Assessing the Impact of Pilot Actions for Travel Behaviour Change and Street Redesign within the CityWalk 2.0 Project

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Abstract As societies undergo concurrent green and digital transitions, urban mobility emerges as a key domain for systemic transformation (Schipper et al., 2020). This shift extends beyond transport mode choices to influence individual behaviour and guide urban planning and policy development (Van Acker et al., 2016), including in peri-urban and regional contexts, where connectivity gaps remain a critical challenge. The accelerating growth of urban populations reinforces the urgency of promoting sustainable urban mobility, given the negative externalities associated with car-dependent systems, including environmental degradation, public health challenges, and the depletion of accessible, high-quality public spaces (Schipper, 2002).

In this context, the CityWalk 2.0 project, funded by Interreg Danube Programme, seeks to advance the energy transition in urban transport. The project aims to significantly reduce the energy consumption of urban mobility systems while improving the overall liveability of cities (Anciaes and Jones, 2020). Pilot cities within the project are tasked with implementing interventions focused on modifying travel behaviour and reconfiguring public spaces to support and sustain these changes.

To systematically evaluate these interventions, an assessment methodology has been developed. The framework is designed to enable cities to measure the impacts of mobility-related actions targeting citizen's travel behaviour, perceptions of public spaces, and overall orientation towards sustainable mobility. The methodology also identifies key implementation challenges and proposes adaptive strategies for future replication and scalability. The evaluation framework is structured around two core areas of interventions: (1) street redesign initiatives aimed at fostering safer, more inclusive, and accessible public spaces; and (2) behavioural change initiatives intended to reduce private car use and promote active or shared modes of mobility.

This paper presents the methodological framework and associated tools designed for the assessment process, detailing their applicability across various stakeholder groups. Preliminary insights derived from pilot city evaluations are discussed to show the dynamics of local mobility transformation triggered by the small-scale experimental interventions, responding to context-specific challenges, including reduced emissions, increased active mode share, or improved connectivity. The findings offer transferable lessons and methodological guidance to other small and medium-sized cities interested in promoting sustainable and active mobility strategies. By grounding future mobility planning in empirical evidence, the assessment will play an essential role in supporting more targeted, effective, and inclusive urban mobility transitions.