UNIVERSITY OF AMSTERDAM

UvA-DARE (Digital Academic Repository)

From street experimentation to urban transformation

The role of tactical urbanism and street experiments in urban mobility

Büttner, Benjamin; Papa, Enrica; Bertolini, Luca

DOI
10.1016/j.urbmob.2026.100207

Publication date
2026

Document Version
Final published version

Published in
Journal of Urban Mobility

License
CC BY

Link to publication

Citation for published version (APA):
Büttner, B., Papa, E., & Bertolini, L. (2026). From street experimentation to urban transformation: The role of tactical urbanism and street experiments in urban mobility. *Journal of Urban Mobility*, *9*, Article 100207. https://doi.org/10.1016/j.urbmob.2026.100207

General rights
It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations
If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: https://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, P.O. Box 19185, 1000 GD Amsterdam, The Netherlands. You will be contacted as soon as possible.

UvA-DARE is a service provided by the library of the University of Amsterdam (https://dare.uva.nl)

Download date:11 Nov 2026

Journal of Urban Mobility 9 (2026) 100207

Contents lists available at ScienceDirect

Journal of Urban Mobility

journal homepage: www.elsevier.com/locate/urbmob

From street experimentation to urban transformation: The role of tactical urbanism and street experiments in urban mobility

Introduction

Street experiments (SEs) are temporary urban interventions to explore new designs and uses of streets and public spaces. These trials prioritize pedestrians, cyclists, and public spaces over motorized traffic, and aim to create more inclusive and vibrant urban environments. While street experiments show promise, several questions remain. What defines a successful street experiment? How do these transformations affect different people, for instance people of different ages and abilities? Can these initiatives be effectively implemented in cities with diverse urban planning traditions, such as those in Europe and North America, or in the Global North and the Global South? These are crucial considerations when evaluating the potential of street experiments to drive systemic change in urban mobility and public space quality. Numerous studies have explored these questions, analyzing street experiments across different urban contexts to assess their applicability and effectiveness, and yet there are no final answers. Contributing to this burgeoning debate, this Special Issue on the subject features a diverse range of papers addressing the roles, processes, and impacts of SEs and tactical urbanism across varied geographic, social, and institutional contexts. From high-density Asian metropolises to intermediate Latin American cities and European tactical interventions, the contributions reflect a growing global interest in SEs as vehicles for both practical innovation and structural change.

The following sections summarizes each paper's findings, offering both critical reflection and practical guidance for scholars, practitioners, and policymakers seeking to understand the factors that influence the implementation and success of these urban interventions.

Content summary

Van Hoose et al. (2022) investigate the potential of SEs to stimulate larger changes in the urban system by conducting case studies in the cities of Amsterdam and Munich, defining and assessing SEs using a multi-level perspective as developed in transition studies. This study conducted a qualitative-based exploratory study analysis, performed on the local examples of SEs in both cities by conducting interviews with selected stakeholders. An assessment framework has been employed to compare the transitional capacity of the implemented SEs in various urban settings and the role played by SEs in triggering system change by relating them to five distinct experiment characteristics. Findings highlight that the 'cumulative strength of experiment characteristics', and the 'communicative' characteristic positively align with the overall dimensions of change. Whereas weak correlating characteristics such as 'radical', 'strategic', and 'challenge-driven' do not seem to possess a determining relationship with the overall transitional change. The study suggests that instead of across-the-board maximization of characteristics, a possibility for different mixes of characteristics could address the trade-offs in a better way while achieving expected change. To limit local resistance from people of mixed opinions, it is useful to involve local governments and increase awareness about SEs. Finally, the study highlights that regardless of their strengths and weaknesses, SEs are influenced by various shifts and dynamics of the overarching mobility regime.

