

**Interreg
Danube Region**



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CITYWALK 2.0

CityWalk 2.0 Strategy

Strategy for a greener urban mobility in small and medium size cities in the Danube Region

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1. Introduction

1.1. The CityWalk 2.0 project

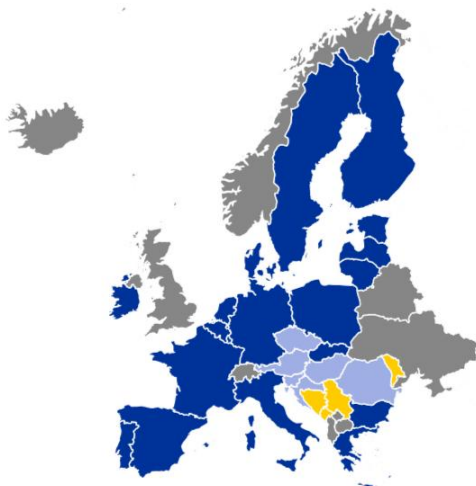
CityWalk 2.0 builds on the legacy of the RegioStars Public Choice Award-winning CityWalk (2016-19). At a time when climate change accelerates at an alarming rate and the global energy crisis grows large, the need for rapid, transformative changes in energy consumption across all sectors is more urgent than ever. Urban mobility, a critical contributor to both energy consumption and greenhouse gas (GHG) emissions, is a key area where effective change needs to happen quickly.

According to the European Environment Agency, transport was responsible for about a quarter of the EU's total CO2 emissions in 2019, of which 60.6% came from cars (European Parliament, 2019). The main goal of CityWalk 2.0 is to promote the energy transition of the transport sector by drastically reducing the energy consumption of urban transport. The fastest, most efficient, and cheapest way to do this is to switch from highly energy-intensive (and inefficient) car-based mobility to active forms of mobility (walking, cycling), micro-mobility, and public transport as primary means of transport.

While CityWalk had a planning orientation with a walkability focus and targeted mostly the city level, CityWalk 2.0 intends to implement tangible changes not only at the city level but also at the citizen level. To achieve the expected transformation, the project includes three key elements:

- redesigning streets to encourage active mobility and discourage car use,
- changing the travel behaviour of citizens, and
- strengthening the political will and commitment to implement the transformation.

Figure 1: EU (light blue) and non-EU (yellow) CityWalk 2.0 partners



Source: piktochart.com

Only through collective action can we hope to achieve the changes necessary to mitigate climate change and ensure a sustainable future for cities in Europe and beyond, so CityWalk 2.0 emphasizes the importance of international cooperation in addressing the common challenges of reducing energy use in urban transport.

CityWalk 2.0's partnership is a diverse and powerful mix of 14 partners from 10 countries, which forms a synergistic, professional partnership, tailor-made to the project objectives in terms of geography, partner type, and expertise. 4 knowledge providers and 10 city partners provide the necessary knowledge for the implementation of professional activities and policy proposals, as well as pilot activities. The project balances new and old CityWalk partners and involves both EU and non-EU members, ensuring a rich exchange of experience and ideas.

1.2. Purpose and structure of the Strategy

The CityWalk 2.0 Strategy is a key document (Output 1.1) designed to guide the transition towards greener urban mobility in small and medium-sized cities in the Danube Region. Developed jointly by the project's transnational partnership, the strategy identifies a shared vision, objectives, and possible solutions to reduce energy consumption and greenhouse gas emissions in urban transport. By focusing on street redesign, changing travel behaviour, and strengthening political commitment, the strategy provides a shared framework for action, reflecting a common aspiration across participating cities.

The purpose of the Strategy is to address the pressing challenges of urban mobility while capitalizing on opportunities for sustainable transition. It aims to:

- build a common understanding of the key issues, challenges, and opportunities related to reducing energy demand in urban transport and greening urban mobility;
- reviewing and integrating European policies and strategies to ensure coherent and effective actions;
- establish clear mid- and long-term objectives and related focus areas that align with the project's overarching vision.

The structure of the Strategy is designed to be both comprehensive and easy to navigate. It begins with a short introductory chapter (Chapter 1 – Introduction) that outlines the CityWalk 2.0 project and its objectives, as well as an overview of the Strategy's context and structure.

The next chapter of the strategy (Chapter 2 – Relevant EU strategies and policies) presents the relevant EU strategies and policies, aligning CityWalk 2.0's goals with broader European frameworks such as the European Green Deal and the Sustainable and Smart Mobility Strategy. Chapter 3 – Main factors and conditions of sustainable urban mobility – explores the main factors and conditions necessary for sustainable urban mobility, including compact city planning, active mobility promotion, and technological innovation.

Chapter 4 – Current state of urban mobility – analyses the situation of urban mobility in the partner cities, identifying key challenges such as car dependency and insufficient infrastructure while highlighting opportunities like cohesive communities and shorter intracity distances. The findings from this chapter provide a basis for the proposed solutions in the strategy.

Chapter 5 – Vision, objectives, street design principles – defines the shared vision and objectives for CityWalk 2.0, providing a focus for the transnational strategy. In addition, the chapter outlines key street design principles.

The Focus areas – Solutions to reduce the energy use of urban transport (Chapters 6) outlines the strategy's three focus areas:

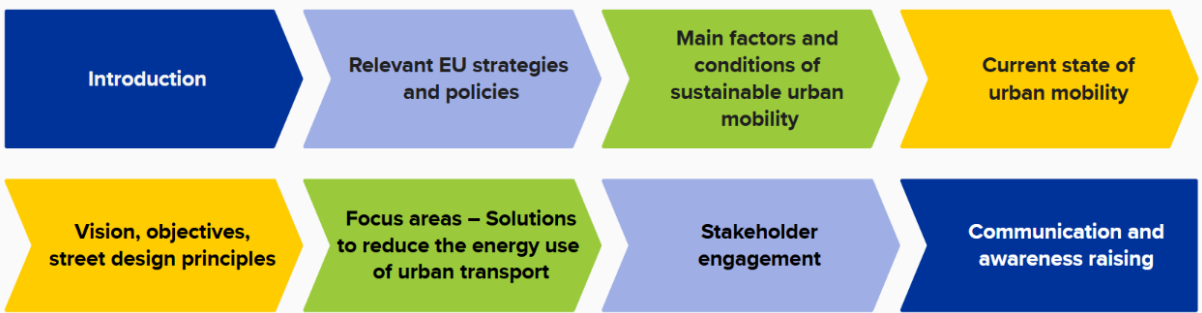
- Street redesign – Transforming streets to prioritize active mobility and public transport.
- Changing travel behaviour – Encouraging shifts from car dependency to sustainable modes of transport through education, regulations, incentives, and infrastructure improvements.
- Strengthening political commitment – Building support among decision-makers to sustain transformative changes.

Focus areas is presented in detail as follows: Identifying challenges and solutions; Detailed description of adaptable practices; Evaluation and comparison of practices. The chapter offers feasible solutions that cities can integrate into their Local Action Plans.

Finally, the strategy emphasizes the importance of stakeholder engagement (Chapter 7) and communication and awareness raising (Chapter 8). These chapters provide tools and approaches for involving citizens, businesses, and authorities in the planning and implementation processes, ensuring broad support and collaboration.

By clearly defining the vision and goals set by the project and providing possible solutions for action, the CityWalk 2.0 strategy serves as a guide to achieving sustainable urban mobility. It equips partner cities with the knowledge, tools and shared vision needed to reduce energy use in urban mobility, promote environmental responsibility and improve the quality of life of their residents.

Figure 2: Structure of the Strategy



Source: mural.com, own editing

2. Relevant EU strategies and policies

CityWalk 2.0's main goal is to promote energy transition in the transport sector by shifting from car-based mobility to active forms of mobility (walking, cycling), micromobility and public transport. The project focuses on implementing the transformation both on the city and citizen level, motivated by a vision of city streets that encourage active mobility and sustainable travel behaviour of citizens.

The impact of motorized transport in cities is multifaceted, with negative impacts on the environment, climate, health and social equality. CityWalk 2.0 contributes to various transnational and EU initiatives, policies and strategies in different areas such as environmental sustainability, sustainable urban mobility, social inclusion and accessibility, and road safety and public health.

Environmental sustainability

- **European Green Deal** – The European Green Deal sets the framework for making the EU climate-neutral by 2050. A significant part of this initiative involves reducing emissions from the transport sector, which accounts for a quarter of EU greenhouse gas emissions. CityWalk 2.0 directly contributes by promoting energy-efficient mobility solutions such as walking, cycling, and public transport, aligning with the Green Deal's goals to reduce transport emissions by 90% by 2050.
- **Energy Efficiency Directive** – The EU emphasizes energy efficiency as a key mechanism to reduce energy consumption and carbon emissions. CityWalk 2.0 contributes by helping urban transport systems to switch to less energy-intensive modes, helping meet efficiency targets.
- **Mission on Climate-Neutral and Smart Cities** – This EU mission aims to support 100 cities in becoming climate-neutral by 2030. CityWalk 2.0's initiatives are well-aligned with this mission, enabling urban areas to reduce transport emissions and energy consumption while enhancing mobility options.
- **Fit for 55 Package** – As part of the EU's commitment to reduce greenhouse gas emissions by at least 55% by 2030, the Fit for 55 Package includes measures targeting sustainable urban mobility. By shifting transport modes toward walking, cycling, and public transit, CityWalk 2.0 helps meet these ambitious reduction targets.
- **Climate Law and National Energy and Climate Plans (NECPs)** – The EU Climate Law makes achieving climate neutrality by 2050 a legally binding target, with member states required to implement NECPs. CityWalk 2.0 complements these efforts by helping the cities to significantly lower energy use and emissions in urban transport, contributing to the targets outlined in national plans.
- **Covenant of Mayors for Climate and Energy** – This EU initiative brings together local governments committed to sustainable energy use, including reducing transport emissions. CityWalk 2.0 encourages cities to adopt active mobility and energy-efficient transport systems, thus helping the development and implementation of their Sustainable Energy and Climate Action Plans (SECAPs).
- **EU Biodiversity Strategy for 2030** – This strategy supports the integration of green spaces in urban areas to enhance sustainability and biodiversity. CityWalk 2.0 contributes by

promoting urban designs that integrate green corridors for pedestrians and cyclists, and reducing the environmental footprint of transport systems in urban areas.

Sustainable urban mobility

- **2030 Agenda for Sustainable Development (2015)** – The 2030 Agenda for Sustainable Development is a global action plan adopted by all United Nations member states in 2015. It includes 17 Sustainable Development Goals (SDGs) aimed at addressing global challenges such as poverty, inequality, climate change, and environmental degradation. The agenda provides a roadmap for achieving a sustainable future by 2030.

The agenda's Goal 11 – Sustainable Cities and Communities focuses on making cities and human settlements inclusive, safe, resilient, and sustainable. Its key objectives include ensuring access to affordable housing and transportation, enhancing urban resilience to disasters, reducing environmental impact, and improving public spaces. The goal recognizes the growing importance of cities in global sustainability efforts and promotes urban policies that support social, economic, and environmental well-being. CityWalk 2.0 is closely linked to two targets of Goal 11, which are:

- Target 11.2: By 2030, provide access to safe, affordable, accessible, and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities, and older persons.
 - Target 11.7: By 2030, provide universal access to safe, inclusive, and accessible, green, and public spaces, particularly for women and children, older persons, and persons with disabilities.
- **EU Sustainable and Smart Mobility Strategy** – This strategy aims to create a sustainable, smart, and resilient transport system by 2050. CityWalk 2.0 supports its key objectives, helping cities to become more liveable (sustainable and healthy) by encouraging active mobility and public transport, reducing dependency on private cars and fostering multimodal mobility.
 - **Urban Mobility Framework (2021)** – This framework aims to increasing the support for, and share of, sustainable transport modes (public transport and active mobility). CityWalk 2.0 aligns with this framework by encouraging the cities to foster car-free or reduced-car urban areas and create safe infrastructure for walking and cycling). The Urban Mobility Framework also explicitly prioritizes inclusive mobility and equitable access for all, including marginalized groups such as persons with disabilities and those experiencing transport poverty. CityWalk 2.0 addresses this by fostering infrastructure improvements that enable active mobility and public transport to be viable and affordable for all, thus reducing reliance on cars, which can exclude individuals without the financial means to own or operate private vehicles.
 - **Urban Agenda for the EU** – This initiative supports sustainable and integrated urban development across the EU, focusing on better policy alignment, funding, and knowledge sharing. CityWalk 2.0 aligns by contributing to the agenda's partnerships on urban mobility, sustainable land use, and energy transition. It encourages urban development that prioritizes active mobility, micromobility, and public transport while discouraging car dependency.

- **Leipzig Charter (2020)** – The Leipzig Charter provides a framework for sustainable and resilient urban development in Europe, emphasizing green mobility and inclusive cities. CityWalk 2.0 contributes by promoting integrated urban transport planning that supports walkable and cyclable cities.
- **New European Bauhaus Initiative** – This initiative connects the European Green Deal with sustainable urban design, focusing on creating beautiful, sustainable, and inclusive urban spaces. CityWalk 2.0 aligns by encouraging cities to redesign urban spaces to prioritize pedestrians, cyclists, and public transport users.

Social inclusion and accessibility

- **EU Strategy for the Rights of Persons with Disabilities (2021-2030)** – This strategy aims to ensure that persons with disabilities have equal access to mobility, infrastructure, and public transport systems. CityWalk 2.0 aligns by supporting the design of urban environments that are universally accessible (e.g., barrier-free pedestrian pathways, accessible public transport, and micromobility options such as adapted bicycles or scooters). Its aim is to develop urban infrastructure that supports the mobility of all individuals, regardless of ability, in line with EU accessibility requirements.
- **European Accessibility Act (2019)** – This Act requires accessible design for public transport systems, urban mobility platforms, and mobility services. CityWalk 2.0 contributes by promoting accessible public transport and micromobility solutions, while also encouraging the redesign of streets and transport services to comply with accessibility standards.
- **European Pillar of Social Rights** – This framework highlights the need for equitable access to essential services, including transport, to combat social exclusion and poverty. CityWalk 2.0 supports this by promoting affordable and energy-efficient public transport as a primary means of urban mobility, with other sustainable alternatives to private car ownership.
- **Action Plan on Social Economy (2021)** – The plan promotes socially responsible transport policies that empower vulnerable populations, including those facing transport poverty. CityWalk 2.0 aligns by encouraging the development and uptake of affordable active mobility and public transit options that reduce economic barriers to mobility.
- **Urban Agenda for the EU: Inclusion of Migrants and Refugees Partnership** – This partnership highlights the role of mobility in social inclusion and economic participation for disadvantaged groups such as migrants. CityWalk 2.0 contributes by enhancing low-cost mobility options like walking, cycling, and accessible public transport to connect vulnerable populations to opportunities.

