

Understanding and Measuring Bicycling Behavior: Implications for Urban Planning, Health, and Research

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BACKGROUND

With rates of obesity, heart disease, and related health problems increasing in the U.S., health professionals, urban planners, and policy makers are looking for ways to increase physical activity. While walking is an attractive option, bicycling offers many benefits and warrants further research. Nationwide, over 60% of all daily trips people take are five miles or less in length – a reasonable distance to ride a bike – and nearly 40% are two miles or less. Despite the potential, only about one percent of the trips people make in the U.S. are on bicycles.

Why aren't more people cycling? There are many reasons, including demographics (e.g. age), the physical environment, and the presence of bicycle lanes, paths, and other facilities. People's attitudes and perceptions about things like safety are also important. This project is trying to determine how all of these factors influence the decision to bicycle. Understanding why people do or do not bicycle can help planners and engineers design better cities to make cycling safer and more attractive.

RESEARCH

The research was divided into two parts: conducting a random survey of adults in the Portland, Oregon region,

and measuring actual bicycle use with GPS technology. This summary covers only the survey portion of the research.

The survey included extensive questions about bicycling habits and attitudes. The 566 respondents were classified by cycling behaviors: Non-cyclists (50%), occasional cyclists (30%), and regular cyclists (20%). Regular cyclists rode their bike about once a week year round. Occasional cyclists rode less than once a week or only rode in the summer months.

FINDINGS

Respondents who lived in neighborhoods closer to downtown Portland and with well-connected streets (e.g. few cul-de-sacs) were more likely to bicycle to get to work, shopping, or other "utilitarian" purposes.

Younger adults are more likely to be regular cyclists than older adults, particularly those 65 and older. Men are twice as likely to be regular cyclists; 27% of men surveyed cycled regularly, compared to 13% of women.

More than 80% of the occasional cyclists indicated that they wanted to cycle more. The amount of car traffic on streets was a significant barrier.

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