Existing research indicates that street experiments (SE) can encourage public support for post-car transitions, typically evaluating SEs from perspectives of upscaling, public acceptability, or practitioner viewpoints. However, few studies have explored what citizens value about SEs in everyday street life in an open-ended manner. To address this, Smeds and Papa (2023) analyze how 458 citizens perceive five SE parklets and plazas in London, Munich, and Bologna. They employ an inductive and qualitative survey method to understand what mobility and public life dimensions of SEs are valued by citizens, considering both use value and the broader social meanings of street transformations. From this empirical analysis, they develop a framework with 10 categories encompassing functional, social, safety, environmental, and economic dimensions. The findings reveal that citizens across all three cities place higher value on the public life aspects of SE compared to the benefits for active mobility. Specifically, they appreciate SE for enhancing the attractiveness of the streetscape, providing public spaces for stationary activities, and fostering social and civic interactions within neighborhoods. This analytical approach offers a deeper understanding of citizens' qualitative evaluations of SEs. The practitioner recommendations derived from this study can guide the design of more effective and inclusive SEs.

Gera and Hasdell (2023) explore how socio-spatial factors influence the mobility of urban marginal women (UMW) and their presence in city streets, revealing that these factors are interconnected and should not be addressed in isolation. Issues such as traveling alone, culturally gendered places, and traveling at night act as barriers, creating feelings of unsafety. Urban informality often enables mobility, with active, interconnected streets fostering vibrant public spaces and mixed land use ensuring safe access. Social interdependence provides a sense of safety, though the sense of community can both enable and hinder mobility. Enhanced participation of women in socio-economic activities increases their presence in public spaces, encouraging more women to safely access these areas. To improve UMW mobility, the study suggests integrating social dynamics with urban infrastructure, supporting

https://doi.org/10.1016/j.urbmob.2026.100207

Available online 2 April 2026
2667-0917/© 2026 The Author(s). Published by Elsevier Ltd. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).

women's participation in socio-economic activities, adopting inclusive and mixed land use planning, and promoting informal street activities. These strategies aim to create more equitable, safe, and inclusive public spaces. This holistic approach highlights significant factors for effective SEs, drawing from gendered mobilities and urban informality to inform city planning.

Beyazit et al. (2023) explores how SEs can enhance gendered mobilities by prioritizing women's needs and improving access to public transport. By creating inclusive streetscapes through participatory planning and design, women can better participate in urban life. The TOPUK project in Maltepe, Istanbul, serves as a case study, demonstrating how participatory pop-up design solutions addressed key issues of accessibility, mobility, and safety for women. Despite bureaucratic challenges, many solutions were implemented. The paper concludes with insights from the TOPUK project, suggesting that these lessons can inform future SEs to foster more gender-responsive and inclusive urban environments.

Scerri and Attard (2023) performed a study in Malta bridging the gap between stakeholders and the community in street experimentation by using a virtual urban living lab (VULL). This virtual platform, created with initial input from the community and key stakeholders, engages residents to identify barriers to walking and evaluate street experimentation ideas. Tested in a workshop, the VULL proved useful for understanding urban walking challenges and collecting feedback on proposed interventions. The study highlights the repurposing of on-street parking for widened pavements, cycle lanes, or street furniture and the impacts on traffic congestion as key issues of debate. The findings suggest that providing peripheral parking can increase support for these street interventions and minimize urban parking issues. Participants in the VULL workshop prioritized traffic calming and designing a consolidated walking and cycling network, emphasizing the need for connectivity in urban planning. These insights can guide future SEs to create more walkable and cycling-friendly environments.

Bajada et al. (2023) in June 2020, the Local Council Association (LCA) in Malta launched the ‘Slow Streets’ action plan to promote active travel and public transport while providing information to reduce mobility. This paper examines people's perceptions, opportunities, and challenges regarding this action plan, using data from 84 semi-structured interviews and a focus group with stakeholders. The interviews, conducted from February to April 2022 across six localities, and the online focus group held in February 2022, revealed that 66% of residents were unaware of the action plan, highlighting a concern about stakeholder involvement. Three main themes emerged from the qualitative analysis: car culture, safety, and policy. Both residents and stakeholders agreed on the need for permanent interventions to reduce car use and create safer urban environments for children. Participants also emphasized the necessity of shifting towards active mobility for mental and physical health benefits. The entrenched car culture, deeply ingrained in institutions, however, poses a significant challenge to change.

