



SPACES Instrument



Purpose

SPACES (Systematic Pedestrian and Cycling Environment Scan instrument), is a **research** audit tool developed for a study which seeks to assess the physical environment in local neighbourhoods for walking and cycling.

Method

This is an **observational** audit, with 'street segments' as the basis for conducting the observation. A 'segment' is a section of street or road between two intersections. Additional information is collected using desktop methods and geographic information systems (GIS) technology. This includes traffic volume and speed, street and intersection design, and the location of local destinations such as parks, shops and public transport points.

Brief description

The SPACES instrument was developed by the University of Western Australia. It contains 37 items including:

- Types of buildings and features;
- A general assessment of paths that could be used for walking and/or cycling e.g. type, location, material, slope, condition;

- A general street assessment e.g. number of lanes on a road, kerb type, traffic control devices, crossing facilities, presence of street lights, presence of destinations, car and bike parking facilities, opportunities for natural surveillance, garden maintenance, cleanliness and views; and
- Perceived attractiveness and difficulty for walking and cycling.

Locating the instrument

The SPACES instrument can be downloaded from:

http://www.cpah.health.usyd.edu.au/pdfs/2007_SPACES_Audit_Instrument.pdf

The SPACES observers' manual can be downloaded from

http://www.cpah.health.usyd.edu.au/pdfs/2007_SPACES_Observers_Manual.pdf

Contact for more information

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Related References

Active Living Research website

http://www.activelivingresearch.org/index.php/SPACES_instrument/323

Pikora T et al. *Developing a reliable audit instrument to measure the physical environment for physical activity.* American Journal of Preventive Medicine 2002;23(3):187-194.

Pikora T et al. *Developing a framework for assessment of the environmental determinants of walking and cycling.* Soc Sci Med 2003;56:1693-1703.

Pikora T et al. *Neighbourhood environmental factors correlated with walking near home: Using SPACES.* Med Sci Sports Exerc 2006 Apr;38(4):708-714.

