



Assessing Built Environment Features Linked to Physical Activity

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Objective

- **Devise a reliable, objective instrument to measure built environment features linked to physical activity**





Research Design

- **Developed draft instrument**
 - Reviewed literature on physical activity & urban form
 - Reviewed existing instruments

Research Design

- **Conducted 3 focus groups to gauge thoroughness of the instrument**
 - Teenagers
 - Low income population
 - Multiple ethnicities

Research Design

- Convened a Delphi panel of 5 experts with backgrounds in planning, public health, urban design, transportation, geography, and GIS
 - Susan Handy, University of California, Davis
 - Harvey Miller, University of Utah
 - Jack Nasar, Ohio State University
 - Dan Stokols, University of California, Irvine
 - Craig Zimring, Georgia Technological University



Field Testing

- Tested instrument in 26 settings throughout So. Cal. including:
- Iterative process of continuous revision to fit all settings

Unit of Analysis

- Settings divided into segments
- Alternate for places with non-linear organization
- Will measure a sample of segments in each setting

The Instrument

- **Setting and segment level questions**
- **Four scales – 113 items total**
 - **Accessibility – 16 items**
 - **Perceived Safety from Crime – 18 items**
 - **Perceived Safety from Traffic – 19 items**
 - **Pleasurability – 60 items**
- **Quantitative, objective measurements**
- **Most in-person observations with some GIS data**

Reliability Testing

- **Currently conducting reliability testing**
- **3 observers**
- **Separate observations**
- **20 settings (subset of existing settings)**