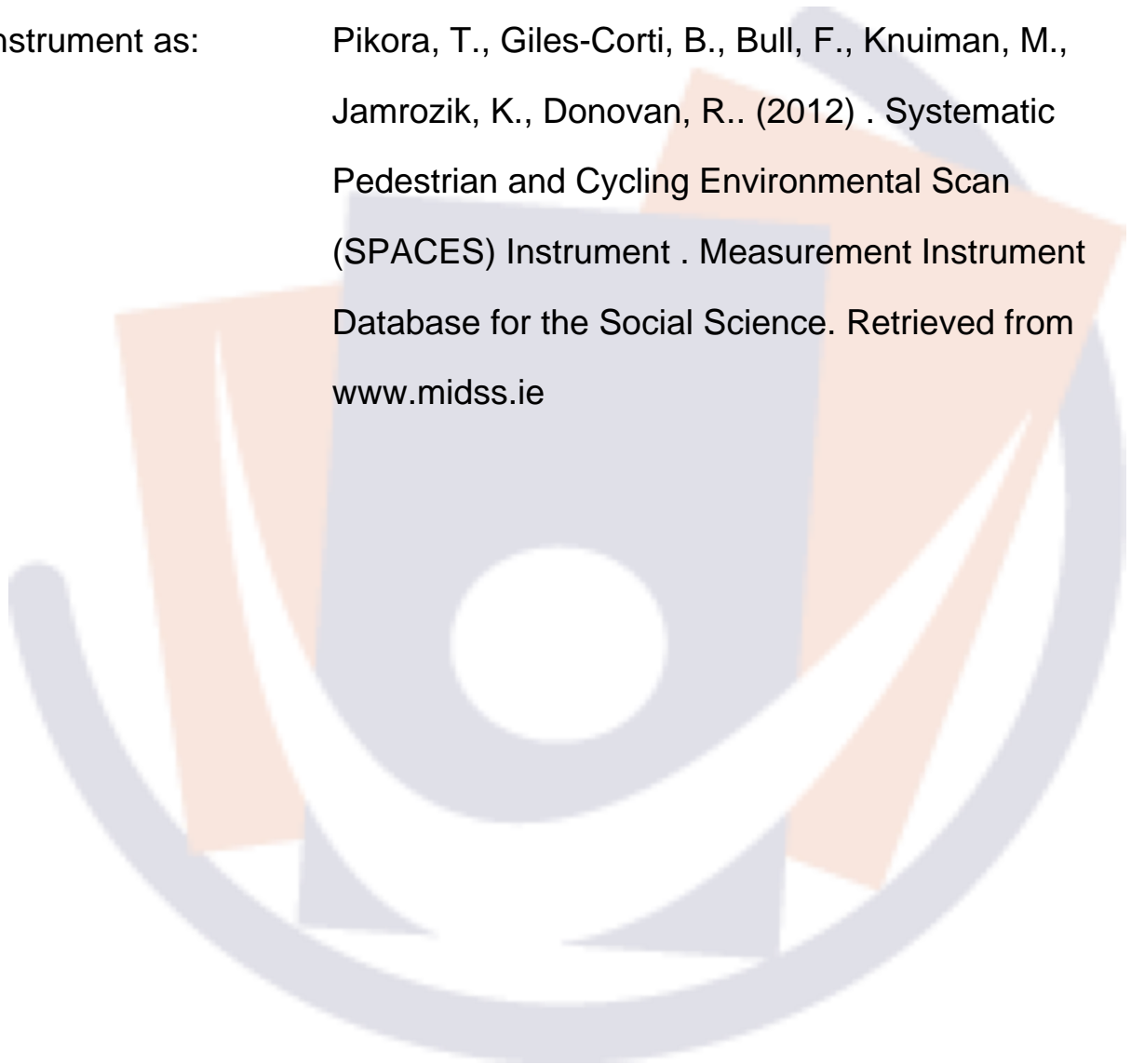


Instrument Title: Systematic Pedestrian and Cycling Environmental Scan (SPACES) Instrument

Instrument Author: Pikora, T., Giles-Corti, B., Bull, F., Knuiman, M., Jamrozik, K., Donovan, R.

Cite instrument as: Pikora, T., Giles-Corti, B., Bull, F., Knuiman, M., Jamrozik, K., Donovan, R.. (2012) . Systematic Pedestrian and Cycling Environmental Scan (SPACES) Instrument . Measurement Instrument Database for the Social Science. Retrieved from www.midss.ie



Auditor ID _____ Date _____
 Suburb _____
 Street _____
 Seg ID _____

1a. Type of buildings/features: (tick all applicable)

| | Side 1 | Side 2 |
|--------------------------|----------------------------|----------------------------|
| Transport infrastructure | <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |
| Housing | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| Office | <input type="checkbox"/> 2 | <input type="checkbox"/> 2 |
| Convenience stores | <input type="checkbox"/> 3 | <input type="checkbox"/> 3 |
| Other retail | <input type="checkbox"/> 4 | <input type="checkbox"/> 4 |
| Industrial | <input type="checkbox"/> 5 | <input type="checkbox"/> 5 |
| Educational | <input type="checkbox"/> 6 | <input type="checkbox"/> 6 |
| Service | <input type="checkbox"/> 7 | <input type="checkbox"/> 7 |
| Natural features | <input type="checkbox"/> 8 | <input type="checkbox"/> 8 |