The findings suggest that safe streets encourage children's play, enhancing social cohesion and community involvement. The ‘Slow Streets’ action plan aims to mitigate the negative impacts of car use by reducing traffic speeds, promoting shared streets, and creating safer, healthier urban environments.

Ceccarelli et al. (2023) highlight the challenge of planning sustainable urban mobility infrastructures and services in European cities. In March 2022, Fondazione Innovazione Urbana and the Municipality of Bologna transformed a parking area near a secondary school into a public space for children using tactical interventions and participatory design. This study introduces a methodology for long-term, camera--based monitoring to assess SEs, differing from previous studies by employing a continuous and systematic approach. The area underwent an extensive mobility study using video analytics to monitor pedestrian and vehicular flows over two months before and after the intervention. The results aimed to identify activation times through metrics like cumulative pedestrian density and dwell time to characterize space use post-redevelopment. Findings revealed a 43% increase in cumulative dwell time, particularly around new furniture spots in the plaza. This study demonstrates the effectiveness of using sensors and innovative analysis technologies to support iterative urban regeneration design processes, confirming the value of such interventions in enhancing urban spaces.

Villani and Talamini (2023) examine four decades of temporary-pedestrianization policies in Hong Kong, highlighting the challenges and strategies in a high-density urban environment. The study focuses on two emblematic cases: Chater Road, the first street pedestrianized under a commercial initiative, and Sai Yeung Choi Street South, a government-initiated pedestrianization that reverted to its original motorized traffic function. These cases reveal how competing roles and uses of pedestrianized streets, along with the planning approach and decision-making process, influence their trajectories. Historically, pedestrianization in Hong Kong aimed primarily at pedestrian safety with minimal traffic disruption, showing modest transformative intentions toward sustainable mobility or public space creation. Recent consultancy studies advocating more transformative approaches still face barriers such as risk aversion, safety concerns, and limited public engagement. These challenges are common in similar high-density contexts and question the transformative nature of SEs. The study identifies four SE development pathways, highlighting tensions between social practices and institutional order, often leading to the suppression and marginalization of pedestrianization measures. Current SEs in high-density Asian cities aim to address socio-environmental challenges but require careful analysis of planning and political environments. To succeed, SEs must consider the selection of locations, emerging social activities, and street uses, prioritizing public social needs over governmental financial interests. Support from civil society, private sector promotion, and dedicated institutions with adequate resources are crucial. The transformative prospects of SEs depend on shifting focus from technical aspects to empowering civil society and moving from statutory plan-making to strategic, flexible, and discretionary planning systems.

Von Schönfeld (2024) examines four recurring critiques of street experimentation and proposes that addressing these critiques can empower rather than weaken such initiatives. Engaging with these critiques isn't intended to renew criticism of SEs but to enhance their design and effectiveness. Advocates should be prepared to defend or amend their choices in response to these critiques. This commentary calls for creativity and a return to the deeper motivations behind street experiments. It encourages planners to ground their motivations and actions within the enthusiasm surrounding various types of experiments. Drawing on the Multi-level Perspective (MLP) and sustainability transitions studies, von Schonfeld critiques the tendency to place market-driven and politically driven niches on equal footing, which can neutralize the political choices of the 'regime' and emphasize slow, long-term change. Von Schonfeld argues that switching theoretical frameworks more frequently and addressing the critiques can lead to more creative, environmentally, and socially just urban configurations. This approach emphasizes the importance of aligning street experiments with broader societal and global goals, ensuring that they contribute meaningfully to sustainable and equitable urban development.

