

Physical Activity: Transportation and Travel Policies and Practices (2004 Archived Review)

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Review Summary

Intervention Definition

Transportation and travel policies and practices encourage walking and bicycling as a means of transportation.

Approaches include the following:

- Facilitating walking, bicycling, and public transportation use
- Increasing the safety of walking and bicycling
- Reducing car use
- Improving air quality

Environmental changes that support these goals include changing roadway design standards, creating or enhancing bike lanes, expanding or subsidizing public transportation, providing bicycle racks on buses, or increasing parking costs.

Summary of Task Force Finding

The Community Preventive Services Task Force finds insufficient evidence to determine whether transportation and travel policies and practices increase physical activity or fitness. Only one study qualified for review.

About the Systematic Review

The Task Force finding is based on evidence from a systematic review of 1 study (search period 1990 – 1998).

The review was conducted on behalf of the Task Force by a team of specialists in systematic review methods, and in research, practice, and policy related to increasing physical activity.

Summary of Results

An intervention made free transit available to university students. After 6 months, 57% more students chose walking over driving, and after 1 year, 14% were still walking instead of driving.

Study Characteristics

The 1 included study used a time-series design to measure the proportion of university students who walked instead of drove to school, once free transit was made available.

Applicability

Applicability of this intervention across different settings and populations was not assessed because the Task Force did not have enough information to determine if the intervention works.

Publications

Heath GW, Brownson RC, Kruger J, Miles R, Powell KE, Ramsey LT, Task Force on Community Services. The effectiveness of urban design and land use and transport policies and practices to increase physical activity: a systematic review. *Journal of Physical Activity and Health*. 2006;3(Suppl 1):S55-76.

Task Force Finding

Intervention Definition

Transportation and travel policies and practices can encourage walking and bicycling as a means of transportation by:

- Facilitating walking, bicycling, and public transportation use
- Increasing the safety of walking and bicycling
- Reducing car use
- Improving air quality

These interventions can encourage environmental changes that support these goals by changing roadway design standards, creating or enhancing bike lanes, expanding or subsidizing public transportation, providing bicycle racks on buses, and increasing parking costs.

Task Force Finding (February 2004)

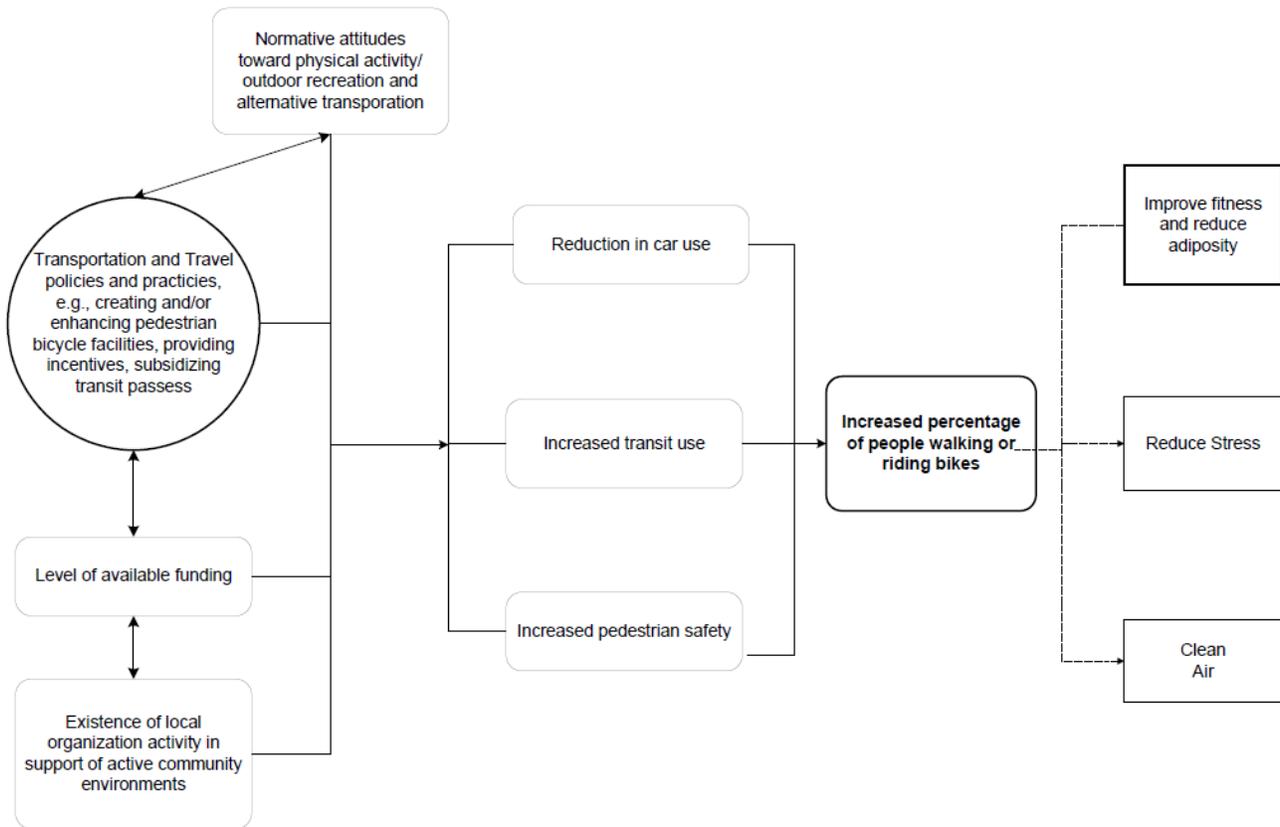
The Community Preventive Services Task Force finds insufficient evidence to determine the effectiveness of transportation and travel policies and practices in increasing levels of physical activity or improving fitness because only one study qualified for review.

