



SHAPES: A systematic analysis of health risks and physical activity associated with cycling policies

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Cycling trade offs

The SHAPES project assesses the risks and benefits of commuter cycling in cities, compared to commuting by car.

- More commuter cycling means less transport emissions, but cyclists may be at risk of higher exposure to air pollution.
- The benefit of a better overall physical condition of the population reduces health risks from a sedentary lifestyle, but increases risks for injuries resulting from the physical effort;
- Higher personal accident risks but increased general traffic safety.
- Longer rural cycling trips may require greater effort and short urban trips increase exposure to dense traffic.

SHAPES is at the crossroads of air pollution, health, transport and urban geography

Taking into account geographical and urban features

Quantifying the exposure to air pollution

Monitoring injuries and accidents

Including the health benefits of cycling



Objectives

- To evaluate the exposure to air pollution of cyclists compared to car users;
- To evaluate the physical condition of cyclists compared to car users;
- To implement an on-line injury registration system to monitor minor injuries to cyclists;
- To develop a spatial analysis for accident risks.

Deliverables

- An assessment of costs and benefits;
- A spatial analysis of trajectory choice and methodology for infrastructure development in the three Belgian regions;
- Policy options that will contribute to safer and healthier cycling conditions and to lower emissions and social security costs in the long term.

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