

Measuring Walking in the U.S.

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- National Center for Safe Routes to School



Pedestrian and Bicycle
Information Center

SafeRoutes
National Center for Safe Routes to School



Data Challenges in U.S.

- **Process-Related Challenges**
 - Lack of Expertise
 - Process Fidelity
 - Cost (Time & Money)
 - Lack of Sharing
- **Data Needs Challenges**
 - Different Consumers = Different Data Needs
 - Too many Potential Data Measures
 - Lack of Standard Measures
- **Attitudes towards Empirical Measures**

Process-related Issues

- Lack of Expertise
- Process Fidelity
- Cost
 - Time
 - Money
- Lack of Data Sharing
 - Proprietary Data
 - Difficult to Share Lessons Learned



Data Consumers: Different Data Needs

- Policymakers
- Planners
- Engineers
- Academics
- Health Researchers
- Architects
- General Public



Lack of Standard Measures

- Volume
 - Peak Hour
 - Peak Two-Hour
 - 24-Hour
 - 1/5/7-day measures
- Volume = Exposure?

Attitudes toward Evaluation

- **Need to Justify Data Collection**
 - Data collection can be time consuming and expensive
 - “We ought to” isn’t good enough
- **Successful Justifications**
 - Policy-related (“We need data to evaluate the program effectiveness.”)
 - Safety-related (“We need data to evaluate the safety outcomes.”)
 - Economic (“We need to know if we are spending the money in the best way.”)



Hypothetical U.S. “Grade Card”

| | Methodology | Local-Level Data | National/Aggregate |
|-------------------------|--------------------|-------------------------|---------------------------|
| Facilities | B+ | A to D- | D |
| Usage | C | | D- |
| Safety | B | | C |
| Spending | B+ | | B- |
| Economic Impact | B- | | D |
| Public Attitudes | B+ | | C |



Innovative Approaches

- National SRTS Program Tracking Database
 - Focused on Children Walking/Biking to/from School
 - Spending
 - Usage (Local-level)
 - Derivable Outcomes:
 - Safety improvements?
 - Facilities changes
 - Economic and policy analysis

Innovative Approaches

- National Bicyclist and Pedestrian Demonstration Project
 - Usage
 - Facility Extent
 - Extensive Documentation
- Collection of Case Studies on Data Collection
 - Facility Extent, Usage, Attitude
 - Practitioner-based Expertise

Potential Solutions

- “Open Source” techniques
 - Volunteers or “Secondary Collectors”
 - Easy-to-follow methods
 - Rigorous Validation Methods
- Improved Analytical Measures
 - Land-Use-related estimates
 - Borrow from Traffic Modeling
- Explore linkages between data categories
 - How does spending affect safety, how does safety affect walking levels, etc.
- Improved Graphical Representations
 - Pedestrian Flow Maps
 - Innovative Mapping/Measurements

Suggested “Urgent” Needs

- **Open Data Sharing**
 - Allow innovative analysis of otherwise stagnant data
 - Potential to learn something unexpected
 - Also share Lessons Learned
 - How to accomplish?
 - Database of Data
- **Standardized Definitions and Measures**
- **Quick and Notable Successes**