Road safety and public health

- **EU Road Safety Policy Framework (2021–2030)** – Safer roads and improved urban mobility systems are central to this framework. Encouraging walking, cycling, and public transit aligns with its goals to enhance safety for all road users. CityWalk 2.0 supports this by helping the cities to design infrastructure and policies that promote active mobility while ensuring the safety of pedestrians and cyclists.

- **Environmental Noise Directive (2002/49/EC)** – This directive requires member states to map noise pollution, develop action plans, and reduce noise levels in urban areas caused by road traffic. CityWalk 2.0 supports this by supporting cities to reduce road traffic volumes by shifting transport modes to quieter alternatives such as walking and cycling. It also promoted the design of urban spaces that prioritize pedestrian-friendly zones and minimize noise pollution from cars and other motorized vehicles.
- **EU Ambient Air Quality Directives (2008/50/EC and 2004/107/EC)** – These directives set air quality standards for pollutants like nitrogen dioxide (NO₂), particulate matter (PM10 and PM2.5), and ozone, many of which are linked to emissions from motorized transport. CityWalk 2.0 contributes by reducing reliance on cars, a primary source of urban air pollution, by promoting active mobility, micromobility, and public transport.
- **Clean Air Programme for Europe** – This program aims to achieve cleaner air by targeting key sectors, including transport, which is a significant contributor to urban air pollution. CityWalk 2.0 contributes by helping the cities to reduce emissions from urban transport systems through a modal shift to walking, cycling, and public transport.

In addition to relevant EU legislation, initiatives such as **EU Urban Mobility Observatory** or **CIVITAS Initiative** are also relevant, which support cities in achieving their sustainability goals:

- The **EU Urban Mobility Observatory** is a key knowledge hub that supports European cities in developing and implementing sustainable urban mobility plans (SUMP). It provides comprehensive data, best practices, and policy guidance to help cities transition toward more energy-efficient and environmentally friendly transport systems ([EU Urban Mobility Observatory - European Commission](#)). This aligns with CityWalk 2.0's focus on reducing energy consumption in urban mobility through street redesign, behavior change, and policy advocacy.
- The **CIVITAS Initiative** is another major EU program that promotes cleaner and more sustainable urban transport. It fosters innovation by funding pilot projects, sharing knowledge, and connecting cities that aim to reduce car dependency and enhance walking, cycling, and public transport ([Home | CIVITAS](#)). CityWalk 2.0 shares CIVITAS's vision of people-centred urban mobility and can benefit from its tools, research, and networks to support local implementation efforts.

3. Main factors and conditions of sustainable urban mobility

This chapter briefly addresses key factors and conditions necessary for fostering sustainable urban mobility in small and medium-size cities. It emphasises the importance of having a comprehensive and sustainable urban mobility strategy (SUMP)¹ that sets clear goals and defines the desired modal split. Transport management will be discussed, as well as other key factors, such as enhancing active mobility infrastructure, optimizing public transportation and leveraging technological innovation, highlighting the role of policies in optimising mobility patterns. Together, these elements foster greener, more accessible, and efficient mobility solutions tailored to the needs of our modern cities. The chapter also examines external conditions such as urban land use, compact urban planning (15-minute city concept), transit-oriented development, as well as policies that reduce the need for motorised travel.

Facing the challenges

Urban streets gather the complexities and tensions inherent in modern urban mobility. Considering the scarcity of urban land, there is an increasing demand to accommodate diverse and competing forms of mobility: motorized and non-motorized, individual and collective, rapid and slow. The shift toward sustainable urban mobility is crucial for enhancing the sustainability and liveability of cities. This transition involves reallocating street space to prioritize walking, cycling, and public transit while reducing reliance on private motorized vehicles (Drăghia & Stan, 2024). In alignment with European transport policy, significant efforts aim to develop competitive, resource-efficient transport systems to meet the 2030 climate and energy framework targets. Furthermore, as urbanization accelerates, with over two-thirds of the global population expected to live in urban areas by 2050, addressing the environmental, health, and spatial challenges of car-dependent transportation systems is imperative. Current practices contribute to severe environmental degradation, health risk, and a deficiency of high-quality urban spaces, emphasizing the need for immediate and comprehensive sustainable mobility strategies (Drăghia & Stan, 2024).

To address these challenges, cities are implementing a range of measures and strategies aimed at achieving sustainable mobility objectives (May et. al, 2006). These initiatives encompass various intervention tools, including transport policies (e.g., road and parking pricing, public transport enhancements), land-use planning measures (e.g., car-free zones, infrastructure for slow mobility), and awareness campaigns to ensure sustainable attitudes among citizens and stakeholders (Moudrá et. al, 2019). To facilitate the transition towards sustainable urban mobility and the adoption of active travel modes, cities need to establish a clear and well-defined framework that provides the foundational structure for this shift.

The successful implementation of these strategies depends on clear policy and governance frameworks that align with broader sustainability objectives. Strategic Urban Mobility Plans (SUMPs) serves as a foundation for integrated, targeted actions, fostering cross-sector collaboration among local authorities, business, and civil society. Securing funding and investment

¹ A Sustainable Urban Mobility Plan (SUMP) is a strategic framework designed and implemented by cities, municipalities, or regions to address the mobility needs of individuals and businesses while enhancing quality of life (Rupprecht Consult, 2019).

is equally vital, leveraging resources from regional development funds, public-private partnerships, and local budgets to support the development of low-emission infrastructure and innovative transport solutions.

Transformation of road space

The reallocation of road space is a pivotal strategy in advancing sustainable urban mobility, prioritizing active transportation modes such as walking and cycling alongside enhanced public transport systems. This “hard” transformation often involves measures like traffic calming, parking management, the establishment of pedestrian-friendly zones, and the expansion of cycling networks. Such interventions are integral to fostering active mobility infrastructure, with a focus on creating safe and accessible pathways, integrating green corridors for eco-friendly commuting, and addressing the needs of all demographic groups. The transformation of road space is complemented by “soft” measures aimed at promoting a modal shift towards sustainable mobility, reshaping urban transport systems, and encouraging active travel options (Maltese et al., 2021). Achieving this shift requires a comprehensive strategy that integrates both restrictive (“push”) policies, such as curbing car usage, and incentivizing (“pull”) initiatives that enhance the attractiveness and accessibility of alternative modes of transportation. This dual approach ensures a balanced effort to discourage reliance on private vehicles while fostering active and public transport options.

Alternatives to cars

Shifting urban mobility patterns in small and medium-sized cities necessitates prioritizing alternative mobility as a strategy to reduce car dependency. While public transportation remains a central pillar where operationally feasible, alternative solutions such as shared mobility systems, carpooling initiatives, and integrated cycling infrastructure are essential for cities without dedicated public transport operators. Interventions such as the establishment of shared spaces, low-speed streets, and pedestrian-only zones enhance the functionality of these systems while contributing to more sustainable mobility.

Technological advancements are instrumental in driving these transitions. Smart mobility innovations, including real-time transport management platforms and Mobility-as-a-Service (MaaS) systems, enable seamless coordination of multimodal travel options, particularly benefiting areas with limited public transit availability. These tools facilitate access to alternative mobility services, reducing dependence on private vehicles. Moreover, big data analytics enhance planning and optimization, ensuring transport systems are responsive to the needs of growing urban populations.

Urban design concepts

In recent years, the focus on creating safe, attractive, and vibrant streets has grown, with urban policies increasingly recognizing the role that well-designed streetscapes play in fostering sustainable environments. This vision advocates for interconnected street layouts that encourage walking, cycling, and easy access to public transport. Compact urban designs, particularly those with efficient bus or rail services, help reduce sprawl and improve the functionality of the overall public transit systems. Concepts like the 15-minute city and transit-oriented development further emphasize compact, accessible urban areas where essential services and amenities are reachable within close proximity.

The 15-minute city envisions urban life within a compact, accessible area where essential services are within a short walk or bike ride, typically under 15 minutes. This concept calls for rethinking urban design to bring services closer to residents, enhancing accessibility, sustainability, and social interaction. The 15-minute city promotes functional diversity, sustainable mobility through walking and cycling, and the reinvention of urban spaces to increase “hyper-proximity”. It also supports biodiversity recovery by incorporating plants into urban areas, contributing to carbon capture and enhancing human well-being, thereby reducing the need for long-distance travel to green spaces. This model aims to address the pressing need for sustainable urban transitions in the face of climate change, while ensuring that cities remain alive, vibrant, and accessible to all (Moreno, 2019).

Similarly, Transit-Oriented Development (TOD) focuses on creating high-density, mixed-use areas within walking distance of public transport, aiming to reduce car dependency and encourage walking, cycling, and transit use (Zimbabwe and Anderson, 2011; Ratner and Goetz, 2013). Key elements include pedestrian-friendly infrastructure and integrated multimodal options (Dittmar and Ohland, 2004; Curtis et al., 2009). TOD emerged in response to challenges like traffic congestion, rising fuel costs, and evolving urban lifestyles, requiring updates to land-use regulations, increased density, and the promotion of car-free zones (Milakis and Vafeiadis, 2014). While TOD may raise concerns about gentrification, research suggests that local policies have a greater impact on these issues than TOD itself (Padeiro et al., 2019).

Reducing the need for travel

To effectively reduce the need for travel, policies must address the significant proportion of daily trips related to school and workplace access. Equitable school choice policies play a critical role in this effort, particularly in mitigating transportation disparities that disproportionately affect marginalized communities, including low-income families. Reliable, affordable, and accessible transportation options are essential for ensuring that school choice policies deliver on their promise to promote educational equity. These policies should focus on connecting students to quality schools, especially in areas where neighbourhood schools are no longer the norm. Without robust transportation infrastructure, the benefits of school choice risk excluding those who face the greatest mobility challenges. By reducing the reliance on personal vehicles for school commutes and addressing barriers to physical access, such initiatives can advance sustainable mobility while supporting the overarching goal of social equity (Bierbaum et al., 2020).

Building upon policies that aim to reduce the need for travel through equitable school access, the strategic distribution of work start times presents an additional approach to mitigating congestion and enhancing urban mobility. By distributing working hours across different sectors and groups within the community, such policies can effectively reduce peak-hour traffic pressures, leading to smoother transportation flows and improved accessibility for all commuters. This approach not only alleviates congestion but also aligns with broader environmental objectives, contributing to improved air quality and reduced urban emissions.

Achieving sustainable urban mobility hinges on integrating compact urban planning principles, equitable policies, and reduced travel needs. These integrated strategies and initiatives resonate with overarching urban planning principles, advancing the vision of compact, liveable cities that prioritize accessibility and environmental stewardship. By aligning these efforts with broader goals of environmental sustainability and social equity, cities can create resilient systems that not only meet the needs of current populations but also ensure a sustainable future for generations to come.

4. Current state of urban mobility in the CityWalk 2.0 partner cities

The ten CityWalk 2.0 partner cities within the Danube Region display considerable variation in their spatial characteristics and infrastructural development. This chapter provides an overview of these variations, as summarised in Table 1, which outlines the size and population of each city:

- Budva, Croatia
- Centar (Sarajevo), Bosnia and Herzegovina
- Chisinau, Republic of Moldova
- Karlovac, Montenegro
- Nyíregyháza, Hungary
- Pardubice, Czech Republic
- Ptuj, Slovenia
- Satu Mare, Romania
- Sremska Mitrovica, Republic of Serbia
- Valjevo, Republic of Serbia

In terms of pedestrian infrastructure, Chişinău can be considered to have the most extensive network, with a total length of 451km of pedestrian routes. This is followed by Nyíregyháza (359km), Sremska Mitrovica (320km), Pardubice (275km), Satu Mare (229km), Valjevo (170km) and Ptuj (69km). In comparison to the total area of each city, the pedestrian network in Pardubice is the densest. It would be beneficial for future efforts to prioritise systematic data collection in Sarajevo, Budva and Karlovac. It is notable that the city of Budva is particularly lacking in data across all categories of infrastructure.

In terms of the provision of bicycle routes, the city of Pardubice leads with a wide network of 151km, followed by Nyíregyháza (78km), Satu Mare (49km), and Karlovac (45km). The networks in Ptuj and Chişinău are 32km and 33km, respectively, while the network in Sremska Mitrovica is 22km. At the other end of the spectrum, Sarajevo has 3km, while Valjevo has the shortest bicycle network at just 1km.

The city of Karlovac has the most extensive road network, with a total length of 1,714km, followed by Chişinău (672km), Nyíregyháza (616km), and Valjevo (532km). Pardubice has a road network measuring 348km, while Satu Mare and Ptuj have shorter networks of 244km and 215km. Sremska Mitrovica has the smallest road network among the cities, with 215km, while Sarajevo has only 126km.

Chişinău is the most developed city in terms of public transport infrastructure, given its total area. It has a comprehensive network with a total length of 1,500km. This is followed by Pardubice with a network length of 702km. It is also interesting to note that the networks of Satu Mare (339km), Sremska Mitrovica (301km), and Karlovac (267km) are of considerable length. The networks of Nyíregyháza and Sarajevo are comparatively shorter at 156km and 126km. The shortest public transport network is that of Valjevo at 147km. However, no data is available for Ptuj and Budva, which indicates a significant gap in the available documentation.

Table 1: Main urban mobility infrastructure data in the partner cities based on the year 2023 (Where data for 2023 is not available, the most recent data has been used.)

City	Total territory (km ²)	Population	Length of walking infrastructure (km)	Length of bicycle routes (km)	Length of public roads (km)	Length of the public transport network (km)
Ptuj	26	23,509	69	32	215	n/a
Sarajevo	33	n/a	n/a	3	126	over 126
Chisinau	12,297	677,453	451	33	672	1,500
Satu Mare	150	114,877	229	49	244	339
Budva	122	26,667	n/a	n/a	n/a	n/a
Sremska Mitrovica	762	72,457	320	22	215	301
Pardubice	83	92,362	275	151	348	702
Valjevo	905	82,169	170	1	532	147
Karlovac	401	49	n/a	45	1,714	267
Nyíregyháza	275	115,711	359	78	616	156

Source: own edition by City profiles

4.1. Key challenges and problems

The city partners involved in the CityWalk 2.0 project face several common urban mobility challenges, largely built around car-centric urban planning driven by car dominance, inadequate infrastructure for walking and cycling, and underperforming public transport systems. Overcoming these problems requires not only infrastructure investments but also a fundamental change in travel behaviour, supported by strong political commitment and innovative urban mobility policies. Common challenges arise in a few key areas such as travel behaviour, street design, active mobility (walking and cycling), public transport.