1b. Predominant buildings/features: (tick ONE per side only)

| | Side 1 | Side 2 |
|--------------------------|----------------------------|----------------------------|
| Transport infrastructure | <input type="checkbox"/> 0 | <input type="checkbox"/> 0 |
| Housing | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| Office | <input type="checkbox"/> 2 | <input type="checkbox"/> 2 |
| Convenience stores | <input type="checkbox"/> 3 | <input type="checkbox"/> 3 |
| Retail | <input type="checkbox"/> 4 | <input type="checkbox"/> 4 |
| Industrial | <input type="checkbox"/> 5 | <input type="checkbox"/> 5 |
| Educational | <input type="checkbox"/> 6 | <input type="checkbox"/> 6 |
| Service | <input type="checkbox"/> 7 | <input type="checkbox"/> 7 |
| Natural features | <input type="checkbox"/> 8 | <input type="checkbox"/> 8 |

1c. Are the predominant buildings/features the same for both sides?

Yes 1
 No 2

A. Path for walking &/or cycling: (only if a path present)

2. Type of path:

| | Side 1 | Side 2 |
|-----------------------------|----------------------------|----------------------------|
| Go to section B ← No path | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| Footpath | <input type="checkbox"/> 2 | <input type="checkbox"/> 2 |
| Shared path – with markings | <input type="checkbox"/> 3 | <input type="checkbox"/> 3 |
| Shared path – no markings | <input type="checkbox"/> 4 | <input type="checkbox"/> 4 |

3. Path location:

| | Side 1 | Side 2 |
|------------------------|----------------------------|----------------------------|
| Next to road | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| Within 1m of kerb | <input type="checkbox"/> 2 | <input type="checkbox"/> 2 |
| Between 1 & 2m of kerb | <input type="checkbox"/> 3 | <input type="checkbox"/> 3 |
| Between 2 & 3m of kerb | <input type="checkbox"/> 4 | <input type="checkbox"/> 4 |
| More than 3m from kerb | <input type="checkbox"/> 5 | <input type="checkbox"/> 5 |

4. Path material:

| | Side 1 | Side 2 |
|---------------------|----------------------------|----------------------------|
| Continuous concrete | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| Concrete slabs | <input type="checkbox"/> 2 | <input type="checkbox"/> 2 |
| Paving bricks | <input type="checkbox"/> 3 | <input type="checkbox"/> 3 |
| Gravel | <input type="checkbox"/> 4 | <input type="checkbox"/> 4 |
| Bitumen | <input type="checkbox"/> 5 | <input type="checkbox"/> 5 |
| Grass or sand | <input type="checkbox"/> 6 | <input type="checkbox"/> 6 |
| Under repair | <input type="checkbox"/> 7 | <input type="checkbox"/> 7 |

5. Slope:

| | Side 1 | Side 2 |
|----------------|----------------------------|----------------------------|
| Flat or gentle | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| Moderate slope | <input type="checkbox"/> 2 | <input type="checkbox"/> 2 |
| Steep slope | <input type="checkbox"/> 3 | <input type="checkbox"/> 3 |

6. Path condition & smoothness:

| | Side 1 | Side 2 |
|--|----------------------------|----------------------------|
| Poor (a lot of bumps, cracks, holes & weeds) | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| Moderate (some bumps, cracks, holes & weeds) | <input type="checkbox"/> 2 | <input type="checkbox"/> 2 |
| Good (very few bumps, cracks, holes & weeds) | <input type="checkbox"/> 3 | <input type="checkbox"/> 3 |
| Under repair | <input type="checkbox"/> 4 | <input type="checkbox"/> 4 |

7. Permanent path obstructions:

| | Side 1 | Side 2 |
|-----------------|----------------------------|----------------------------|
| Poles | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| Signs | <input type="checkbox"/> 2 | <input type="checkbox"/> 2 |
| Tables & chairs | <input type="checkbox"/> 3 | <input type="checkbox"/> 3 |
| Trees | <input type="checkbox"/> 4 | <input type="checkbox"/> 4 |
| None | <input type="checkbox"/> 5 | <input type="checkbox"/> 5 |

B On-road (all segments)

8. Path type:

On-road cycle lane – marked 1
 On-road – no lane marked 2

9. Slope: (only assess on-road if no path is present)

Flat or gentle slope 1
 Moderate slope 2
 Steep slope 3

10. Condition of road:

Poor (a lot of bumps, cracks, holes) 1
 Moderate (some bumps, cracks, holes) 2
 Good (very few bumps, cracks, holes) 3
 Under repair 4

11. Number of lanes on road (in total):

1 lane 1
 2 or 3 lanes 2
 4 or 5 lanes 3
 6 or more lanes 4

12. Vehicle parking restriction signs present:

| | Side 1 | Side 2 |
|-----|----------------------------|----------------------------|
| Yes | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| No | <input type="checkbox"/> 2 | <input type="checkbox"/> 2 |