Publications

Heath GW, Brownson RC, Kruger J, Miles R, Powell KE, Ramsey LT, Task Force on Community Services. The effectiveness of urban design and land use and transport policies and practices to increase physical activity: a systematic review. *Journal of Physical Activity and Health*. 2006;3(Suppl 1):S55-76.

Supporting Materials

Analytic Framework



Evidence Gaps

Additional research and evaluation are needed to answer the following questions and fill existing gaps in the evidence base.

- What community characteristics are needed for the best use of policy and environmental interventions?
- Does the effectiveness vary by type of access (e.g., worksite facility or community facility) or socioeconomic group?
- How can the necessary political and societal support for this type of intervention be created or increased?
- Does creating or improving access motivate sedentary people to become more active, give those who are already active an increased opportunity to be active, or both?
- What behavioral changes not involving physical activity can be associated with changes in physical activity?
- Does an increase in the use of public transportation mean an increase in physical activity or will users drive to the transit stop?

- Can reliable and valid measures be developed to address the entire spectrum of physical activity, including light or moderate activity?
- Does the level or scale of the intervention significantly change its effectiveness?
- What are the most effective ways to maintain physical activity levels once the initial behavior change has happened?
- Do informational approaches to increasing physical activity help to increase health knowledge? Is it necessary to increase knowledge or improve attitudes toward physical activity to increase physical activity levels?
- Do these interventions increase awareness of opportunities for, and benefits of, physical activity?
- Are there any key harms?
- Is anything known about whether or how approaches to physical activity could reduce potential harms (e.g., injuries or other problems associated with doing too much too fast)?
- What resource (time and money) constraints stop or slow implementation of these interventions?
- Can reliable and valid measures be developed to address the entire spectrum of physical activity, including light or moderate activity?
- Are these interventions cost effective?
- How can effectiveness in terms of health outcomes or quality-adjusted health outcomes be better measured, estimated, or modeled?
- How can the cost–benefit of these programs be estimated?
- How do specific characteristics of these interventions contribute to economic efficiency?
- What combinations of components in multicomponent interventions are most cost-effective?
- What are the physical or structural (environmental) barriers to carrying out these interventions?

Included Studies

The number of studies and publications do not always correspond (e.g., a publication may include several studies or one study may be explained in several publications).

Meyer J, Beimborn AA. Evaluation of an innovative transit pass program: the UPASS. *Transport Res Record* 1998;(1618):131-8.

Disclaimer

The findings and conclusions on this page are those of the Community Preventive Services Task Force and do not necessarily represent those of CDC. Task Force evidence-based recommendations are not mandates for compliance or spending. Instead, they provide information and options for decision makers and stakeholders to consider when determining which programs, services, and policies best meet the needs, preferences, available resources, and constraints of their constituents.

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