments are noted down for later input into the PERS software.

- **Stage 4 – Data Input and Analysis**

The scores and comments gathered are entered into PERS software for each environment reviewed. The software assigns each environment and sub-sections an overall score.

- **Stage 5 – Display and Review of Outputs**

The PERS software can be used to generate reports and charts to display all aspects of the auditing data gathered.

## USING PERS

PERS and the Streetaudit tool can be purchased from TRL. See <http://www.trl.co.uk/software/> for more information.