

WHY QUALITATIVE WALKING AND CYCLING INFRASTRUCTURE MATTERS

ABSTRACT Urban areas and their hinterland are at a critical point, facing a complex array of challenges that threaten long-term sustainability and quality of life. Considering that the global demography and the share of the population living in such areas are expected to increase, these challenges will likely exacerbate in the near future. Central to sustainable and resilient solutions is moving away from reliance on privately owned vehicles and fostering alternative transport modes, including public transport, as well as walking and cycling (Millard-Ball, 2025).

The paper will discuss the various benefits of walking and cycling, analysing the current barriers and opportunities (Makahleh, 2025). Among the parameters that influence the share of walking and cycling in the mobility modes is the need for appropriate infrastructure and its quality (Schoon, 2019; Parkin, 2017). The paper will analyse the case of Brussels to illustrate this; for instance, the cycling infrastructure is assessed with the cycle route evaluation tool (Bendisk, 2013) based on several criteria: consistency, directness, attractiveness, road safety, comfort, spatial integration, user experience and socio-economic value.

The rise of e-commerce, accelerated by the COVID-19 pandemic, has also reshaped the logistics landscape dynamics and placed increasing pressure on urban delivery systems (Schorung, 2023). In this evolving context, cycle logistics has emerged as a promising solution. The paper will then specifically discuss how the infrastructure is an essential tool in the development of such a solution.

Finally, the paper will conclude by making some policy and guidelines recommendations regarding walking and cycling infrastructure.