Extended Abstract

Composing Effective Packages of Push and Pull Measures to Reduce Inner City Car Traffic

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Keywords: Sustainable Urban Mobility, Regulatory Frameworks, Car Traffic Reduction, Avoid-Shift-Improve, European Cities, Governance Structures

Problem statement

Responsible mobility innovations are imperative for the sustainable development of urban areas, as progressive European cities face the challenges of congestion, air pollution, and the need to reallocate space to more sustainable transport modes. To address these issues, this study aims to understand the conditions under which European cities' approaches to developing effective packages of push and pull measures to reduce inner city car use have been successful, and to draw lessons for the German regulatory framework.

To enable a sustainable transformation of urban mobility systems, cities need to renegotiate the allocation of public space and redesign their mobility system. Overall, adjustments to transport systems, pricing, regulatory frameworks and urban development policies must also take into account their planning horizons and the time required for approval and implementation. In addition to considering the cost and acceptability of planning options, these time requirements must be part of planning decisions. The way in which public authorities and municipal projects view the reform tasks in the transport sector and the respective legal framework conditions are therefore important and necessary levers for the rapid implementation of a sustainable transformation of urban mobility systems.

Research objectives and questions

This study supports the research objectives of the research project <u>"Car-Traffic Reduced City Centres in Europe – A Comparative Analysis of Regulatory Approaches Based on Case Studies"</u>, which aims to derive practicable strategies from the experiences of European cities to reduce car ownership and car use in German cities. By evaluating the results of this research project, the key question of this study is how push and pull measures within the existing instruments of German road traffic law and urban planning law can be complemented with experiences from other European countries in order to create more effective packages of push and pull measures to reduce inner city car traffic.

In more detail, the study is addressing the following research questions:

- What options does the existing German legal framework already provide for the sustainable urban development with the aim of car traffic reduced city centres and a reallocation of urban space in favour of sustainable transport modes?
- What are the decisive legal levers with the greatest effectiveness to improve the coordination of different areas of law in terms of integrated transport and urban development, and how can Germany optimise its multi-level governance structure?

- Which legal, regulatory and administrative approaches and urban development policies were successful in the cities of other European countries? How have these cities successfully managed their strategies and objectives when composing effective packages of push and pull measures, including the redistribution of urban space?
- How can German cities learn from these examples of the conditions for a successful reduction of inner-city car traffic and apply these findings to the composition of their own packages of measures? What key framework conditions do they need to take into account?

Methodological approach

The study follows the "avoid-shift-improve" approach, which integrates regulatory frameworks as key elements in the quest to promote strategies that encourage people to reduce car ownership and avoid car use, shift to alternative modes of transport, and improve the efficiency of existing transport options. This basic concept underpins the design of the study, allowing the systematic exploration of different measures that fall into these categories and then create comprehensive packages tailored to the specific needs of German cities.

In Germany, as in many other countries, environmental and health concerns as well as goals to improve the quality of life in cities are driving the push for responsible mobility. Accompanying the current reform processes of German road traffic law, municipalities are demanding more local powers. However, in order to strengthen these efforts in the further development of the legal framework, it is first necessary to identify the most effective legal levers based on the experiences of other European cities. Furthermore, these efforts need to link to other sustainable urban development objectives in the context of integrated urban development.

The study uses a multi-method approach that combines a thorough analysis of the current legal framework in Germany, a qualitative analysis of interviews with local experts and planners from different European cities (Delft, Villach, Vienna, Paris, Zürich, Umea, and Pontevedra) and a comprehensive literature review on different typologies of low car urban mobility systems.

Expected results

Based on an analysis template of the existing legal instruments in Germany, which brings together five comprehensive expert reports and clusters their proposals for reducing car traffic in city centres, this study creates a comprehensive framework for German cities to develop effective packages of push and pull measures that are in line with their sustainable urban development objectives. The project thus shows how effective packages of push and pull measures to reduce car traffic in city centres can combine instruments from the existing legal framework in Germany with experiences from other European countries. Together with research on different typologies of low car urban mobility systems, this will provide cities with guidance for sustainable urban mobility planning, taking into account their local planning conditions.

Acknowledgments

The study builds on research from the research project <u>"Car-Traffic Reduced City Centres in Europe – A Comparative Analysis of Regulatory Approaches Based on Case Studies"</u> that is part of the research program "Experimenteller Wohnungs- und Städtebau" (ExWoSt). This is a program of the German Ministry of Housing, Urban Development and Building (BMWSB) and is managed by the German Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) within the German Federal Office for Building and Regional Planning (BBR).

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