

# Which transport policies influence physical activity of the whole of society?

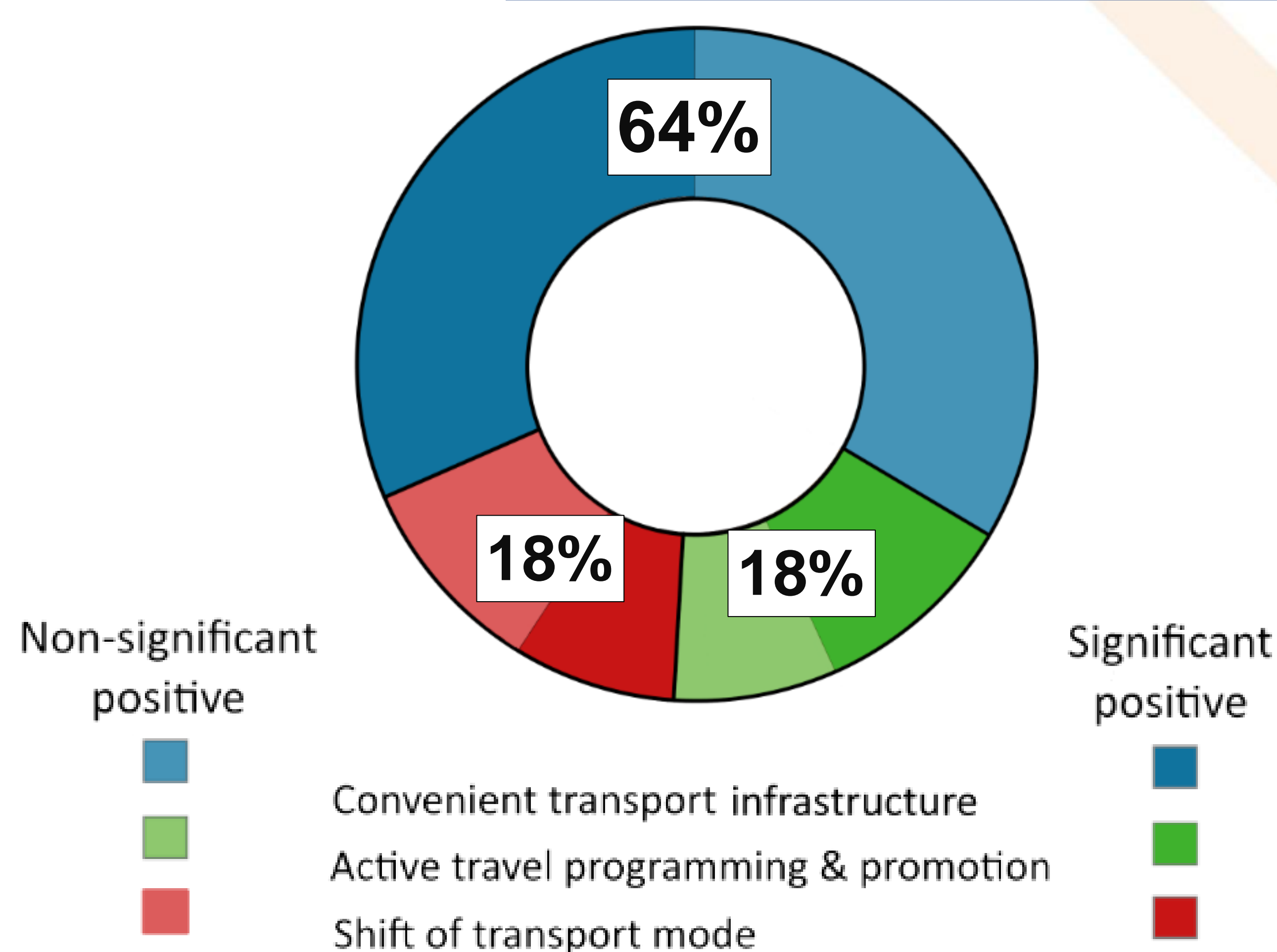
J Zukowska<sup>1</sup>, A Gobis<sup>1</sup>, P Gelius<sup>2</sup>, S Messing<sup>2</sup>, S Forberger<sup>3</sup>, J Lakerveld<sup>4</sup>, C Woods<sup>5</sup>, K Volf<sup>5</sup>, L Kelly<sup>5</sup>, B Casey<sup>5</sup>, E García Bengoechea<sup>5</sup> on behalf of the PEN consortium

<sup>1</sup> Gdansk University of Technology, Poland; <sup>2</sup> Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany; <sup>3</sup> Leibniz Institute for Prevention Research and Epidemiology – BIPS, Germany; <sup>4</sup> Amsterdam UMC, VU University Amsterdam, The Netherlands; <sup>5</sup> University of Limerick, Ireland.

## What is already known on this topic

- There is strong evidence of a link between car dependency and physical inactivity.
- Research consistently shows that those who walk, cycle or use public transport generally have higher total daily physical activity (PA) levels than those who drive a car.
- The 'Physical Activity Strategy for the WHO European Region 2016-2025' strongly highlights entry points for transport-related policies that influence PA levels in society.
- Although transport policies that prioritize walking, cycling and public transport are regularly recommended due to their direct and indirect effect on PA the many publications that are relevant in this field often have conflicting or inconsistent results.

## What policy actions work best for Physical Activity?



**Significant positive policy actions in three policy areas are:**

### 1. Convenient transport infrastructure

walking paths, new traffic-free cycling routes, new bus shelters, new bus lines, safer urban and streets design, traffic calming.

### 2. Active travel programming and promotion

personal travel planning, individual active travel guidelines, promotional activities on active transport.

### 3. Shift of transport mode

ticketing improvements, discounted season tickets, free university bus service, increased parking charges, public transport frequency.

**Fig 1. Share of policy areas positively influencing PA**

## Policy recommendations

1. PA levels can be increased by implementing policies that provide convenient, safe, and connected walking and cycling infrastructures.
2. PA levels can be increased by promotion active travel policies.
3. PA levels can be increased by giving strong support to public transport.
4. Active travel policies work best when implemented in a comprehensive way (very often as a combination of several policies).



**Figure 2. Cycling paths - good example**

### References

Chakrabarti, S., & Shin, E. J. (2017). Automobile dependence and physical inactivity: Insights from the California Household Travel Survey. *Journal of Transport & Health*, 6, 262–271. <https://doi.org/10.1016/j.jth.2017.05.002>

Volf, K., et al. (2020). Policy Evaluation Network (PEN): Protocol for systematic literature review examining the evidence for impact of policies across seven different policy domains. *HRB Open Research*, 3, 62. <https://doi.org/10.12688/hrbopenres.13089.2>