4.1.1. Street design - Prioritisation of cars over sustainable mobility

In most of the partner cities, the historically established street design favours cars over more sustainable modes of transport. In many cities, the street network is not adapted to the needs of users of non-motorized means of transport. For instance, narrow sidewalks limit walkability and the cycling infrastructure is minimal and fragmented.

Large arterial roads, such as in Budva and Chisinau, handle a significant amount of traffic, contributing to congestion in the city centres. On the one hand, these main roads represent a physical barrier between certain city districts, and on the other hand, the traffic jams that form on them limit the efficiency of public transport.

There is also a problem in several cities (Karlovac, Valjevo) that already narrow sidewalks are blocked by illegally parked cars, and that the cities (Budva, Pardubice) want to solve parking

problems by building new parking spaces. All of this clearly illustrates that in many cases more attention is paid to the support of motorized transport than to the development of walkability and cycling.

4.1.2. Walking and cycling - Insufficient Infrastructure and safety concerns

Walking and cycling are key elements of sustainable urban mobility, yet most cities report challenges and problems related to active mobility. Walkability is favourable in the centre of most cities, as they have well maintained pedestrian zones, sidewalks, and promenades, but the situation is worse as one moves away from city centres: in most cases, in the outskirts districts, pedestrian infrastructure is either poorly maintained or incomplete, reducing the attractiveness of walking.

Cycling, despite being promoted as an alternative to car use, is hindered by inadequate and fragmented cycling networks. Most cities have limited or poorly designed bike lanes, which are often shared lanes, causing conflicts between different user groups. In the partner cities, there is an average of 0.48 km of bicycle road per square kilometre. Relative to the area, Ptuj (1.87) and Pardubice (1.83) have the most bicycle lanes, but these values also fall short of the indicators of bicycle-friendly cities such as Copenhagen, where there are 6.07 km of bicycle lanes per square kilometre. The lack of safe parking and storage facilities for bicycles further reduces the desire to cycle.

Poor traffic safety for pedestrians and cyclists is a main challenge in many cities, as a significant number of traffic accidents affect these vulnerable groups. Some cities (Satu Mare, Valjevo) report many accidents involving pedestrians and cyclists, especially in the city centres. Insufficient street design and inadequate enforcement of traffic rules increase the risk of accidents for pedestrians and cyclists.

Despite the challenges, awareness and efforts to improve walking and cycling infrastructure are increasing in most cities, although the level of progress varies widely among them.

4.1.3. Public Transport – Overcrowded, unreliable, and underfunded systems

Overall, all the partner cities have some level of public transport services, but these are often not competitive enough to convince car drivers to use public transport in the city. In some cases, the public transport systems of the partner cities are characterised by declining use (Nyíregyháza), in other cases by overcrowding (Chisinau). The service is inefficient in most cities; vehicles often get stuck in traffic, which reduces reliability and appeal, and the outer areas of some cities are not covered by the service. Accessibility is also a problem that arises in many cases: vehicles cannot be used or are difficult to use for people with disabilities.

Despite this, efforts are underway in many cities to modernize the service:

- In Nyíregyháza, a new bus schedule was created with environmentally friendly CNG-powered buses to improve the frequency and connections of the bus routes.
- Chisinau has created dedicated bus lanes to prioritize public transport in traffic flow.
- Sremska Mitrovica plans to upgrade its aging fleet with gas or electric models.
- Ptuj offers free city bus services and plans to expand routes to nearby settlements to encourage the use of public transport.

4.1.4. Travel behaviour - Dominance of private cars and the challenge of behavioural change

Even though most of the partner cities are compact and mostly flat, i.e. suitable for active mobility, the use of cars dominates travel habits in all cities. Based on the modal split, Sremska Mitrovica, Satu Mare, and Karlovac have the highest proportion of car users, while Nyíregyháza, Pardubice, and Centar has the lowest.

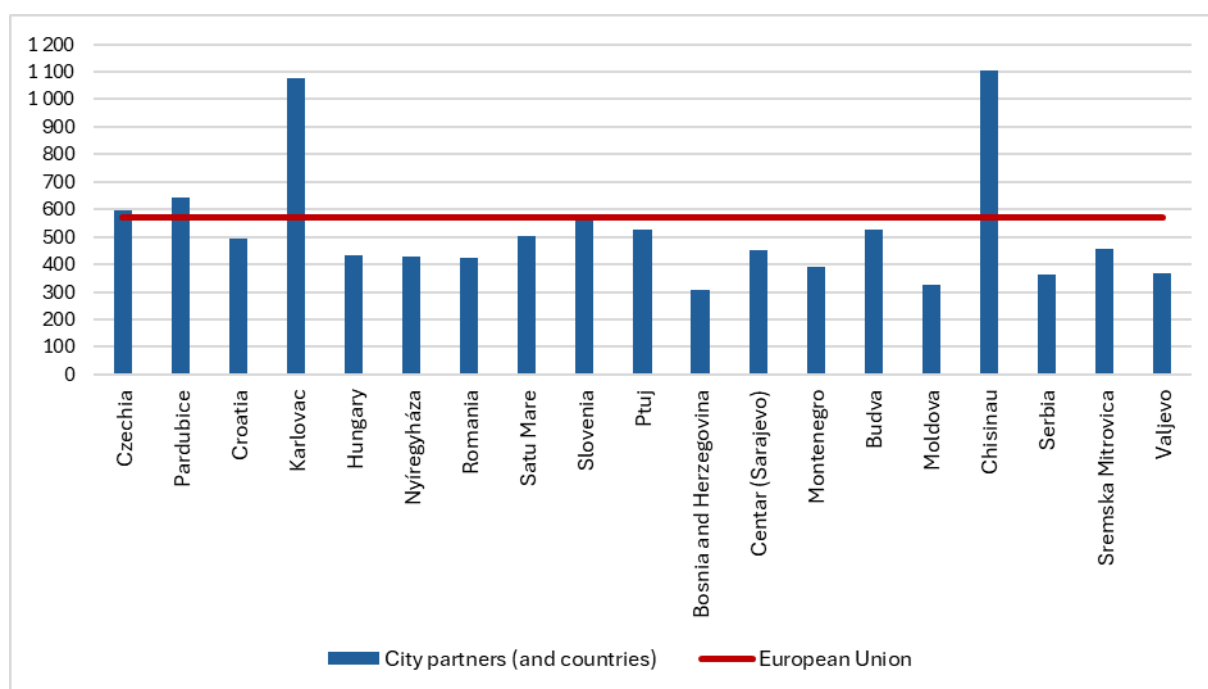
Table 2: Modal share in the partner cities

City	MODAL SHARE (%)				
	Private car	Walking	Cycling	Public transport	Other
Ptuj (2017)	55.0	23.0	7.0	2.0	13.0
Sarajevo	n/a	n/a	n/a	n/a	-
Chisinau (2024)	51.0	17.0	2.0	31.0	-
Satu Mare (2023)	65.6	13.6	9.4	11.4	-
Budva (2024 est.)	50.0	45.0	1.0	3.0	-
Sremska Mitrovica (2024)	70.0	5.0	10.0	15.0	-
Pardubice (2017/2018)	33.0	31.0	14.0	22.0	-
Valjevo (2018)	37.4	29.8	20.1	6.5	3.6 (taxi)
Karlovac (2018)	53.0	21.5	3.0	20.7	-
Nyíregyháza (2018)	35.0	31.0	11.0	23.0	-

Source: own edition by City profiles

In most of the partner cities, the number of cars per 1 000 inhabitants is high, but below the EU average (570 in 2023) (Eurostat, 2024). The motorization index is higher than the EU average only in Chisinau (1107), Karlovac (1076) and Pardubice (871).

Figure 3: Number of passenger cars per thousand inhabitants



Source: [Statistics | Eurostat](#)

The increase in the number of passenger cars is very significant in most cities. The motorization index at the EU level increased from 490 to 560 (by 14.3%) between 2012 and 2022, but in Nyíregyháza the rate of growth was even higher, as the number of passenger cars increased by 33.5% in the last decade despite a declining population. If these trends continue, cars will put additional burdens on the city's transport infrastructure (maintenance of roads, needs of parking places, etc.).

The high level of car ownership and use is mainly driven by cultural factors, comfort and the insufficiency of alternative transport options. In several cities, an important factor is that people view the car as a status symbol.

The dominance of car use contributes to severe traffic congestion, especially during peak hours. School commuting enhances congestions, because many parents take their children to school (Karlovac, Sarajevo, Nyíregyháza etc.), which in many cases is generated by free primary school choice.

Efforts to shift travel behaviour toward more sustainable modes of transport have been slow and difficult. Despite improvements in public transport and active mobility infrastructure, cars remain the preferred mode of travel due to convenience, cultural norms, and the perceived inefficiency of alternatives. The challenge of changing travel behaviour is compounded by the lack of political will to implement policies that limit car use or improve alternatives.

4.2. Opportunities

Small and medium-sized cities possess unique advantages that enable them to effectively transition to greener and more energy-efficient urban transport systems. These advantages set them apart from both rural areas and metropolitan centres, offering opportunities for transformative change in the transport sector.

Small and medium-sized cities feature **shorter intracity distances** due to their size and often compact urban form, allowing for better accessibility. This compact form facilitates active transport modes such as walking and cycling, which are energy-efficient and environmentally friendly. Several partner cities, like Ptuj and Pardubice, exemplify this advantage, with their compact layouts enabling easier development and establishment of pedestrian and cycling networks.

Compared to large metropolitan areas, smaller cities can more easily plan and **optimize their public transport systems** due to their manageable size and less complex network. This allows for targeted interventions, such as introducing dedicated bus lanes or increasing service frequency. For example Nyíregyháza have been continuously working on improving their public transport systems in recent years, including developing environmentally friendly bus fleets and optimizing routes to reduce dependence on private vehicles.

Smaller cities generally experience **lower levels of traffic congestion** compared to metropolitan areas, making it easier to introduce and promote sustainable mobility practices. This is evident in several partner cities, where lower traffic densities create opportunities to redesign streets for pedestrians and cyclists without significant disruption to existing traffic patterns.

Many small and medium-sized cities have **easy access to the natural environment** surrounding the city centre by bicycle or even on foot, making cycling and walking attractive. Nyíregyháza, Pardubice and Satu Mare, for example, take advantage of the proximity of parks and recreational areas to encourage active transport. The development of green corridors and cycle paths connecting cities to natural areas can further increase the attractiveness of active mobility while reducing dependence on motorised transport.

The **strong sense of community** in smaller cities facilitates greater stakeholder engagement and participation in sustainable mobility initiatives. Public consultations and awareness-raising campaigns often receive greater attention and support, as shown by the proactive efforts of cities such as Sremska Mitrovica and Valjevo to involve residents in planning and decision-making. Citizen participation also allows for more effective implementation of policies that encourage active mobility and the use of public transport.

The compact size, cohesive communities, and manageable infrastructure of small and medium-sized cities present significant opportunities for advancing sustainable transport systems. By capitalizing on these advantages, partner cities can lead the way in reducing the energy demand of urban transport and making the sector greener, setting examples for larger cities and regions to follow.

5. Vision, objectives, street design principles

5.1. Vision and main objective

The CityWalk 2.0 partner cities have a long-term vision to create vibrant, sustainable cities where urban transport contributes to cities' energy efficiency goals and environmental responsibility:

“CityWalk 2.0 partner cities by 2030 by prioritizing active travel modes such as walking and cycling, complemented by reliable and attractive public transport, we aim to transform streets into inclusive, people-centred spaces. Through innovative street redesign, promoting a culture of sustainable travel behaviour and engaging decision-makers and politicians to support these, we aim to reduce car dependency, thereby reducing the energy demand for urban transport and ensuring a healthier, more connected urban future for all citizens.”

CityWalk 2.0's main goal is to promote energy transition in the transport sector by drastically reducing energy use of urban transport. The quickest, most efficient and cheapest way is to shift from extremely energy-intensive (and inefficient) car-based mobility to active forms of mobility (walking, cycling), micromobility and public transport the primary means. CityWalk 2.0 focuses on implementing the transformation both on the city and citizen level. Key elements of CityWalk 2.0:

- redesigning streets to encourage active mobility and discourage car use,
- changing the travel behaviour of citizens, and
- strengthening the political will and commitment to implement the transformation.

5.2. Objectives

Each of the goals set out in the project is linked to the overall vision of CityWalk 2.0 and its 3 focus areas, which ensure that urban mobility becomes more sustainable and energy efficient, thereby making cities more liveable.

OBJECTIVE 1: Improve urban streets by reallocating of road space to pedestrians, cyclists, and public transport by 2030.

Current urban environments in many small and medium-sized cities are dominated by car-oriented infrastructure, leading to higher energy consumption and reduced accessibility for sustainable modes of transport. By addressing the challenge of car dependency, this objective aims to transform streets into inclusive, safe, people-centred and environmentally friendly urban public spaces by reallocating road space and prioritizing active mobility and public transport.

Possible related actions:

- Establish car-free zones and pedestrian-friendly streets in city centres.
- Develop continuous, protected bike lanes on the city's main traffic routes and in the centre.

- Integrate public transport hubs with active mobility pathways to ensure seamless connectivity.
- Implement traffic-calming measures, such as speed limits (30km/h zones) and shared spaces (10 km/h zones).
- Reallocate road space to multimodal transport lanes and green corridors.
- Enhancing the attractiveness of walkability environment – Implement green corridors and shared spaces to integrate mobility and urban ecology.
- Conduct pilot projects to test street redesign concepts before permanent implementation.
- Educate citizens and stakeholders about the benefits of redesigned streets through campaigns and workshops.

