

Addressing Challenges in Bicycle Daily Commuting in Slovenia

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Abstract. Daily commuting is a challenging issue in Slovenia, and cycling to work could gain popularity due to its recreational, health and environmental benefits. However, there are challenges, such as safe bicycle parking and determining the best path, dealing with unfavourable weather periods, and arriving at work fresh. Slovenia lags behind its neighbouring Austria in allocating funds for sustainable mobility reform. Factors such as fuel prices and available public transport opportunities significantly influence transportation choices. Dutch initiatives promoting cycling highlight the importance of strategic planning, infrastructure development, and soft measures to reshape mobility culture. Effective policy interventions in resilient directions, and infrastructure improvements that require efficient investments are crucial for achieving sustainable mobility goals in Slovenia.

Keywords: sustainability, bikes, Slovenia, commuting

1 Direction of the Research

The issue of daily commuting poses a significant challenge for individuals residing in Slovenia. While several modes of transportation are available, one option that has gained attraction in recent years is cycling to work. Not only does cycling offer a means of incorporating physical activity into one's daily routine, but it also presents an opportunity to circumvent traffic congestion and reduce carbon footprint. Nevertheless, cycling to work is not without its obstacles. These challenges include determining a secure bicycle parking and efficient path, coping with unfavourable weather conditions, and arriving at work refreshed and ready to engage in professional activities. Despite these challenges, many individuals have successfully adopted cycling as their mode of transportation for daily commuting. With the potential for different aspect of sustainability, health and environmental benefits, cycling presents a promising alternative to traditional modes of transportation.

1.1 What is Behind?

The European Commission, through the Recovery and Resilience Plan under the Next Generation EU program, emphasises a strong commitment to sustainable mobility transition. Slovenia's allocation of 12.6% for sustainable mobility reform lags behind Austria, its closest neighbour, which allocates 25.5% for the same objective (European Commission 2024). Daily mobility is pivotal in achieving a low-carbon society, a circular economy, and promoting sustainable, healthy, and active lifestyles. Many European cities prioritise daily mobility, a trend Slovenia aims to emulate. This study investigates current mobility patterns and future perspectives, particularly concerning cycling for daily commuting. Interviews with Dutch government representatives and time-series data analysis for Slovenia were conducted to assess the stylized facts.

1.2 Time Series Analysis Results

Current measures to transition to sustainable mobility in Slovenia appear ineffective, as indicated by an increasing car-to-population ratio alongside declining bicycle usage during economic growth,

highlighting the need for raising awareness and effective policy interventions. Factors such as fuel prices and public transport availability opportunities significantly influence transportation choices. Surprisingly, higher unemployment rates correlate with increased car demand, possibly due to limited public transport options or job-seeking individuals relying on personal vehicles. Higher carbon dioxide emissions increase car demand, revealing a disconnect between environmental concerns and consumer behaviour (Gricar et al. 2023). However, fuel prices and alternative transport availability options negatively impact car demand, underscoring the challenges in promoting sustainable mobility and achieving emission reduction goals in Slovenia.

1.3 Results from the Interviews

Comparing time series findings with Dutch initiatives promoting cycling for daily commuting reveals key insights. Ensuring cyclist safety and encouraging pedestrian mobility emerge as primary areas for improvement.

Current research and Slovenian governmental documents highlight various strategies, but their effectiveness remains limited. Addressing this research gap requires identifying short- and medium-term measures alongside long-term infrastructure improvements. Insights from current data analysis and expert interviews contribute to formulating effective strategies for sustainable mobility promotion.

The study's primary data sources are time-series variables data spans from 1997 to 2021, supplemented by insights from interviews conducted in March 2024 with Dutch government representatives focusing on infrastructure improvements that require investments and sustainable mobility, respectively. Their insights underscore the importance of strategic planning and governmental initiatives in fostering sustainable daily mobility practices. Key Dutch strategies include parallel infrastructure development, traffic segregation, cycle highways, car speed limit reductions, and educational initiatives with raising awareness promoting sustainable mobility. Employers are encouraged to support sustainable commuting through incentives like bicycle facilities and transportation subsidies.

2 Conclusion

The Netherlands' success in promoting cycling highlights the importance of strategic planning, infrastructure development, and soft measures to reshape mobility culture. Effective policy interventions and infrastructure improvements are crucial for achieving sustainable mobility goals, emphasising the need for multi-level collaboration and comprehensive strategies in Slovenia.

References

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