13. Kerb type:

| | Side 1 | Side 2 |
|---------------|----------------------------|----------------------------|
| Mountable | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| Non-mountable | <input type="checkbox"/> 2 | <input type="checkbox"/> 2 |
| No kerb | <input type="checkbox"/> 3 | <input type="checkbox"/> 3 |

14. Traffic control devices: (tick all applicable)

Roundabouts 1
 Speed humps or ramps 2
 Chicanes, chokers, kerb extensions or lane narrowing 3
 Traffic signals 4
 None 5

15. Other routes available:

| | Lane |
|--|----------------------------|
| Access lane through cul-de-sac/no through road | <input type="checkbox"/> 1 |
| Path through park | <input type="checkbox"/> 2 |
| None | <input type="checkbox"/> 3 |

16. Type of crossings:

Zebra or children 1
 Traffic signals 2
 Bridge/overpass 3
 Underpass 4
 None 5

17. Crossing aids: (tick all applicable)

Median refuge or traffic island 1
 Kerb extensions 2
 None 3

18. Streetlights present?

| | Side 1 | Side 2 |
|----------------|----------------------------|----------------------------|
| Yes | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| Go to Q20 ← No | <input type="checkbox"/> 2 | <input type="checkbox"/> 2 |

19. Does lighting cover the path area?

| | Side 1 | Side 2 |
|-----|----------------------------|----------------------------|
| Yes | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| No | <input type="checkbox"/> 2 | <input type="checkbox"/> 2 |

20. Are destinations present in segment?

Yes 1
 Go to Q23 ← No 2

21. Number car parking facilities at destinations: (approx.)

| | 0 (1) | 1-20 (2) | 21-50 (3) | 51-70 (4) | 71-100 (5) | 101+ (6) |
|--------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Shops | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| School | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

22. Bike parking facilities:

Bike locker or enclosure 1
 Bike parking or U rails 2
 Rack or stand 3
 None 4

23. Driveway crossovers:

Most buildings have one driveway 1
 Approx. ½ buildings have one driveway 2
 Approx. ¼ buildings have one driveway 3
 No driveways 4

24. Surveillance: (can be observed from a window, verandah, porch, garden)

Can be observed from more than 75% of buildings 1
 Can be observed from between 50 – 74% of buildings 2
 Can be observed from less than 50% of buildings 3
 Not applicable 4

25. Garden maintenance: (well maintained = looks trim & clean, looks kept)

More than 75% well maintained 1
 Between 50 –74% well maintained 2
 Less than 50% well maintained 3
 Not applicable 4

26. Verge maintenance: (well = looks trim & clean, looks kept)

More than 75% well maintained 1
 Between 50 –74% well maintained 2
 Less than 50% well maintained 3
 Verge undergoing work 4
 Not applicable 5

27. Number of verge trees:

| | Side 1 | Side 2 |
|---|----------------------------|----------------------------|
| 1 or more per house block | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| Approx. 1 tree for every 2 house blocks | <input type="checkbox"/> 2 | <input type="checkbox"/> 2 |
| Approx. 1 tree for every 3 or more house blocks | <input type="checkbox"/> 3 | <input type="checkbox"/> 3 |
| Go to Q29 ← No trees at all | <input type="checkbox"/> 4 | <input type="checkbox"/> 4 |

28. Average height of trees:

| | Side 1 | Side 2 |
|--|----------------------------|----------------------------|
| Small (head high) | <input type="checkbox"/> 1 | <input type="checkbox"/> 1 |
| Medium (between head & ceiling height) | <input type="checkbox"/> 2 | <input type="checkbox"/> 2 |
| Large (higher than a ceiling) | <input type="checkbox"/> 3 | <input type="checkbox"/> 3 |

29. Cleanliness: (can you see any litter, rubbish, graffiti, broken glass, discarded items)

Yes lots 1
 Yes some 2
 None or almost none 3

30. Type of views: (tick all applicable)

Urban (houses & household gardens) 1
 Commercial (shops, light industrial, offices, schools) 2
 Water (such as river, ocean, lake) 3
 Tended nature (parks, community gardens tended, well maintained) 4
 Nature (parks, community gardens where level of care differs) 5

31. How alike are the building designs?

All of similar design 1
 Range of different designs 2
 Not applicable (no buildings) 3

32. How attractive would you rate this segment for walking?

Very attractive 1
 Attractive 2
 Not attractive at all 3

33. How physically difficult would you rate this segment for walking?

Easy 1
 Moderately difficult 2
 Very difficult 3

34. How attractive would you rate this segment for cycling?

Very attractive 1
 Attractive 2
 Not attractive at all 3

35. How physically difficult would you rate this segment for cycling?

Easy 1
 Moderately difficult 2
 Very difficult 3

C. OVERALL ASSESSMENT

Auditor ID _____ Date _____

Suburb _____

Map ID _____

36. Continuity of pathPath forms useful & direct route 1Path is disjointed 2**37. Neighbourhood legibility – ease of finding your way around the neighbourhood**Very easy 1Fairly easy 2Not easy at all 3