Result indicators:

- Increase in the percentage of urban streets redesigned for pedestrians and cyclists (%)
- Percentage increase in the length of urban separated bicycle paths (%)
- Percentage decrease in on-street parking spaces for private vehicles (%)
- Reduction in road space allocated to cars (%)
- Increase in the size of street green space as a result of street redesign (%)

OBJECTIVE 2: Reduce car dependency by shifting travel behavior

Car dependency remains a significant challenge, driven by convenience and ingrained travel habits. This objective seeks to shift travel behavior towards sustainable modes such as walking, cycling, and public transport. By addressing the barriers to adopting these modes and fostering cultural change, the goal is to reduce private car use, promote energy-efficient travel options, and create healthier urban environments.

Possible related actions:

- Launch citywide campaigns to promote walking and cycling, highlighting their environmental and health benefits.
- Organize car-free events to demonstrate the advantages of reduced car dependency.
- Introduce reward programs (e.g., free public transport passes) for citizens who regularly use sustainable transport modes.
- Provide incentives for employers to encourage sustainable commuting practices.
- Collaborate with schools and workplaces to implement mobility management programs.
- Develop digital tools providing real-time public transport information.

- Expand micromobility services like bike-sharing schemes.

Result indicators:

- Decrease in private car use for commuting (%)
- Decrease in car trips during peak hours (%)
- Increase in the modal share of walking and cycling (%)
- Percentage increase in public transport use (%)
- Proportion of residents participating in awareness-raising campaign (%)

OBJECTIVE 3: Increase the level of political commitment for sustainable mobility

A lack of long-term political commitment often hampers the transition to sustainable urban mobility. This objective focuses on securing political support to prioritize, fund, and implement sustainable transport initiatives. By addressing this governance challenge, the ambition is to align urban transport policies with energy transition goals and ensure the longevity of these changes.

Possible related actions:

- Organize high-level workshops to educate policymakers on the benefits of sustainable mobility.
- Conducting interviews with decision-makers to learn about their misconceptions and fears hindering them to take significant steps to reduce car dependency.
- Advocate for legislative changes to support active and public transport initiatives.
- Establish governance bodies and cross-party committees to oversee sustainable mobility projects.
- Pilot projects to demonstrate the feasibility and positive impact of proposed mobility changes.

Result indicators:

- Increase in municipal budgets allocated to sustainable mobility initiatives (%).
- Adoption of Sustainable Urban Mobility Plans (SUMP) in all partner cities by 2030.

5.3. Street design principles

In addition to defining the objectives, the strategy defines street design principles that cities can apply when developing their local action plans. However, in local action plans, the principles are expected to be more specific than the general principles formulated in the strategy. The principles set out in the strategy are as follows:

Streets as public spaces – Streets are not just pathways for movement but vital public spaces that contribute to the social, cultural, and political life of cities. They should support diverse activities such as gathering, celebrating, and cultural expression while providing safe movement. By transforming streets into multi-functional spaces, cities can enhance community interaction, equity, and a sense of belonging. Streets become platforms for inclusivity and vitality, fostering a shared urban identity.

Safety for all users – Making streets safe is essential to protect pedestrians, cyclists, and other vulnerable users, including children, the elderly, and people with disabilities. Designing for safety includes traffic-calming measures, visible and well-lit pathways, protected sidewalks and bike lanes, and clear signage. Prioritising safety reduces accidents, increases trust in public spaces, and encourages more active mobility choices like walking and cycling, which are key to sustainable urban living.

Equity and inclusivity – Streets must serve the needs of all users, regardless of age, ability, income or cultural background. Design elements like ramps, tactile pavements and accessible intersections ensure universal usability. Streets that are equitable promote social inclusion and provide opportunities for everyone to participate in public life and reduce barriers for marginalised communities.

Flexibility and adaptability – Streets must evolve with changing urban needs. Temporary, small-scale, low-cost actions can be used to test new ideas, gather feedback, and modify designs before making permanent and costly changes. This approach enables innovation, encourages public involvement and ensures that streets meet the needs of diverse urban environments and users.

Multimodal design – To promote sustainability, streets need to support a range of mobility options, including walking, cycling, public transport and shared vehicles. By reallocating space to active and sustainable modes of transport, multimodal streets reduce car dependency, lower the energy demand of transport and sector related emissions, and improve urban connectivity. Safe and efficient multimodal design increases the capacity and usability of urban spaces.

Streets as ecosystems – Streets should function as ecosystems, integrating natural and man-made systems. Features such as street trees and climate-adaptive vegetation, permeable pavements, rain gardens and bioswales enhance biodiversity, manage stormwater, and mitigate urban heat. Ecologically designed streets improve air and water quality and cooling urban climate, while contributing to a healthier, more resilient urban environment that aligns with climate action goals.

Spaces of social and economic interactions – Well-designed streets attract people, encourage spending, and increase property values. Vibrant streetscapes with attractive shopfronts, markets, and gathering spaces support businesses and strengthen the overall economic vitality of a neighbourhood. Streets that balance functionality with aesthetic and social appeal generate long-term economic and community benefits.

Context-sensitive design – Streets must respond to their surroundings, adapting to the unique characteristics of neighbourhoods, land uses, and urban densities. A flexible approach ensures that a street supports its local context, whether it runs through a quiet residential area or a bustling urban core. Street design that considers its environment enhances the compatibility of streets with their environments, ensuring harmony and functionality at multiple level.

6. Focus areas – Solutions to reduce the energy use of urban transport

The chapter briefly describes how the three focus areas of CityWalk 2.0 are related to the objectives defined in the previous chapter. After the introduction, the strategy presents easy-to-apply solutions and practices related to the three focus areas, with reference to the Baseline study, the Good practice catalogue, and other documents (e.g. CityWalk Walkability Guide, 2019).

The aim of this chapter is to provide a list of useful solutions for urban partners, from which they can select some to be incorporated into their local action plans, adapted to local circumstances. The chapter does not present concrete good practices, but rather a list of possible solutions (supported by good practice examples) to the identified urban mobility challenges.

The structure of the chapter follows the following structure and content:

- The Identifying challenges and solutions subchapter describes the challenges arising in the given area (briefly discussed in Chapter 3) and the possible solutions to address them.
- The Detailed description of adaptable practices subsection presents the possible solutions in detail.
- Evaluation and comparison of practices subchapter compares the practices described in the previous chapter in an easy-to-understand, visual form. The comparative subchapter is not relevant for the case of the focus area of Strengthening political commitment.

6.1. Overview of the focus areas of CityWalk 2.0

6.1.1. Street redesign

Street redesigns that prioritize active mobility can lead to numerous benefits. For instance, Copenhagen, which has invested heavily in cycling infrastructure, now boasts that 49% of all commutes to work or school are done by bicycle. This shift not only reduces carbon emissions but also improves public health and overall quality of life. Introducing wider sidewalks, dedicated bike lanes, and more green spaces in city streets encourages citizens to choose non-car alternatives.

In addition, reducing road space for cars – such as by narrowing lanes or reducing parking – can discourage car use and make streets safer and more welcoming for pedestrians and cyclists, and by developing the freed-up areas into green spaces, streets can become important elements of the urban ecosystem.

The concept of "complete streets" has emerged as a popular framework for redesigning urban streets. Complete streets are designed with all users in mind, including pedestrians, cyclists, and public transport users, rather than focusing solely on cars. This type of street layout not only supports active mobility but also reduces the need for energy-intensive travel modes. By redesigning streets with a people-first approach, cities can significantly decrease car dependency and, by extension, lower their energy consumption.

6.1.2. Changing travel behaviour

A key element of the transition from car use is changing people's travel behaviour. By educating citizens about the environmental and personal benefits of walking and cycling, and by making

these options more accessible and appealing, the project aims to shift travel behaviour towards more energy-efficient modes of transport. Cities that have successfully implemented measures to change travel behavior, such as Stockholm and its congestion pricing system, have seen significant reductions in car traffic. In Stockholm, car traffic has decreased by 20% since the introduction of the congestion charge, while public transport use has increased.

CityWalk 2.0 highlights the role of technology and innovation in changing travel patterns. The rise of micromobility options such as e-scooters, bike-sharing systems and mobility-as-a-service (MaaS) platforms offer flexible alternatives to car ownership. These innovations, when combined with well-designed infrastructure, can help cities encourage citizens to rethink their travel habits. In addition, public awareness campaigns and participatory planning processes, in which citizens are directly involved in transforming their streets, can foster a sense of ownership and responsibility, making behavioural change more sustainable over time.

6.1.3. Strengthening political commitment

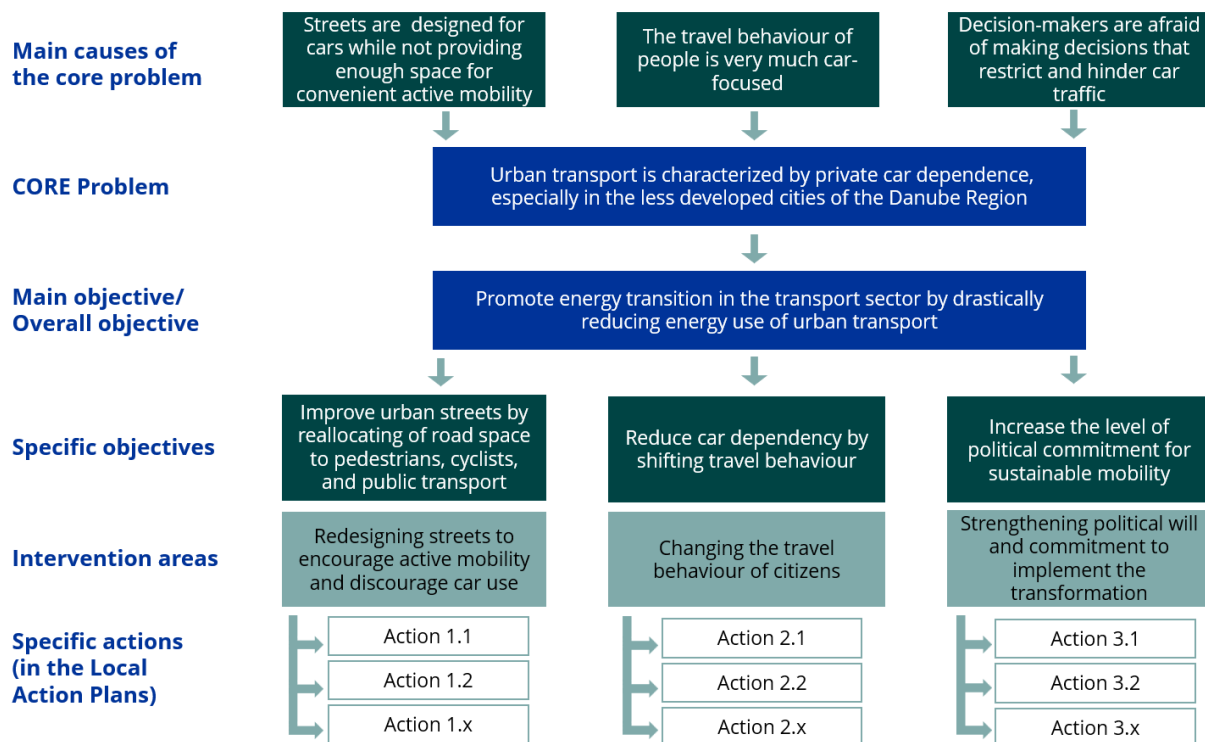
One of the key challenges in the field is to overcome the status quo. Car-centric policies are often deeply embedded in urban planning, and measures such as reducing car lanes or eliminating parking can face resistance from both residents and interest groups. However, cities that have implemented these changes, such as London with its congestion charging zone, have achieved significant benefits. Since its introduction, congestion charging has reduced traffic in central London by 15%, while public transport use has increased (Transport for London, 2023).

Political will is also crucial in the context of long-term planning. Urban mobility projects require long-term investment and commitment, which often spanning political terms. CityWalk 2.0 emphasizes the importance of building cross-party support for these initiatives to ensure that progress is sustained regardless of political change. This can be achieved through participatory governance models, where citizens, businesses, and other stakeholders are actively involved in shaping and supporting urban mobility policies.

In addition, the project works to identify and advocate for the necessary policy changes at both local and transnational levels. These policy changes could include new regulations on street design standards, incentives for active mobility, or the introduction of mobility pricing mechanisms such as parkin zones. By engaging decision-makers early and demonstrating the benefits of these measures through pilot projects and data-driven evidence, CityWalk 2.0 aims to create the political support needed for long-term change.

As can be seen from the Figure 3, the three focus areas of CityWalk 2.0 are directly related to the project objectives.

Figure 4: Intervention logic of CityWalk 2.0



Source: own editing

6.2. Street redesign

The functionality and identity of cities are reliant on their urban streets, which serve as links for mobility, economic hubs and social spaces. The design of urban streets has a significant impact on how people move, live, work and engage in social activities within urban environments. Historically, urban planning and street design have been dominated by the needs of motorised vehicles, reflecting a car-centric approach that has had far-reaching consequences (see Norton, 2008). This paradigm has led to environmental impacts, including air and noise pollution, rising carbon emissions and loss of green space. It makes social inequalities worse by favouring private car users over those who walk, cycle or use public transport. These cities are often unsafe and lack vibrancy, which reduces quality of life.

In recent years, there has been a growing recognition of the need for more sustainable and inclusive street design. This has led to a shift in approach, with urban streets now being viewed as multi-functional spaces that prioritise pedestrians, cyclists and public transport users, while also accommodating motorised vehicles. The objective of sustainable street design is to reduce the environmental footprint of urban mobility, improve equity of access and create streetscapes that foster social interaction and economic vitality.

At the European level, various energy and environmental directives, such as the Habitats Directive, the Water Framework Directive, the Renewable Energy Directive and the Energy Efficiency Directive, influence national legislation and affect the use of public space. The EU's climate goals, guided by the Nationally Determined Contributions (NDCs) under the Paris Agreement, require regular updates of national climate policies every five years, starting in 2020. To support these

efforts, the Governance Regulation requires the preparation of National Energy and Climate Plans (NECPs). Failure to meet national or EU climate targets can result in penalties, as outlined in regulations such as the 2018 Effort Sharing Regulation, which sets national emission reduction targets for sectors such as transport, heating and agriculture (Laa et al., 2021).

Urban mobility is also addressed in the EU Green Deal. Sustainable Urban Mobility Plans (SUMPs) have been made mandatory for 424 European cities by 2025 under the TEN-T Regulation. This will ensure alignment with the EU's strategy for sustainable and intelligent mobility.