Younes et al. (2024) investigates the effects of a delineator-protected bicycle lanes on traffic speeds using computer vision to analyze over 9000 vehicles at a pilot site. The analysis revealed that the protected bicycle lane, marked with traffic cones and plastic delineators, led to a 28% reduction in average maximum speeds and a 21% decrease in average speeds for vehicles turning right. For vehicles going straight, the reduction was up to 8%. In contrast, traffic perpendicular to the bike lane experienced no speed change. Painted-only bike lanes resulted in a smaller speed reduction of 11–15%, primarily affecting right-turning vehicles. These findings suggest that delineated bicycle lanes have a significant traffic calming effect, which can reduce the risk and severity

of pedestrian and cyclist crashes. Slower traffic speeds are linked to lower crash severity, as higher speeds increase the likelihood of severe or fatal injuries. The study supports the notion that delineated bike lanes, compared to painted lanes, contribute to safer conditions for all road users. Planners and policymakers aiming to achieve Vision Zero should prioritize delineated bike lanes over painted lanes. While delineated lanes may appear more costly, their traffic calming benefits and potential to enhance safety justify their implementation. Future research should further explore the traffic calming effects of various bike lane designs, including protected bike lanes.

Vásquez et al. (2024) examine SEs in Chilean intermediate cities during the COVID-19 pandemic, focusing on Quilpué, a city near Santiago. The pandemic provided an opportunity for these cities to advance sustainable mobility due to their simpler governance structures compared to larger cities with fragmented urban management. This allowed for more straightforward coordination among local stakeholders. However, financial constraints remain a significant challenge, as municipalities often struggle to allocate funds for sustainable measures amid other pressing needs.

The research highlights that while SEs in intermediate cities mirrored those in larger cities, they were executed on a smaller scale. Despite some progress in sustainable mobility, the effectiveness of tactical urbanism in overcoming institutional inertia remains uncertain. The study emphasizes the importance of integrating diverse urban knowledges and engaging with community members' social identities to foster more equitable and transformative urban interventions.

The findings suggest that while intermediate cities like Quilpué leveraged their governance advantages to implement innovative SEs, these changes are not universally perceived as positive. For sustainable mobility measures to have a lasting impact, increased civic engagement and broader analysis involving more cities and stakeholders are necessary. Future research should explore whether intermediate cities offer better conditions for sustainable mobility and identify factors that can turn temporary experiments into permanent improvements.

Nello-Deakin (2024) investigates the spatial equity effects of Barcelona's new pedestrianized "green axes" implemented in 2023. The study, based on interviews and a focus group with key stakeholders, explores how these pedestrianized areas may create "winner" and "loser" streets within the same neighbourhood, thus complementing previous research that focused on spatial equity across different neighbourhoods.

The findings reveal that pedestrianization can increase relative inequities between streets, as pedestrianized areas become more attractive but may also face pressures like property value increases and gentrification. While these areas can enhance public space for the whole neighbourhood, they might also experience new negative impacts, potentially leading to opposition from residents. The research suggests that while pedestrianization can benefit the broader community, it may create local inequities.

To address these issues, the study recommends assessing spatial equity on a neighbourhood-wide scale rather than focusing solely on individual streets. It highlights trade-offs between inter-street equity and the feasibility of street transformations, advocating for more diffuse and lower-cost traffic calming measures across a larger number of streets. The study also emphasizes the need to address gentrification and property value impacts, which are often overlooked in favor of traffic-related concerns.

In summary, Barcelona's green axes demonstrate that pedestrianization's impact on spatial equity is complex and multi-dimensional. Key findings include: 1) Pedestrianization can make some streets appear worse by comparison; 2) The green axes strategy avoids some issues of the original superblocks model; 3) Successful pedestrianized streets may face new challenges; 4) Public space gains benefit the entire neighbourhood; and 5) Local businesses are more affected by inequities than residents. The study calls for a balanced approach to street transformations, considering both the spatial and social impacts of such interventions.

