

## Scoring procedures and preliminary psychometrics for the Neighborhood Environment Walkability Scale (NEWS)

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Preliminary psychometrics for scale reported in *Saelens BE, Sallis JF, Black J, & Chen D. (2002) Measuring perceived neighborhood environment factors related to walking/cycling. Annals of Behavioral Medicine, 24, S139* and based on a pilot study (n=106) conducted within two neighborhoods in San Diego, CA. Test-retest reliability coefficients are single measure one-way random effect model intra-class correlations. As more psychometric data for NEWS become available, information will be updated.

### A. Residential density (“Types of residences in your neighborhood”)

#### Scoring

Response range (assigned score): None(1) A few (2) Some (3) Most (4) All (5)

Reverse coding items: None

Subscale scoring: Single-family detached + (12 \* row houses/townhouses 1-3 stories) + (10 \* apts/condos 1-3 stories) + (25 \* apts/condos 4-6 stories) + (50 \* apts/condos 7-12 stories) + (75 \* apts/condos 13+ stories)

These weighting values are based on approximate density of households per unit area relative to a single-family detached residence.

#### Psychometrics

Subscale test-retest reliability: .63

### B. Land use mix-diversity (“Stores, facilities, and other things in your neighborhood”)

#### Scoring

Responses (scores): 1-5 min(1), 6-10 min(2), 11-20 min(3), 21-30 min(4), 31+ min(5), don't know (5)

Note: A don't know response is coded as a “5” because if it is not known whether the facility is within walking distance, the actual walk is likely more than 31 minutes.

Reverse coding items: All items must be reverse coded

Subscale scoring: Mean of items

Alternative scoring: For some purposes it may be useful to tally the number of stores or facilities within a 5, 10, or 20-minute walk.

#### Psychometrics

Subscale test-retest reliability: .78

**C. Land use mix-access (“Access to services”)**

Scoring

Responses (scores): Strongly disagree(1) Somewhat disagree(2) Somewhat agree(3) Strongly agree(4)

Reverse coding items: #6 (‘hilly streets’) and #7 (‘canyons/hillsides’)

Subscale scoring: Mean of items

Psychometrics

Subscale test-retest reliability: .79

**D. Street connectivity (“Streets in my neighborhood”)**

Scoring

Responses (scores): Strongly disagree(1) Somewhat disagree(2) Somewhat agree(3) Strongly agree(4)

Reverse coding items: None

Subscale scoring: Mean of items

Psychometrics

Subscale test-retest reliability: .63 (due to the skewed distribution of responses to the item regarding “walkways connecting cul-de-sacs to streets and trails” and corresponding low test-retest reliability of that item in this sample, that item was eliminated from subscale analyses in the pilot study)

**E. Walking/cycling facilities (“Places for walking and cycling”)**

Scoring

Responses (scores): Strongly disagree(1) Somewhat disagree(2) Somewhat agree(3) Strongly agree(4)

Reverse coding items: None

Subscale scoring: Mean of items

Psychometrics

Subscale test-retest reliability: .58

**F. Aesthetics (“Neighborhood surroundings”)**

Scoring

Responses (scores): Strongly disagree(1) Somewhat disagree(2) Somewhat agree(3) Strongly agree(4)

Reverse coding items: None

Subscale scoring: Mean of items

Psychometrics

Subscale test-retest reliability: .79

**G. Pedestrian/traffic safety (“Safety from traffic”)**

Scoring

Responses (scores): Strongly disagree(1) Somewhat disagree(2) Somewhat agree(3) Strongly agree(4)

Reverse coding items: #1 (‘traffic on my street’), #2 (‘traffic on nearby streets’), #5 (‘exceed speed limits’), #8 (‘exhaust fumes’)

Subscale scoring: Mean of items

Psychometrics

Subscale test-retest reliability: .77

**H. Crime safety (“Safety from crime”)**

Scoring

Responses (scores): Strongly disagree(1) Somewhat disagree(2) Somewhat agree(3) Strongly agree(4)

Reverse coding items: #4 (‘high crime rate’), #5 (‘unsafe during day’), #6 (‘unsafe at night’)

Subscale scoring: Mean of items

Psychometrics

Subscale test-retest reliability: .80

**I. General neighborhood satisfaction (“Neighborhood satisfaction”)**

Scoring

Responses (scores): Strongly dissatisfied(1) Somewhat dissatisfied(2)  
Neither satisfied nor dissatisfied (3) Slightly satisfied(4) Strongly satisfied(5)

Reverse coding items: None

Subscale scoring: Mean of items

Psychometrics

Subscale test-retest reliability: .80 [this subscale reliability coefficient is based on the original ten items (#1-8, 16,17) of the subscale using a 7-point Likert scale; the modified response scale and final 5 items were added to the subscale after it was used in the pilot study]