6.2.1. Identifying challenges and solutions

The dominance of motor vehicles in urban spaces has led to congestion, pollution, and unsafe conditions for vulnerable groups such as pedestrians and cyclists. Overcrowded roads, designed to maximize traffic flow, often limit opportunities for public space enhancement or equitable street use. This imbalance reduces the quality of urban life, exacerbating social and environmental disparities (Bauer et al., 2020; Dietrich, 2017).

One challenge lies in overcoming stakeholder resistance. Businesses concerned about reduced vehicle access and car owners who perceive redesigns as limiting their mobility often oppose these changes. As Hardinghaus et al. (2021) emphasizes, stakeholder opposition can stall or significantly alter redesign projects, particularly in dense urban environments where space reallocation is already constrained. Moreover, financial and logistical hurdles add to the complexity of transforming urban streetscapes (Dietrich & Kirchberg Erto, 2017).

To address these challenges, experts propose strategies that balance functionality and inclusivity. Hardinghaus (2021) identifies pedestrianization, green public spaces, and expanded cycling infrastructure as foundational tools for redesigning streets. Creating car-free zones and protected bike lanes not only enhances safety but also supports a shift toward active mobility.

Additionally, adaptive urban planning strategies, such as pilot projects, provide cities with a mechanism to experiment with temporary measures. These initiatives, which include pop-up bike lanes and seasonal pedestrian zones, allow for testing solutions and gathering feedback before permanent implementation (European Commission: Directorate-General for Environment, 2004). Furthermore, Bruno et al. (2024) highlights the importance of integrated mobility systems, where streetscapes are designed in alignment with the broader vision of "15-minute cities" that provide residents with accessible amenities and services within short distances.

6.2.2. Description of adaptable practices

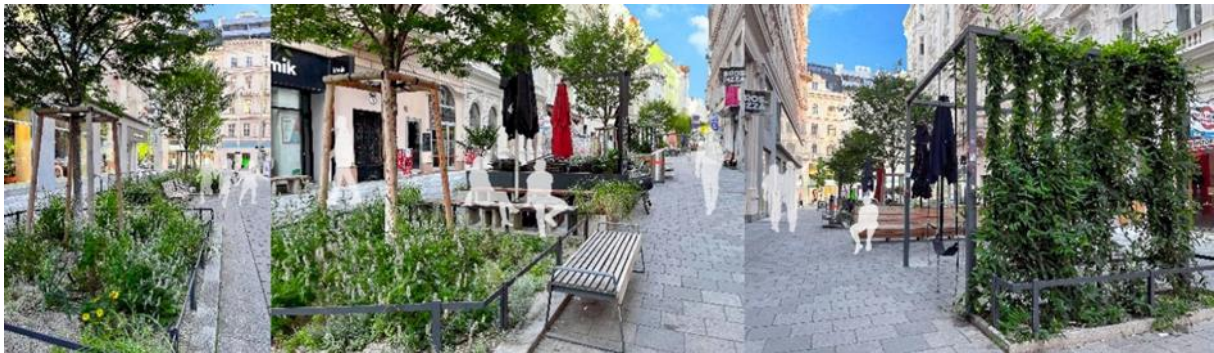
The success of streetscape redesigns often depends on a combination of political commitment, public engagement, and flexible urban planning frameworks. Political leadership plays a key role in backing such projects, ensuring that long-term environmental and social goals are not sacrificed to short-term opposition (Bruno et al., 2024). Furthermore, involving communities throughout the process builds trust and increases public support. According to UN Habitat (n.d.), engaging residents and businesses during the planning stages ensures that the outcomes are aligned with local needs and aspirations.

Integrated urban mobility planning is another critical factor. Streets should be redesigned not in isolation but as part of a broader network that prioritizes accessibility and sustainability. By ensuring seamless connections between pedestrian, cycling, and public transportation infrastructure, cities can reduce car dependency and promote active mobility (Bauer et al., 2020).

Pedestrian zones and public spaces – Pedestrian-only streets have been widely adopted as a strategy to reclaim urban areas from cars and prioritize community life. For example, many European cities have converted central roads into pedestrian zones with green spaces and recreational areas. These spaces not only improve air quality but also increase the social and economic vitality of urban centres (Dietrich & Kirchberg Erto, 2017).

In Freiburg, Germany, the redesign of public spaces has demonstrated the potential to create healthier, more inclusive urban environments. Similarly, Hardinghaus et al. (2021) highlights how redistributing public space in cities like Vienna has enhanced pedestrian safety and revitalized local economies.

Figure 5: Zollergasse Wien



Source: photos by Lemmerer & Yun (2023)

Traffic calming and shared spaces – Traffic calming strategies, such as speed bumps, reduced speed limits, and shared spaces, create safer streets that accommodate multiple users equitably. Dietrich & Kirchberg Erto (2017) emphasizes that shared streets are particularly effective in mixed-use neighbourhoods, where the absence of strict divisions between road users encourages cooperation and reduces vehicular dominance.

The Austrian town of Trofaich (Styria) has started the process of implementing a zone of shared space in the year 2015. Before implementation, motorised traffic on the narrow central section of the main road often exceeded speeds of 70 km/h. After introducing the shared space zone with its distinctive design, speeds dropped by approximately 30%. Additionally, daily traffic volume decreased from 5,500 to 4,500 vehicles, improving safety and livability in the area (Erich Biberich – [Bodenbündnis Österreich](#)).

Figure 6: Shared Space Trofaiach



Source: photos by Freisinger Trofaiach ([Bodenbündnis Österreich](#))

Flexible, temporary interventions – Temporary interventions, such as pop-up pedestrian zones or bike lanes, allow cities to test innovative approaches before making permanent changes. European Commission: Directorate-General for Environment (2004) highlights the importance of these measures, citing their scalability and ability to generate public support as cities gather real-time data on their effectiveness. Such initiatives have proven particularly useful during periods of rapid urban change, such as during the COVID-19 pandemic when cities like Vienna introduced temporary bike lanes that later became permanent fixtures.

Figure 7: Lassallstraße (left) and Hörlgasse (right) Wien



Source: photos by Leth (2020)

Superblock – The Superblock concept, developed in Barcelona, Spain, is a response to the city's challenges of dense development, traffic congestion, pollution and vulnerability to climate change. It aims to improve urban life by reorganising public space to prioritise people over vehicles,

promoting environmental sustainability and quality of life. A Superblock is a 400m x 400m grid of nine city blocks, with surrounding streets allowing traffic to move at 50 km/h, while inner streets limit motorised traffic to 10 - 20km/h (Tiran et al., 2023). This creates shared spaces for pedestrians, cyclists and community activities, reducing urban heat and pollution and promoting a more liveable environment.

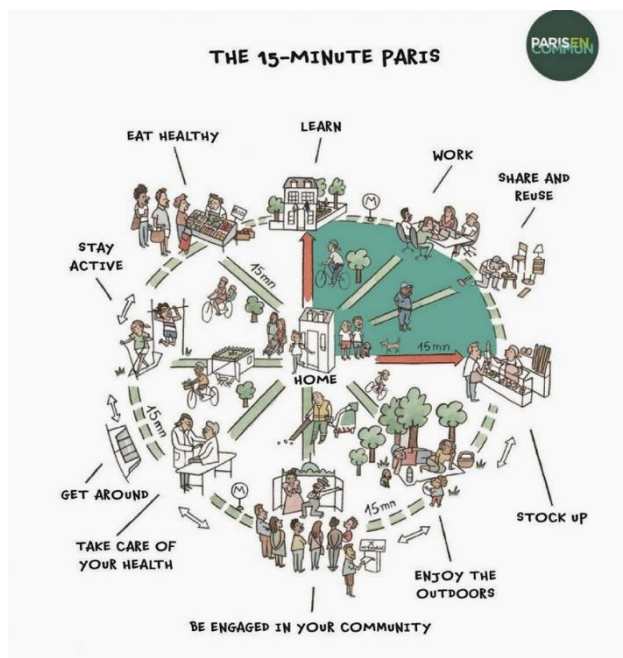
Figure 8: Supergrätzl Wien



Source: photos by Lemmerer (2022)

15-minute city concept – The 15-minute city is an urban planning concept that aims to address several contemporary issues such as air pollution, noise, lack of space, urban climate, health problems due to physical inactivity and work-life balance.

Figure 9 The vision of the evolution of Paris to a 15-minute city


















Source: <https://www.dezeen.com/2021/10/26/15-minute-city-carlos-moreno-obel-award>




































Developed by Carlos Moreno of the University of Paris Pantheon-Sorbonne, it envisions neighbourhoods where residents can access essential services - such as jobs, schools, pharmacies, healthcare, recreation, shopping and green spaces - within a 15-minute walk or bike ride (Moreno et al., 2021). This model encourages mixed-use developments that combine residential, office and commercial space. It also promotes mobility beyond the neighbourhood, prioritising walking and cycling over car use, with a focus on creating infrastructure that supports these modes of transport.

6.2.3. Evaluation and comparison of practices

The table below evaluates the urban practices mentioned in the previous section against five key criteria: cost effectiveness, time for implementation, potential for conflict, political support and timeframe of benefits.

Table 3: Evaluation and comparison of street redesign practices

COST EFFECTIVENESS	TIME REQUIRED FOR THE IMPLEMENTATION	POTENTIAL CONFLICTS	POLITICAL SUPPORT	TIMEFRAME OF BENEFITS
 low costs	 fast implementation	 smooth implementation	 easy to support	 quick results
 medium costs	 requires more time	 can incite some conflict	 indifferent	 needs more time to work
 high costs	 time-consuming	 significant opposition	 difficult to support	 longer investment

NAME OF PRACTICE	COST EFFECTIVENESS	TIME REQUIRED FOR IMPLEMENTATION	POTENTIAL CONFLICTS	POLITICAL SUPPORT	TIMEFRAME OF BENEFITS
Pedestrian zone					
Traffic calming					
Shared space					
Pop-up pedestrian zone					
Pop-up bike lane					
Superblock					
15-minute city					

Source: own editing

6.3. Changing travel behaviour

The aim of the solutions described in this chapter is to shift the attitude and habits of the population towards more sustainable modes of transport. The chapter highlights the importance of education, incentives and policies promoting walking, cycling and public transport, and describes campaigns, programs and policies aimed at changing travel behaviour. This could include, for example, awareness campaigns, implementing car-free days and improving public transport services.

The development of robust infrastructure is essential in urban planning to mitigate dependency on private cars. While foundational elements such as extensive public transport systems, pedestrian-oriented infrastructure, and cycling facilities are critical, addressing the complexity of transportation behaviour is equally important. Human behaviour plays a significant role in shaping travel patterns, with many individuals continuing to rely on cars despite the availability of alternatives. Transforming these behaviours requires multifaceted interventions, including awareness campaigns, incentives for modal shifts, educational initiatives, and policies promoting sustainable travel modes.

While infrastructure serves as the cornerstone, achieving substantial behavioural change necessitates a holistic approach that considers social, cultural, and psychological factors alike. Behavioural strategies such as mobility management have been employed to raise awareness and influence psychological determinants, encouraging voluntary shifts away from car dependency. These strategies often include tailored information on public transit options, targeted travel campaigns, and educational programs to promote alternative travel modes (Fujii and Taniguchi, 2014).

6.3.1. Identifying challenges and solutions

This section explores the key challenges in shifting travel behaviour and potential solutions to address them. It highlights cultural and psychological barriers, such as car dependence and resistance to change, as well as infrastructure gaps, including limited pedestrian paths and unreliable public transport. Additionally, it examines policy shortcomings and the impact of urban sprawl on commuting patterns, offering insights into strategies for overcoming these obstacles.

The primary challenges identified in Deliverable 1.1.1. Baseline Study concerning travel behaviour in many European cities are centred around the persistent high level of car dependency and the underuse of public transport systems. This issue is complex and results not only from entrenched cultural habits but also from insufficient quality and coverage of existing public transport networks. Furthermore, cities struggle to increase the modal share of walking and cycling, primarily due to inadequate infrastructure and a limited understanding of the diverse factors influencing citizens' transportation choices. Additionally, the integration of multimodal transport remains a significant challenge, as many cities lack the necessary spatial and organizational conditions to facilitate seamless transitions between different modes of transport. Addressing these challenges requires the implementation of comprehensive urban mobility strategies that combine improvements to physical infrastructure with initiatives targeting behavioural change.

Travel behaviour is a deeply habitual activity, often characterized by repetitive patterns on daily, weekly, and even yearly scales. Theories such as Ajzen's Theory of Planned Behaviour (1991) suggest that travel decisions are the product of rational deliberation (Bamberg et al., 2003). Research shows that even individuals who actively consider alternatives often exhibit inertia due

to aversion to risk and uncertainty regarding alternative modes. This **reliance on cars** presents significant challenges for sustainable mobility transitions. For instance, many car users overestimate public transport travel times and attempts to correct these misperceptions often fail due to justifications for maintaining the status quo. Beyond rational considerations, symbolic, emotional, and affective factors play pivotal roles in shaping travel behaviour, sometimes outweighing instrumental factors, particularly in leisure travel (Durand et al., 2018). The infrastructure in many cities amplifies this issue, with insufficient or poor alternatives such as limited pedestrian and cycling paths, inadequate public transport coverage, and low reliability. Moreover, the lack of integrated multimodal systems hinders seamless transitions between transport modes, further entrenching car dependency. Furthermore, the urban sprawl phenomenon, characterized by dispersed land use, reduces walkability and increases commuting distances, making sustainable mobility alternatives less feasible and reinforcing the dominance of car use. Overcoming these challenges involves enhancing infrastructure, fostering accurate perceptions of alternatives, and addressing emotional and symbolic associations with car use.