Gatarin and Andal (2024) examines the pivotal role of civil society in addressing the severe traffic congestion in Metro Manila, a city notorious for its car-centric issues. Despite the government's focus on infrastructure and technological interventions, the article underscores how grassroots initiatives and civil society engagement are crucial for initiating and sustaining SEs that promote sustainable mobility. The study highlights two main approaches: the *bibingka* or sandwich approach and the role of civil society as a 'critical friend'. The *bibingka* approach is exemplified by the *Bayanihan sa Daan* initiative in Pasig City, which promotes road-sharing in the busy Ortigas business district. This initiative demonstrates how community-led projects can effectively tackle traffic problems and shift the focus from car-centric solutions to people-oriented mobility.

Additionally, the article presents examples of how civil society organizations have acted as critical friends, influencing transport policies and practices through partnerships with government agencies or by placing their members in key positions. These organizations play a crucial role in driving SEs and reforms that better serve community needs. The study reveals several key lessons: First, engaging civil society is essential for developing sustainable and inclusive mobility systems, ensuring that transportation solutions address the needs of people rather than just vehicles. Second, strengthening community engagement, as seen in initiatives like *Bayanihan sa Daan*, fosters ownership and alignment between government priorities and local needs. Third, successful SEs often involve collaboration across various stakeholders, with public awareness and education campaigns being vital for garnering support. Moreover, the study emphasizes the importance of policy institutionalization, noting that lessons learned from SEs must be translated into formal policies with legal backing to ensure sustainability and scalability. Effective urban mobility reforms require both government support and grassroots involvement, advocating for collaborative projects that integrate both perspectives. While some SEs have faced challenges or been discontinued, these experiences provide valuable lessons for future initiatives. A holistic approach that combines physical infrastructure with community-driven solutions and policy support is crucial for achieving just and sustainable urban mobility. Ultimately, Gatarin & Andal's analysis highlights the need for interdisciplinary efforts to transform urban environments, addressing traffic congestion and promoting more equitable and efficient mobility solutions.

Zhao et al. (2025) explore the limited impact of a SE initiative in the city of Hong Kong. The study takes a qualitative and partial quantitative approach, using interviews to get input from stakeholders and participants, exploratory questionnaires to better understand user demographics, field observations, and document searches. The study discusses how leadership dynamics influence the transformational potential of SEs. Findings reveal that low willingness to learn and the capacity to lead among key stakeholders resulted in a compromised vision and scope that fell short of initial aims and objectives, lowering design effectiveness and social impact. An important takeaway would be that, while the rest of the world experience governance challenges after implementation, Hong Kong encountered governmental pushback during the pre-implementation period, highlighting a unique barrier as evidenced by the case study.

Ortar et al. (2025) investigate the experience of implementing the idea of Tactical Urbanism (TU) during the COVID-19 pandemic in the city of Lyon, France. Experiments mainly involved the creation of pop-up (temporary) dedicated bicycle lanes to enable mobility during the pandemic while also focusing on achieving a long-term shift towards a bicycle-oriented city. This study employs a mixed methods approach, beginning with participant interviews (qualitative) followed by a survey questionnaire (quantitative) to better understand people's perceptions towards the incentives that were brought up. Findings demonstrate that TU boosted the adoption of cycling as a result of the faster implementation of the temporary bicycle lanes and the local political party's support for promoting cycling, showcasing the commitment of relevant stakeholders. However, due to the limited awareness of the public,

policies faced criticism. Later, attempts were undertaken to institutionalize cycling policies, which played a key role in reducing car-dominance and increased usage of public transport (PT). However, reflecting on the TU's principles of faster implementation, Lyon faced socio-spatial inequalities as cycling is not very welcomed by the working class, and a lack of inclusivity still persists, highlighting the importance of designing and maintaining infrastructure that meets the diverse needs of various user groups, including safety and accessibility in society.

