**Walking and Biking Suitability Assessment (WABSA)**

**Instrument Abstraction**

<table>
<thead>
<tr>
<th><strong>Instrument Name</strong></th>
<th>Walking and Biking Suitability Assessment (WABSA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Author(s)</strong></td>
<td>James Emery and Carolyn Crump</td>
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<tr>
<td><strong>Affiliated Organization(s)</strong></td>
<td>Department of Health Behavior and Health Education, School of Public Health, The University of North Carolina at Chapel Hill</td>
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<tr>
<td><strong>Instrument Purpose</strong></td>
<td>To assess and improve the walkability and bikeability of communities.</td>
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<tr>
<td><strong>Instrument Type</strong></td>
<td>Observational (audit tool)</td>
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<tr>
<td><strong>Geographical Scale</strong></td>
<td>Community (urban and rural road segments from .1 to 2.0 miles)</td>
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<td><strong>Instrument Development Methods</strong></td>
<td>This assessment form was adapted from N. Eddy, 1996</td>
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<td><strong>Sample</strong></td>
<td>Two data collectors measured 31 road segments. Road segments represented major and minor arterial highways, neighborhood, and local streets. Two transportation engineers with extensive research experience subjectively assessed the walking and biking suitability characteristics on a 7-point Likert scale.</td>
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<tr>
<td><strong>Psychometrics</strong></td>
<td>The inter-rater reliability was acceptable for both the walking suitability assessment ($r = .79$) and the engineers’ overall ratings ($r = .73$). The validity correlation for overall walking suitability assessment score was $r = .58$. The inter-rater reliability was high for the biking suitability assessment ($r = .90$) and acceptable for the engineers’ overall ratings ($r = .77$). The validity correlation for overall biking suitability score was $r = .62$.</td>
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<td><strong>Key Item Sub-Domains</strong></td>
<td>There are 7 key domains: (1) General road (2) Pavement (3) Location (4) Daily traffic (5) Posted speed (6) Number of lanes (7) Sidewalk/path</td>
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<tr>
<td><strong>Considers Disability Issues</strong></td>
<td>No</td>
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<tr>
<td><strong>Number of Instruments(s)</strong></td>
<td>2 instruments: bicycle and walking suitability assessment forms</td>
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<tr>
<td><strong>Length of Instrument(s)</strong></td>
<td>38 items</td>
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<tr>
<td><strong>URL(s)</strong></td>
<td><a href="http://www.unc.edu/~jemery/WABSA">www.unc.edu/~jemery/WABSA</a></td>
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<tr>
<td><strong>Contact Information</strong></td>
<td>James Emery, MPH (919) 966-7172 <a href="mailto:James.Emery@unc.edu">James.Emery@unc.edu</a></td>
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<td>Department of Health Behavior and Health Education School of Public Health</td>
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<tr>
<td>Definition(s)</td>
<td>NA</td>
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<td>Notes</td>
<td>NA</td>
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