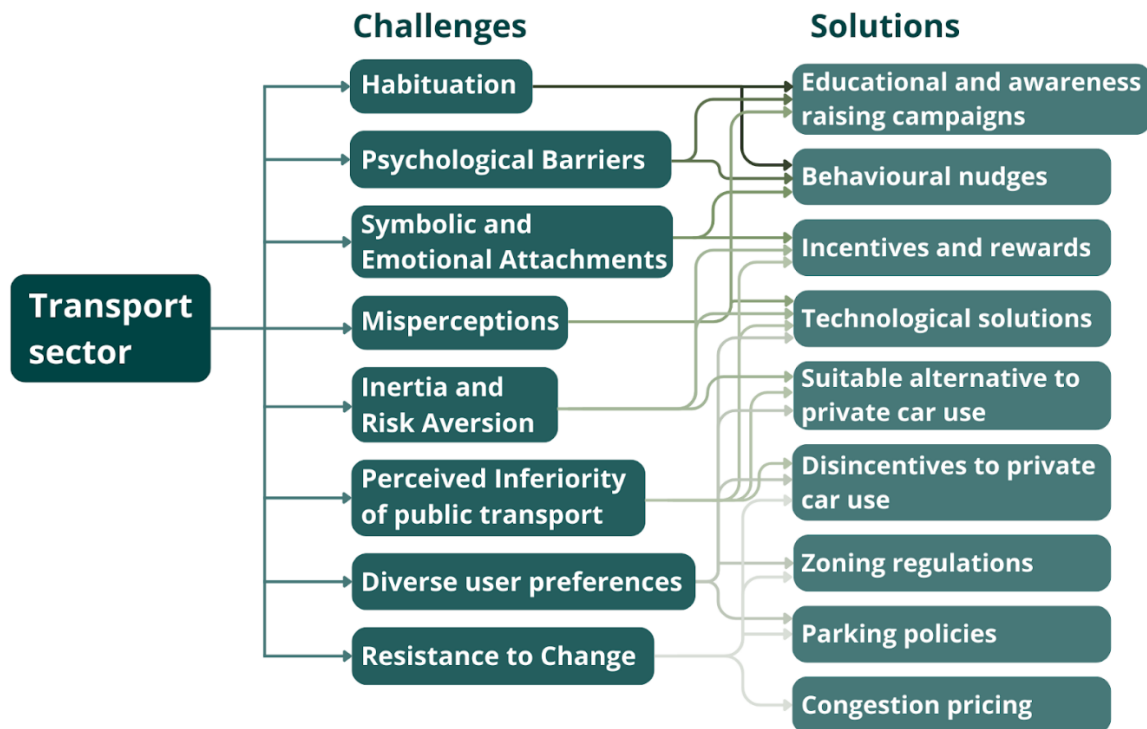
Car ownership represents a substantial obstacle to achieving sustainable behaviour change in urban mobility, as vehicles are frequently associated with key attributes such as personal autonomy, flexibility, and comfort. These qualities often set private cars apart from public transportation options, which are perceived to lag in providing the same degree of independence and adaptability to individual needs. This strong emotional and symbolic attachment to cars complicates efforts to encourage alternative travel modes, even in the presence of functionally viable options. Research underscores that renouncing car ownership can evoke resistance, primarily due to the emotional significance cars hold for many individuals, who view them as private, secure spaces and sources of convenience (Laasko, 2017). For older generations in particular, the attachment to traditional car ownership remains deeply ingrained, further limiting the appeal of emerging mobility models based on shared or non-ownership paradigms. The challenge is further exacerbated by the inadequate provision of incentives to encourage the adoption of more sustainable transport options, in conjunction with the poor implementation of comprehensive and cohesive policies to reduce car dependency. These policies, such as parking restrictions and congestion charges, remain underdeveloped or inconsistently applied, hindering their potential to significantly influence travel behaviour. Solutions should focus on increasing the attractiveness of public transport and shared mobility services while strengthening policy measures that discourage car use.

Notably, the potential for behavioural change is heightened during "windows of opportunity", critical periods of life when routines are disrupted, allowing individuals to reassess and modify habitual behaviours. Such moments may arise during significant life events, including relocation, changes in local infrastructure, or milestones such as the birth of a child. These disruptions create opportunities to de-routinize travel patterns and encourage shifts towards sustainable mobility choices. Interventions during these periods, when combined with improved public transport services that offer attributes comparable to private vehicles, have shown promising results in facilitating a mode shift (Verplanken & Roy, 2016).

Effectively addressing the challenges of car dependency requires a multifaceted approach that integrates infrastructure enhancements with behavioural interventions. It is essential to account for both the rational and emotional dimensions of travel behaviours. By acknowledging the complex interplay between functional needs, symbolic values, and psychological factors,

policymakers and planners can design comprehensive strategies to promote sustainable urban mobility while reducing reliance on private cars.

Figure 10: Relation between identified challenges and potential solutions



Source: based on results of CITYWALK 2.0 Deliverable 1.1.1. Baseline Study)

6.3.2. Description of adaptable practices

In the context of achieving a modal shift in transportation, literature identifies several adaptable practices with the significant impact on travel behaviour. These practices address a range of social, cultural, and psychological factors that collectively shape individuals' travel choices. This section provides an overall examination of these practices, supplemented by exemplary case studies that illustrate their successful implementation.

Educational campaigns are crucial for fostering a shift towards active and sustainable mobility. These initiatives aim to increase public awareness about multimodal transportation options, emphasizing their environmental and health benefits. By highlighting alternatives to car use, such as walking, cycling, or public transit, campaigns encourage informed decision-making and promote a culture of sustainability. This practice encompasses five exemplary cases, all of which employ a range of strategies such as interactive content, persuasive messaging, and educational tools to influence travel behaviour. In each case, the focus of the interventions varied, targeting different stakeholder groups to drive behavioural change. For instance, some cities leveraged the influence of school staff as role models while incentivizing parents to adopt sustainable travel behaviours (Helsingborg, Sweden). Other initiatives incorporated interactive campaigns aimed at engaging children (Nyíregyháza, Hungary), organized events for marginalized groups (Ruma, Serbia), or focused on commuter-specific campaigns (Nyíregyháza, Hungary). This approach demonstrates a

deliberate effort to engage diverse social groups, ensuring that the interventions address the needs of various populations and effectively encourage a shift in travel patterns. Such targeted interventions, by engaging specific social groups, ensure that behavioural change strategies are inclusive and tailored, maximizing their potential impact across different segments of the population (Karlovac, Croatia).

Zoning regulations serve as a foundational intervention in urban planning, guiding land use and transportation patterns through the strategic design of master plans. By aligning residential, commercial, and recreational activities with public transit networks, zoning policies can reduce the need for car travel and encourage the adoption of sustainable modes. In terms of best practices for zoning regulations, examples focused on traffic zoning, demonstrated by the initiatives in Graz, Ghent and Bielefeld. Graz introduced a citywide 30 km/h speed limit on 80% of its streets, aiming to improve safety and reduce accidents, supported by an extensive communication campaign to ensure public understanding. Similarly, Ghent implemented a traffic zoning plan that included a car-free city center and a low-emission zone (LEZ) for vehicles meeting specific pollution standards. Key features of Ghent's plan include painted road marking, pedestrian-only streets, and fines for violation of the rules. In Bielefeld, Germany, urban zoning regulations have designated the downtown area as a pedestrian-only zone, prioritizing walkability and reducing vehicular access to enhance the urban environment. These cities effectively used awareness campaigns to garner public support for their zoning measures, highlighting the importance of communication in the success of such policies.

The availability and cost of parking play a pivotal role in influencing travel behaviour. **Policies such as limited parking spaces, paid parking zones, and workplace parking fees** discourage car dependency by increasing the inconvenience or cost of car use. These measures can significantly reduce car commuting and promote alternative transportation modes. Several cities, including Bucharest, London, Oslo, Hamburg, and Rotterdam, have adopted advanced parking policies aimed at reducing private car use, particularly in densely populated urban areas. These measures include differentiated parking fees based on location, the establishment of P+R facilities, the removal of on-street parking, and variable pricing for on-street versus underground parking. These strategies aim to decrease congestion and promote sustainable mobility practices. Donald Shoup, in his influential book *The High Cost of Free Parking* (Shoup, 2005), highlights three key reforms to enhance parking policies: implementing market-based pricing for curbside parking, channeling parking revenues into neighbourhood development projects, and eliminating off-street parking mandates for new developments. These reforms have been instrumental in guiding urban planning practices and shaping contemporary parking strategies.

Congestion pricing is an economic mechanism designed to mitigate traffic congestion by aligning driving costs with demand. By imposing charges on drivers in high-demand areas or during peak hours, this policy encourages shifts to alternative modes of transportation. It also serves as an effective tool for managing urban mobility and reducing emissions. The London Congestion Charging program aims to reduce traffic congestion and emissions by charging a fee for driving in central London during specified hours. Enforcement occurs via a network of cameras in the Congestion Charge Zone, which includes key areas like the City of London and Covent Garden. Exemptions include electric vehicles and residents within the zone. The program has been credited with reducing congestion and promoting alternative transportation.

Leveraging **ICT technologies, incentives and rewards programs** encourage sustainable travel behaviours by offering tangible benefits for desired actions. For instance, systems that track

mobility habits through GPS can provide users with rewards for opting for public transport, cycling, or walking. This approach fosters a sense of achievement while reinforcing positive behavioural changes. The Health Ticket Initiative in Cluj-Napoca, Romania, rewards physical activity with bus tickets. Commuters earn tickets by completing exercise at smart stations. The program, launched in 2022, encourages physical activity by linking exercise to public transport, with real-time feedback and rankings to enhance engagement. The iLEU token system, introduced by Baia Mare Municipality in Romania, incentivizes sustainable behaviours by rewarding eco-friendly actions with local currency. Individuals earn iLEU for activities like cycling or walking to work or school. Despite its promising potential, the system faced legal and procedural obstacles, limiting its widespread adoption and impact. In Nyíregyháza, Hungary, the Bike City event employed a strategy that rewarded cyclists with various incentives and refreshments at designated stations. This initiative aimed to promote cycling and engage the local community in sustainable transportation efforts. Specially set up reward points during the event provided cyclists with tangible benefits, reinforcing positive behaviour and encouraging continued participation in active mobility.

Behavioural nudges are subtle interventions aimed at influencing travel behaviour in environmentally sustainable ways. These may include default settings for green choices or framing options in ways that highlight their environmental and social benefits. By minimizing the cognitive effort required to choose sustainable alternatives, nudges can significantly impact decision-making processes. A selection of best practices has been identified for this approach, one of which will be briefly outlined. Hackney's School Streets scheme effectively employed behavioural nudges to promote active travel and reduce car dependency. The initiative restricted motor traffic near schools during drop-off and pick-up times, transforming the areas into walking and cycling zones. This encouraged parents and students to adopt active modes of travel, improving safety and reducing air pollution around schools. The scheme's success was driven by community engagement, clear communication of its benefits, and visible enforcement mechanisms, such as signage and physical barriers. Results demonstrated notable increases in walking and cycling among students, along with a reduction in gas emissions, highlighting the effectiveness of behavioural nudges in shifting travel habits. Also, in Helsingborg, Sweden, the city utilised an online platform called Nudge, which leverages behavioural science to encourage sustainable school travel and to reduce traffic congestion and pollution.

The integration of **advanced technologies into urban mobility systems** offers innovative solutions to reduce single-occupancy car use. Tools such as sensor-controlled lighting, real-time data collection, and enhanced safety measures improve the efficiency of public spaces and transportation systems. These technologies not only support sustainable travel choices but also enhance user experience and security. Nyíregyháza implemented technological advancements to modernize its public transport system and enhance sustainable mobility. A demand-driven service, GYEREBUSZ, was launched in 2023, offering nightly transportation based on prior booking and registration, with plans for further expansion to underserved areas in 2024. Integration with digital trip planning tools like Google Maps improved accessibility, while enhanced passenger information systems featured simplified timetables and network maps at bus stops, supported by continuous updates through local media. These innovations aimed to increase user convenience, respond to passenger needs, and encourage a shift toward sustainable transit options. Sarajevo's e-GO initiative leverages technological solutions to address parking, pollution, and traffic challenges by promoting electric vehicle use through the e-GO CarSharing service. This service allows users to book electric cars via a mobile app, offering affordability, flexibility, and convenience, including complimentary parking. Over 30 car stations enhance accessibility, providing sustainable mobility
















alternatives to reduce individual car ownership. The project also introduced a new electric city car, emphasizing the integration of sustainable practices into daily life. Educational initiatives and promotional campaigns were implemented to highlight the economic and environmental benefits of electric cars, fostering broader public acceptance and adoption.































A detailed description of each particular example can be further explored in CITYWALK 2.0 Deliverable 1.1.2. Good Practice Catalogue, where a wide range of best practices is analysed and described.

























6.3.3. Evaluation and comparison of practices

The table below evaluates the urban practices mentioned in the previous section against five key criteria: cost effectiveness, time for implementation, potential for conflict, political support and timeframe of benefits.

Table 4: Evaluation and comparison of travel behaviour change practices

COST EFFECTIVENESS	TIME REQUIRED FOR THE IMPLEMENTATION	POTENTIAL CONFLICTS	POLITICAL SUPPORT	TIMEFRAME OF BENEFITS
 low costs	 fast implementation	 smooth implementation	 easy to support	 quick results
 medium costs	 requires more time	 can incite some conflict	 indifferent	 needs more time to work
 high costs	 time-consuming	 significant opposition	 difficult to support	 longer investment

NAME OF PRACTICE	COST EFFECTIVENESS	TIME REQUIRED FOR THE IMPLEMENTATION	POTENTIAL CONFLICTS	POLITICAL SUPPORT	REALIZATION OF THE BENEFITS
Annual events dedicated to cycling and soft mobility addressed to parents and pupils					
Annual/ recurrent events to promote alternative modes of transport (walking, cycling)					
Speed-limited zones for cars (Tempo 30)					
Congestion charging programs					
Restriction of car access in central and historic areas of cities					
Free public transport tickets generated by light physical activity [Health Tickets]					

NAME OF PRACTICE	COST EFFECTIVENESS	TIME REQUIRED FOR THE IMPLEMENTATION	POTENTIAL CONFLICTS	POLITICAL SUPPORT	REALIZATION OF THE BENEFITS
Token-based system for promoting sustainable modes of transport [walking, cycling]					
Transformation of school zones into traffic-free zones					
Digital Incentives for Active School Travel Through Smartphone Tracking					
Attractive public transportation system					
On-demand electric car rental services					

Source: own editing

6.4. Strengthening political commitment

The chapter briefly presents how the commitment of city decision-makers can be strengthened to support and successfully implement projects that serve sustainable mobility.

6.4.1. Identifying challenges and solutions

Political commitment is defined as “the essential dedication and support from political leaders towards initiating and maintaining actions and policies” (Gillespie, 2017). Strong political will and commitment are fundamental prerequisites for developing sustainable local mobility systems, particularly in areas where sustainability remains at a low level.