Schreiber (2025) investigates the potential of Tactical Urbanism (TU) to stimulate innovation in urban planning practices, as well as the elements that promote or impede it, and proposes important insights to planners and policy makers. The study uses a mixed methods approach to undertake a case study in the city of Barcelona, Spain from 2013 to 2023, which is seen as ideal in assessing long-term impacts on the level of perception by the citizens. TU was a part of the 'Super Block Concept', which was tested by implementing it in the neighborhoods of Poblenou and Sant Antoni. Qualitative part of the assessment involves primary and secondary data collection from various sources, additionally complemented by field observations. Primary data is collected from participant interviews, which primarily include city planners, politicians, academic and social representatives to gather multiple and diverse perspectives. Whereas secondary data collection is from the inputs extracted from local municipal strategies, and policy documents & reports related to street experiments and urban planning.

Author mentions that in the view of municipal planners, the concept of TU addresses urban space challenges, encouraging people-centered street transformation, allowing flexibility and adaptability, emphasizing how innovative mobility practices help shape people's perception of street usage. It also emphasizes the crucial role of avant-garde planners and intermediaries in pushing the boundaries and ensuring the timely implementation of TU, as well as the alignment of the municipal agenda with emerging innovations, in maximizing impact of TU in Barcelona. However, the author underlines that, despite its considerable influence on innovations and behavioural patterns, TU has a limited impact on long-term planning processes. The study points out bureaucracy, political interference, and a lack of learning during trial as key challenges to supporting innovation. The study also explains how the failure of SEs, as observed in the case of Poblenou, was linked to political power games that influenced the urban planning agenda, and how the complex interplay of conditions may influence urban experimentation practices, limiting planners' freedom to try and implement new approaches within urban landscapes.

Nixon (2025) examines various street opening and closure experiments in London and São Paulo that differ in terms of their geographic and temporal scale, target groups and modes of transport. The study aims to evaluate the claim that street experiments and grassroots initiatives are undemocratic, unrepresentative and inequitable due to their spatial limitations and private nature, as opposed to more formal governance processes. The analysis of the case studies in London and São Paulo refutes these claims, suggesting that street experiments achieve broader and more diverse representation, wider temporal and spatial boundaries and higher democratic legitimacy. This conclusion is based on four key findings. First, the investigated grassroots organisations were dynamic and well adjusted to their target groups' capabilities, intentionally prioritising smaller groups before broadening their scope. Furthermore, street experiments can enhance democratic processes by fostering participatory and representative decision-making through experiential learning and embodied experiences. In contrast, conventional governance is often less representative, as other political and private interests prevail. Lastly, street closures do not reduce equity; rather, they shift who benefits and who is disadvantaged as a consequence of the paradox of freedom due to the conflicting needs of different transport mode users.

Thomas (2025) investigates the extent to which street experiments contribute to larger-scale mobility transitions. The study assesses whether London's School Streets facilitate a reduction in private motor vehicle use and an increase in active mobility for travel to and from school through a quasi-experimental analysis. Following the implementation of School Streets, mode share of private motor vehicles decreased by four to five percent, while active travel increased by three percent in comparison with to schools that did not implement School Streets. However, these effects are lessened with increased average travel distance, rendering travel distance a key determining factor for mode choice. Despite the fact that the School Street initiative mostly led to mode shifts specifically along the final stretch rather than the entire trip to school, the study suggests that widespread implementation of street experiments could potentially contribute to broader mobility transitions.

Main lessons

Street experiments are increasingly recognized as pivotal in transforming urban mobility and public spaces. The case studies and research presented in this issue highlight the significant impact of these interventions on enhancing urban livability. A central question that unites these contributions is: To what extent do street experiments facilitate not just spatial or infrastructural change, but deeper social, political, and cultural transformations in cities? This is pursued through investigations into who participates, who benefits, and how change unfolds or is constrained across different scales and power dynamics.

Realising the potential of street experiments depends on applying insights from diverse urban experiences. The five takeaways below highlight core strategies for designing interventions that are both inclusive and effective:

Focus on Public Life: Street experiments should prioritize enhancing public life by creating attractive streetscapes and providing spaces for social interactions and stationary activities, fostering a sense of community and civic engagement.

Equity must be central: Effective SEs account for how interventions intersect with gender, class. Urban and mobility planning should incorporate social factors to improve mobility and safety, particularly for marginalized groups. Inclusive and mixed land use planning, along with promoting informal street activities, can create more equitable public spaces.

Community and Participatory Planning: Engaging local communities in the planning process ensures that street interventions address the specific needs of diverse groups and respect the local context. Participatory planning leads to more inclusive and responsive urban environments.

Engagement tools are evolving: New approaches such as virtual platforms support more participatory, adaptive, and informed experimentation processes. This approach could for instance be used to explore traffic calming and connectivity measures, leading to more walkable and cyclist-friendly environments.

Long-Term Monitoring and Data-Driven Decisions: Continuous monitoring and data analysis of street experiments provide valuable insights for iterative design processes. This ensures that urban interventions lead to sustainable and effective improvements in urban livability and mobility.

Conclusion

In conclusion, as we continue to explore and implement street experiments (SEs), it is crucial to understand and value local street transformations from a citizen perspective. A multifaceted approach is necessary for successful upscaling. Broad community involvement is key to the acceptance and success of these projects. Planning must consider all members of society, especially children and the older population, who need safe, healthy, and nurturing environments to thrive. Shifting mindsets within institutions is equally important; reliance on car-centric thinking will undermine initiatives aimed at reducing car dependency. Educational campaigns are vital to promoting respect among all street users and fostering a more inclusive understanding of shared public

spaces.

Overall, the findings from various case studies underscore the importance of integrating social dynamics into urban and transport planning, utilizing participatory and virtual platforms for community engagement, and employing continuous monitoring to refine street interventions. By focusing on these strategies, cities can better address sustainability challenges, enhance public life, and create more equitable and livable urban spaces. The role of the academic community in exploring, refining, and advocating for these transformative ideas is vital in advancing toward more inclusive and sustainable urban futures.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

Bajada, T., Mifsud, W.-J., & Scheiber, S. (2023). Transforming urban mobility and public space through slow streets. A stakeholder approach. *Journal of Urban Mobility, 4*. https://doi.org/10.1016/j.urbmob.2023.100068, 100068–100068.

Beyazit, E., Waite, İ. A., Balik, H., Erturan, A., & Keşan, B. (2023). Improving women's accessibility to public transport through participatory street experiments: The case of Maltepe, Istanbul. *Journal of Urban Mobility, 4*, Article 100062. https://doi.org/10.1016/j.urbmob.2023.100062

Ceccarelli, G., Messa, F., Gorrini, A., Presicce, D., & Choubassi, Rawad (2023). Deep learning video analytics for the assessment of street experiments: The case of Bologna. *Journal of Urban Mobility, 4*. https://doi.org/10.1016/j.urbmob.2023.100067, 100067–100067.

Gatarin, G. R., & Andal, G. T. (2024). Towards just transitions in cities of the Global South: Civil society and street experiments against the Carmageddon in Metro Manila, Philippines. *Journal of Urban Mobility, 5*. https://doi.org/10.1016/j.urbmob.2024.100075, 100075–100075.

Gera, K., & Hasdell, P. (2023). Learning from informal gendered mobilities: Towards a holistic understanding for experimenting with city streets. *Journal of Urban Mobility, 4*. https://doi.org/10.1016/j.urbmob.2023.100061, 100061–100061.