Although political programmes often include support for public transport and active mobility, the post-election reality frequently diverges from these promises. Decisions perceived as unpopular—such as parking policies designed to reduce car dependency—are often delayed or compromised. Additionally, budgets allocated for initiatives aimed at changing citizens’ travel behaviour are typically insufficient to achieve meaningful results. Ranking it low on the list of priorities, many cities lack a Sustainable Urban Mobility Plan (SUMP) or fail to implement one, limiting mobility improvements to small-scale interventions that lack systemic, long-term impact.

To address this challenge, practitioners, public officials, and academics must work together to strengthen political will and commitment among local decision-makers. This involves persuading politicians to prioritize the development of effective strategies and action plans, allocate adequate funding, and implement impactful measures.

Unfortunately, there are many challenges related to impacting the will and commitment of politicians to sustainable mobility policy.

The key one is that politicians often prioritize short-term results to align with election cycles and public approval, which can conflict with the long-term nature of sustainable mobility goals. Projects like developing SUMP-s or implementing systemic changes may not produce immediate, visible benefits, making them less attractive for political agendas.

As already mentioned, many sustainable mobility measures, such as reducing car parking spaces or introducing congestion charges, are usually unpopular with voters. Fear of losing public support often discourages politicians from pursuing these policies, even when they are necessary for long-term improvement.

In some cases, politicians can also be influenced by powerful lobbying groups, such as the automotive industry, real estate developers, or businesses dependent on car-oriented infrastructure. These stakeholders may resist changes that threaten their interests, creating additional barriers to political commitment.

Sometimes the lack of technical understanding of sustainable mobility systems or underestimation of their importance can hinder political commitment. Without clear evidence or strong advocacy from experts, the decision-makers may deprioritize mobility initiatives in favour of more familiar or urgent issues producing results on a shorter term.

Decision-makers may hesitate to commit resources to sustainable mobility projects due to competing budgetary demands or scepticism about the return on investment. Limited funding is often allocated to more immediate or visible projects that offer higher political rewards.

In cities or regions with multiple levels of governance, decision-making authority may be fragmented across local, regional, and national levels. Aligning priorities and securing commitments from all stakeholders can be a demanding task. Moreover, sustainable mobility initiatives may also become extremely politicized, with support or opposition tied to party ideologies, which can stall progress.

Clearly, politicians must balance multiple priorities, such as economic development, healthcare, and education. Mobility-related policies often fall down the priority list, especially if they don't directly address pressing crises or emergencies. In many cases strong political will often competes with institutional inertia, where bureaucratic systems resist change. Existing regulations or organizational structures may slow down or obstruct new initiatives.

Finally, politicians may face limited accountability for failing to follow through on commitments made during campaigns. Established mechanisms for monitoring and enforcing policy implementation are not strong enough to avoid this.

Given its significance, efforts have been made to measure political commitment. Their purpose is to assess whether current levels of commitment are sufficient, identify areas where commitment is strong and/or where it is lacking, and track changes over time to understand trends and evaluate the impact of various activities. Due to the multidimensional nature of political commitment, it cannot be easily quantified using a single indicator. Some of the indicators that can be monitored are the number of related statements made by politicians, reserved funds and actions that result from political commitment.

There are several approaches that can be used to strengthen political commitment. One of the main ones is advocacy, building on the "assumption that change can happen through building awareness, presenting evidence and arguments for why change should happen, and engaging people who have the power to make those changes" (Aicher, Napier, and Pickard, 2010). Advocacy can include different type of activities, such as sending relevant e-mails and letters, making telephone calls and in-person visits, activity on social media, publishing in local newspapers, participating in advocacy events or community meetings, identify and rally those who can help etc.

The approach to be taken depends on the position and role of the advocate(s), the objectives of advocacy, local context and decision-makers themselves.

The objectives of advocacy (Rutgers, 2021) could be to establish new policies and/or laws, improve existing policies and/or laws, challenge pieces of legislation that impact negatively specific individuals or groups, or ensure that sufficient budget is allocated to implement policies. Advocacy can be done by the practitioners, scientists, citizens or local public administration towards the local decision-makers. However, local policymakers can also act as advocates pushing for change on higher governance levels (regional, national).

Political commitment can be regarded as a series of targeted and consistent decisions towards achieving a goal. Affecting political decisions requires full understanding on all factors that impact political decision-making. These include:

- Research evidence. Providing policymakers with data-driven insights, help them to make and justify decisions. Research evidence can highlight the potential benefits, risks, and impacts of different options. However, while evidence can shape decisions, its influence often depends on how well it aligns with political priorities or the public's interests. If research contradicts popular sentiment or vested interests, it may be disregarded.
- Experience and personal views of a decision maker and his/her close circle of advisors. A decision-maker's personal experiences, values, and beliefs play a significant role in shaping their priorities and approach to policy. Advisors and close confidants can also influence decisions by offering perspectives that align with or challenge the leader's views. These subjective influences may override objective evidence.
- Amount of funding available. Even with strong political will, decisions are often constrained by available funding and the ability of implementing agencies to deliver on promises. Limited resources can force politicians to prioritize certain initiatives over others, often favouring projects with immediate or visible results.
- Prevailing political climate. The broader political environment, including partisan dynamics, political stability, and government priorities, strongly affects decision-making. In a polarized or contentious climate, decisions may be guided by party interests or electoral calculations rather than long-term public good. A stable political environment can create opportunities for more ambitious and forward-thinking policies.
- Habit and tradition. Established habits, customs, and traditions can create inertia in political decision-making. Policymakers may rely on familiar solutions or maintain the status quo rather than adopting innovative or disruptive approaches.
- Pressure groups, lobbyists, and opinion leaders. Interest groups, lobbyists, and influential leaders can exert significant pressure on policymakers to act in their favour. This influence is often backed by resources, persuasive arguments, or promises of political support. While lobbying can provide useful insights and representation for specific interests, it can also distort priorities, particularly if it benefits a small group over the broader public.
- Public opinion surveys and focus groups. Politicians often rely on public opinion surveys and focus groups to gauge the priorities and concerns of their constituents. Decisions may be shaped to align with voter preferences to secure political support or re-election. However, a heavy reliance on public opinion can sometimes lead to short-term, populist decisions rather than those based on evidence or long-term planning.

- Competition at the EU level. The drive to achieve recognition at the EU level, such as being designated a “Smart and Climate-Neutral Mission City,” or other prestigious labels, significantly influences political decisions. Politicians and local governments may prioritize projects or policies that enhance their chances of earning these distinctions to gain visibility and prestige, often showcased at prominent events like the European Week of Regions and Cities. This competitive pressure can accelerate innovation on many levels.

To conclude, strengthening political commitment often means addressing more than one of the factors listed above, and therefore requires time, resources and a suitable advocacy strategy. Possible strategies include lobbying aimed at influencing public officials, working with practitioners to change current practice, pushing for change by challenging laws and institutions, mobilizing public support through campaigns to press decision makers for change, media outreach and capacity building. The choice of the most suitable strategy (or strategies) predominantly depends on the objective of the undertaken efforts (e.g. adopting a SUMP, allocation of a budget, change of the spatial planning documents, enactment of legislation, infrastructural changes etc.)

6.4.2. Description of adaptable practices

Lobbying involves formal activities aimed at influencing public officials, and especially members of a legislative body, on matters related to legislation (Aicher, Napier, and Pickard, 2010). Lobbying and influence activities play a central role in shaping public policies and are legitimate acts of political participation (OECD). The tendency is to make lobbying transparent and regulated. Therefore, some countries provide transparency through a publicly available lobbying register, disclosing information on the lobbyist’s name, the domain of intervention and the type of lobbying activities. Lobbyists are special interest groups that hire a lobbying organization to act on their behalf. Although lobbying is mostly negatively associated with corporate interests and – in case of mobility – automotive industry, it can also be related to pushing for pro-climate or pro-environmental legislation.

Influencing decision makers through practitioners means working with practitioners that have an established relationship or impact on the decision-makers to change current practice towards sustainable objectives. Some of the options include training, exchange visits, and identification of positive role models i.e. best practice examples. Peer-to-peer learning plays an important role in changing practice. Therefore, establishing a relationship with the “role models” and implementing exchange visits can generate changes. An exchange visit involves a team of participants from the visiting city travelling to the host city to observe and learn from the implementation of a programme or policy. Appropriate activities during the study visit can include policy dialogue through interviews, workshops or site visits, depending on the overall objective agreed among both parties.

Litigation can be a powerful tool to drive systemic change when traditional advocacy methods, such as lobbying or issue campaigning, fail to produce results. By bringing cases to court, advocates, NGOs, and citizens can push for legal compliance, highlight government inaction, and demand policies that promote sustainable and equitable mobility. E.g., systematically requiring legal compliance to air quality regulation can result in implementing changes in the mobility system, turning the development objectives towards low- or zero-emission modes, such as public transport, walking and cycling.

Issue campaigning means mobilizing public support to press decision makers for change. It can take different forms, such as demonstrations and petitions. In the context of sustainable mobility,

issue campaigns highlight pressing challenges—such as traffic congestion, air pollution, or lack of safe active mobility infrastructure—and advocate for actionable solutions. By strategically engaging stakeholders, media, and the public, issue campaigns can generate momentum, pressure decision-makers, and push sustainable mobility onto political and policy agendas.

Media outreach builds on various tools and channels, such as printed publications, radio, television, and the Internet. Given the public-facing nature of political roles, politicians are often sensitive to media coverage, as it directly impacts their reputation, credibility, and electoral prospects. By strategically leveraging media platforms, advocates for sustainable mobility can elevate the issue, highlight solutions, and hold politicians accountable for their decisions. However, media may prioritize sensational stories over relevant sustainable mobility topics. Building compelling narratives can help overcome this, making sure that non-partisan benefits, such as economic growth or public health are emphasised, to avoid political polarisation.

Capacity building includes developing skills of decision-makers needed to carry out more effective advocacy in the future. Through learning activities, the decision-makers can gain access to the latest evidence, best practices, and case studies related to sustainable mobility. Additionally, trainings can enable them to evaluate options, roughly analyse impacts, adopt integrated approaches or make an educated decision or judgement. Implementing thematic capacity building programmes also fosters a deeper appreciation for sustainable mobility, ensuring it remains a priority on the political agenda. Organising events where decision-makers can exchange experiences, challenges, and successes proved to be a good step to initiate a positive change.

An effective advocacy strategy should be designed to meet the decision-makers where they are and move them toward the desired viewpoint (United Nations SIAP, 2017). Therefore, the focus of outreach will vary depending on their level of awareness and knowledge on the topic. If the decision-makers are accurately informed of the topic, the focus of the actions to strengthen political commitment should be to improve their willingness and strength to act. In cases where they are not sufficiently informed or not even aware of the topic-related issues, simply implementing communication and dissemination activities is appropriate to raise the visibility of the issue.

Finally, choosing the tactics that has the potential to work best relies on the analysis done beforehand, a clear understanding of the level of political commitment that aims to be achieved and time in which results are expected. Although the overall duration of the efforts to strengthen policy commitment depends on specific milestones targeted, capacity building can be regarded as a long-term strategy in comparison to e.g. issue campaigning.

7. Stakeholder engagement

The chapter focuses on how project partners can build relationships and actively involve key stakeholders (e.g. citizens, businesses, authorities) in decision-making processes. Its purpose is to collect inputs and establish cooperation. Strengthening engagement is key to ensuring that the strategy is well-supported and that its implementation is coordinated across different sectors. The process of engagement is usually interactive and involves dialogues, workshops and co-creation. Another important goal of the chapter is to provide city partners with useful ideas and tips on how to involve local stakeholders in the action planning process (e.g. organizing a local workshop).

7.1. What is stakeholder engagement?

The term 'stakeholder' refers to individuals or groups whose quality of life, living conditions, and opportunities are significantly affected by a project / plan. The term may also include representatives of specific interest groups.

Stakeholder engagement enhances decision-making processes while fostering ownership and collective responsibility. It aligns the goals of the planning initiative with the community's aspirations and needs, creating a harmonious synergy between planners and participants. Identifying and engaging stakeholders, along with understanding their diverse roles and perspectives, is critical for success – where the voices of the community is not only heard but essential in shaping the future. Stakeholder engagement promotes dynamic and meaningful dialogue among all involved parties.

Stakeholder engagement tools are practical methods or techniques used to interact with, involve, and build relationships with stakeholders. These tools help ensure that stakeholders are informed, consulted, and involved in decision-making processes, fostering transparency, trust, and collaboration. Stakeholder engagement tools are essential components of a participatory planning process, focusing on community involvement and early engagement. They incorporate ongoing feedback loops to seamlessly integrate partial outcomes. The process entails comprehensive exploration of alternatives, thorough groundwork for informed decision-making, and robust communication and dialogue. It empowers communities by providing a platform for voicing opinions and influencing outcomes, ensuring their perspectives are acknowledged and impactful. This approach transforms stakeholders from passive observers to active contributors, shaping decisions that guide the community's future.

Stakeholder engagement is no longer a choice but a necessity due to its importance, as it has a significant positive impact on planning processes.

7.2. What are the benefits of stakeholder engagement?

The most important benefit of stakeholder engagement is that the plans and projects are rooted in the specific context they aim to serve and represent the aspirations of community. Moreover, they also include the following aspects:

- Enhanced collaboration and innovation: when stakeholders are engaged, they have a sense of ownership with regards to the project / plan and they are more open to interaction, leading to creative ideas and new approaches.
- Strengthened self-reliance and sustainability: a sense of responsibility is also achieved through the ability to contribute to the development of local societies.

- Improved planning quality: high-quality plans reflect the needs of the community, which can be achieved / supported by stakeholder involvement.

7.3. How to identify and involve stakeholders?

The identification of stakeholders is a foundational step in any project. It involves recognizing individuals or groups impacted by, capable of influencing, or interested in the topic. A holistic perspective is vital, examining diverse sectors (e.g., public and private sectors, voluntary organizations, academics, and researchers) and roles (e.g., policymakers, data users, local communities).

The initial phase generates a comprehensive list of stakeholders and groups, clarifying the reasons for their engagement and the motivations driving their involvement. The second phase focuses on evaluating and prioritizing stakeholders based on the significance of their engagement. This structured approach ensures efficient resource allocation and fosters targeted, effective strategies for stakeholder involvement.

When formulating involvement strategies, several factors must be considered:

- Stakeholders' perception of their involvement.
- Their willingness to actively contribute.
- The tangible benefits they associate with their participation.
- Their sense of responsibility within the project.
- The influence exerted by individuals or groups of stakeholders.