Nello-Deakin, S. (2024). Winner" versus "loser" streets? Pedestrianisation and intra-neighbourhood equity. *Journal of Urban Mobility, 5*, Article 100074. https://doi.org/10.1016/j.urbmob.2024.100074

Nixon, D. (2025). Grassroots street 'closures' in São Paulo and London: Democracy and equity as experimental and experiential process. *Journal of Urban Mobility, 7*, Article 100116. https://doi.org/10.1016/j.urbmob.2025.100116

Ortar, N., Lejoux, P., & Ovtracht, N. (2025). From temporary bike lanes to a cycling oriented mobility paradigm: The case of Lyon during and after the pandemic of COVID-19. *Journal of Urban Mobility, 7*, Article 100103. https://doi.org/10.1016/j.urbmob.2025.100103

Scerri, K., & Attard, M. (2023). People as planners: Stakeholder participation in the street experimentation process using a virtual urban living lab. *Journal of Urban Mobility, 4*. https://doi.org/10.1016/j.urbmob.2023.100063, 100063–100063.

Schreiber, F. (2025). The long road from urban experimentation to the transformation of urban planning practice: The case of tactical urbanism in the city of Barcelona. *Journal of Urban Mobility, 7*, Article 100100. https://doi.org/10.1016/j.urbmob.2025.100100

Smeds, E., & Papa, E. (2023). The value of street experiments for mobility and public life: Citizens' perspectives from three European cities. *Journal of Urban Mobility, 4*, Article 100055. https://doi.org/10.1016/j.urbmob.2023.100055

Thomas, A. (2025). Temporary recurring closures and changing mobility patterns: A quasi-experimental study of the impacts of London's Covid-19 school streets on travel to school. *Journal of Urban Mobility, 8*, Article 100156. https://doi.org/10.1016/j.urbmob.2025.100156

VanHoose, K., de Gante, A. R., Bertolini, L., Kinigadner, J., & Büttner, B. (2022). From temporary arrangements to permanent change: Assessing the transitional capacity of city street experiments. *Journal of Urban Mobility, 2*, Article 100015. https://doi.org/10.1016/j.urbmob.2022.100015

Vásquez, L., Mora, R., Vecchio, G., & Tiznado-Aitken, I. (2024). Street experiments in intermediate cities: scope and perceptions of COVID-19 interventions. *Journal of Urban Mobility, 5*. https://doi.org/10.1016/j.urbmob.2024.100072, 100072–100072.

Villani, C., & Talamini, G. (2023). Failed pedestrian street experiments in high-density urban Asia: A matter of policies? *Journal of Urban Mobility, 4*. https://doi.org/10.1016/j.urbmob.2023.100069, 100069–100069.

von Schönfeld, K. C. (2024). On the "impertinence of impermanence" and three other critiques: Reflections on the relationship between experimentation and lasting – Or significant? – Change. *Journal of Urban Mobility, 5*. https://doi.org/10.1016/j.urbmob.2023.100070, 100070–100070.

Younes, H., Andrews, C., Noland, R. B., Xia, J., Wen, S., Zhang, W., Metaxas, D., Ann, L., & Gong, J. (2024). The traffic calming effect of delineated bicycle lanes. *Journal of Urban Mobility, 5*. https://doi.org/10.1016/j.urbmob.2024.100071, 100071–100071.

Zhao, K. J., Chang, R. A., & Sun, G. (2025). Experiment unlearned: Unpacking leadership and learning of key actors in a Hong Kong street experiment. *Journal of Urban Mobility, 7*, Article 100091. https://doi.org/10.1016/j.urbmob.2024.100091

Benjamin Büttner[a,*], Enrica Papa[b], Luca Bertolini[c]

[a] *Technical University of Munich, Germany*

[b] *University of Westminster, UK*

[c] *University of Amsterdam, the Netherlands*

[*] Corresponding author.

E-mail address: benjamin.buettner@tum.de (B. Büttner).