Participation levels can help categorize stakeholders by their involvement:

- **Informing:** Stakeholders are made aware of the project but have limited input and play a passive role. A possible tool for this category: Town hall meeting.
- **Consulting:** Stakeholders provide feedback that influences decisions, though the project team retains final authority. A possible tool for this category: Walkshop.
- **Involving:** Stakeholders actively participate in discussions, workshops, or collaborations, and their inputs shape decisions. A possible tool for this category: Online whiteboard.
- **Empowering:** Stakeholders become full partners, engaging in every project stage from planning to implementation. A possible tool for this category: Hackathon.

An effective engagement process is iterative, incorporating planning, reporting, evaluation, and refinement. The evolution of stakeholder engagement, informed by insights, transforms it into a continuous, adaptable cycle rather than isolated events. Proper management of this process strengthens organizational relationships and fosters innovation, paving the way for sustainable collaborations.

7.4. What kind of tools are available for stakeholder engagement?

Stakeholder engagement requires a tailored approach to accommodate diverse needs, expectations, and interests. Effective tools and techniques include: town hall meetings; co-creation workshop; walkshop; mixed methods (survey, focus group, deliberative workshop); cross-focus stakeholder event; OPERA; newspaper of tomorrow; decision theatre; online whiteboards;

swimlane process; six thinking hats; moving debate; European Civil Society Forum for the green and just transition; LAG establishment; hackathon; AVthon.

7.5. How to make stakeholder engagement effective?

Stakeholder feedback underpins informed decision-making and effective project management. It comprises cycles of inputs, opinions, and perspectives from invested parties, serving as a strategic asset. This feedback enriches initiatives, enabling them to adapt and succeed.

Key elements for effective engagement include:

- Clear deadlines: defining specific timeframes ensures that stakeholder input is timely and impactful; stakeholders are motivated by them to dedicate focused attention.
- Timely feedback: stakeholders' input must be aligned with the project timeline, allowing for seamless integration into strategic planning.
- Rigorous analysis and evaluation: providing stakeholders with the opportunity to review the project comprehensively contributes to a sense of ownership and commitment, which enriches the quality of their feedback and results in more established responses.

By integrating these elements, organizations can maximize stakeholder contributions, ensure meaningful participation and drive projects toward success.

7.6. What are the common mistakes and how to overcome them?

If stakeholder engagement isn't planned properly, it can lead to unexpected results and disappointment for those involved.

Common mistakes to avoid are listed below:

- Inefficiency in processes: it can occur when objectives and the agenda of a meeting is unclear, when there are dominant parties in group discussions. An experienced facilitator for these events is essential.
- Fragmentation in the approach: when the schedule of stakeholder engagement activities is not structured enough, they can miss new impulses, resulting in a loss of motivation. Active communication is a must to sustain interest continuously.
- Overly ambitious commitments: since engaging stakeholders require resources (time, human and financial), the lack of them can lead to serious issues. One should always take into consideration the availability of resources and plan tasks accordingly, choosing the appropriate methods and setting the right expectations.
- Non-representative participation: poorly executed engagement activities (e.g. wrong venue choice, inconvenient timing) may induce failures. Therefore, proper planning is crucial for higher participation rates. The community's needs and expectations should define engagement strategies.
- Poor communication and feedback loops: posterior and inadequate communication negatively affects the success of stakeholder engagement. Up-to-date and widespread communication is crucial, and active feedback is essential for the truly motivated stakeholders.

8. Communication and awareness raising

In addition to stakeholder engagement, project communication is also important. Communication activities are more about transmitting information, raising awareness, and promoting the project's goals to a wider audience. It is usually a one-way process, using tools such as websites, newsletters and media campaigns to inform or persuade stakeholders.

The chapter describes the main target groups of communication (car-using population, young people, public, etc.), the key messages of the target group, the possible channels of communication, and gives ideas on how to carry out effective communication activities within the framework of the project.

8.1. Target groups and key messages

Target Groups (TGs) are key audiences with whom the project needs to communicate. They all have different characteristics and needs – due to the complexity and transnational character of CityWalk 2.0 actors affected by the implementation of the project (or its further impact) the next target groups have been defined:

- Local public authority
- General public
- National public authority
- Infrastructure and (public) service provider
- Interest groups including NGOs
- Higher education and research

Different TGs will be reached using different tactics and different media. Messages are the statements that will feed into each communication action. Each partner will suggest the best message for its own territory. Key messages will be refined and revised within the project duration according to the activities planned. General messages addressed to different TGs on project's specific objectives and which communication activities will be used to reach these specific objectives are described in the AF.

The main direct target group of the CityWalk 2.0 project involves the local authorities of small- and medium sized cities in the Region. The pilot actions will be implemented by the local authorities of the partner cities, and the experiences from these projects will be disseminated to and used by other local public authorities in the region. The policy proposal package will propose policy improvements on local, (when applicable, regional) and national levels. This output, therefore, will potentially be used by local (regional) and national public authorities in the region.

8.2. Communication channels

Informing on the project and its results is of crucial importance for CityWalk 2.0 in order to achieve the change of behaviour the project seeks to aim. Through communication activities and knowledge sharing the project will extensively involve local - and transnational stakeholders, and experts on designated platforms to ensure consistency in the building up of smooth transferability throughout the project.

Posters – Project poster with information about CityWalk 2.0 and EU support is placed at the premises of each project partner to provide basic information about the project for the public during project implementation.

Social media – It has highlighted importance in CityWalk 2.0's new generation of dynamic communication. CityWalk 2.0 project has a Facebook page. Communication on social media channels can be effective only if partners and stakeholders are actively using them. Therefore, during the whole implementation period, all partners will share on its social media CityWalk 2.0 related contents regularly, too.

CityWalk 2.0 Facebook link: <https://www.facebook.com/CityWalk.project>

Media appearances – The Interreg Danube Programme expects all projects to inform the general public about their activities and achievements. The main information channel for this purpose is the media at local, regional, national and European level – online and printed press. The media coverage must support all dissemination activities throughout the project.

Partners can give interviews to media on the project (supported by the project messages). Partners can also participate at thematic events, conferences by holding presentations on the CityWalk 2.0 project (using the visual elements).

Media activities supporting the public awareness campaigns will be organised by each partner. Under the supervision of Communication leader, they will focus on channelling information towards their citizens covering the project's main themes in order to educate local communities and citizens on projects issues. Media campaigns will use mass media formats targeting mostly wider audience (e.g. TV, radio, billboards, and newspapers).

CityWalk 2.0 website – Interreg Danube Programme hosts all project websites on its own portal. The following content are published on the project website:

- News about the project's implementation and achievements.
- Information about main project events.
- Pictures about the project's work (HQ photographs).
- Digital project deliverables / outputs.

CityWalk 2.0 website link: <https://www.interreg-danube.eu/citywalk-2-0>

Partners' websites – All project partners will publish information about the CityWalk 2.0 project on their organisations' website. A short description of the project, its aims and results, partnership, and highlight the financial support from the European Union should be provided. Partners should also publish news about the project's implementation and achievements, information about main project events, and pictures about the project's work on their own organisations' website.

Events – Project partners participate in other capitalization poles, SC meeting/ events to present/discuss/develop/share project results and create synergies with other projects/organizations. The key message is to communicate the main project aim and results but also more specifically to target groups.

Thematic publications – Thematic articles published by the professional knowledge partners are rather focused on the activities and results supporting the project themes defined under SOs. These articles support knowledge dissemination within the partnership and within professional networks.

8.3. Practices and tools

The CityWalk 2.0 communication strategy emphasizes innovative and visually appealing digital content to engage target groups effectively. This approach leverages modern tools for content creation and dissemination, enabling partners to create impactful material even without advanced multimedia skills. Below are the key components of the strategies:

Content development – The development of compelling content is vital for effective communication. The process includes:

- Planning: Establish a clear objective for what, when, and where the content will be created and shared.
- Production: Tailor multimedia content (images, videos, infographics) to resonate with the audience.
- Visual Design: Use eye-catching visuals to boost engagement.
- Writing: Deliver concise and relatable messages.
- Promotion: Use creative strategies, including games and advertisements, to increase reach.

Creating engaging content – To attract and maintain attention, messages should:

- Be visually driven since 65% of people are visual learners.
- Focus on relatable and easy-to-understand themes.
- Translate technical details into engaging, accessible stories.

Using photos – Posts with high-quality visuals stand out on platforms like Facebook. Recommendations for photo content include:

- Use properly lit, high-resolution images with a balanced horizon and appropriate composition.
- Enhance images using tools or filters but avoid over-editing.

Stock photos and free photo editors – In addition to custom visuals, stock photos from platforms like Unsplash and Pexels can enrich content. For photo editing, GIMP is recommended as a powerful, free alternative to Photoshop.

Infographics – Infographics simplify complex ideas through visuals, boosting audience engagement. Canva, with its wide range of templates, is suggested for creating professional infographics with minimal effort.

Video content – Videos are increasingly favored due to their ability to capture and retain attention. Free video editing tools, including iMovie and Shotcut, are ideal for creating promotional videos. Videos merge movement and sound, improving message retention and engagement.

Animated videos – Animations simplify complex ideas, evoke emotion, and entertain viewers. Tools like Animaker and Powtoon enable partners to produce animations that captivate and inform their audience.

Post promotion – Although Facebook advertising costs are not reimbursable under the program, partners are encouraged to allocate small budgets (e.g., €10/month) to boost post visibility. Paid promotions can significantly enhance reach and engagement.

Bibliography

- Bamberg, S., Ajzen, I., & Schmidt, P. (2003). Choice of travel mode in the theory of planned behavior: The roles of past behavior, habit, and reasoned action. *Basic and applied social psychology*, 25(3), 175-187.
- Bardhi, F., & Eckhardt, G. (2012). Access-Based Consumption: The Case of Car Sharing. *Journal of Consumer Research*, 39.
- Bauer, U., Bettge, S. & Stein, T. (2023). Verkehrsberuhigung: Entlastung statt Kollaps! Maßnahmen und ihre Wirkungen in deutschen und europäischen Städten (Difu Policy Papers Nr. 2). Deutsches Institut für Urbanistik. <https://doi.org/10.34744/difu-policy-papers-2023-2>
- Bierbaum, A. H., Karner, A., & Barajas, J. M. (2020). Toward Mobility Justice: Linking Transportation and Education Equity in the Context of School Choice. *Journal of the American Planning Association*, 87(2), 197–210.
- Bruno, M., Melo, H. P. M., Campanelli, B., & Loreto, V. (2024). A universal framework for inclusive 15-minute cities. *Nature Cities*. <https://doi.org/10.1038/s44284-024-00119-4>
- Curtis, C., Renne, J. L., Bertolini, L. (Eds.). (2009). *Transit-oriented development: Making it happen*, Ashgate, Burlington, VT.
- Dietrich, U., & Kirchberg Erto, G. (2017). Liveable public urban spaces: Criteria for assessment and design. *WIT Transactions on Ecology and the Environment*, 223, 273–284. <https://doi.org/10.2495/SC170241>
- Dittmar, H., Ohland, G. (Eds.). (2004). *The new transit town: Best practices in transit-oriented development*, Island Press, Washington, DC, USA.
- Donald Shoup (2005). *The High Cost of Free Parking*, Chicago: Planners Press, 2005.
- Durand, A., Harms, L., Hoogendoorn-Lanser, S. & Zijlstra, T. (2018). Mobility-as-a-Service and changes in travel preferences and travel behaviour: a literature review. *KiM | Netherlands Institute for Transport Policy Analysis*, 15-16.
- Draghia, M., Stan, V. (2024). Exploring Transformations in Sustainable Urban Mobility: Insights from CityWalk 2.0 project and beyond, *AESOP 2024 Book of Proceedings: Game changer? Planning for just and sustainable urban regions*, 804-819, ISBN: 9789464981827.
- European Commission: Directorate-General for Environment. (2004). *Reclaiming city streets for people: chaos or quality of life?* Publications Office.
- Eurostat (2024): [Passenger cars per inhabitant remain stable in 2022 - News articles - Eurostat](#)
- Fundaro, S., Mwau, B., Thung, I., & Ochieng, M. (n.d.). *City planning and neighbourhood design case studies*. United Nations Human Settlements Programme. Nairobi.
- Fujii, S., Taniguchi, A. (2014). Theoretical Underpinnings of Practical Strategies for Changing Travel Behaviour, in: Gärling, T., Ettema, D., Friman, M. (eds) *Handbook of Sustainable Travel*, Springer, Dordrecht, 151-162.
- Gillespie, S., & van den Bold, M. (2017). Stories of Change in nutrition: An overview. *Global Food Security*, 13, 1–11. doi:10.1016/j.gfs.2017.02

Hardinghaus, M., Wolf, C., & Cyganski, R. (2021). Case studies of new urban planning policy: Effects of redesigning and redistributing public space in Europe. In 10th International Congress on Transportation Research, Greece.

Kleissner, A., Lemmerer, H., Tschugg, B. (2023). Wirtschaftsfaktor Gehen. Österreichische Energieagentur – Austrian Energy. Wien.

Laa, B., Gallian, L., Gebhardt, V., Franta, L., Hölzl, D., von Krosigk, P., & Frey, H. (2024). Chancen und Herausforderungen zur Transformation von öffentlichen Mobilitätsräumen: Recht, Finanzen, Akteur: innen (Deliverable 2.1). Trans|formator:in. Wien.

Laasko, S. (2017). Giving up cars – The impact of a mobility experiment on carbon emissions and everyday routines. *Journal of Cleaner Production*, 169, 135-142

Maltese, I., Gatta, V., Marcucci, E. (2021). Active Travel in Sustainable Urban Mobility Plans. An Italian overview, *Research in Transportation Business & Management*.

May, A. D., Kelly, C., & Shepherd, S. (2006). The principles of integration in urban transport strategies. *Transport Policy*, 13(4), 319–327.

Erich Biberich. Meeting zone Trofaiach – [Bodenbündnis Österreich, Stadtgemeinde Trofaiach - die lebenswerte Stadt der Steiermark](#)

Milakis, D., Vafeiadis, E. (2014). Ado(a)pting the Transit-Oriented Development Model in the Greek Urban and Transport Contexts, *Planning Practice & Research*, 29(5), 471–491.

Moreno, C. (2019). The 15 minutes-city: for a new chrono-urbanism!, available at: <https://www.moreno-web.net/the-15-minutes-city-for-a-new-chrono-urbanism-pr-carlos-moreno/>

Moreno, C., Allam, Z., Chabaud, D., Gall, C., & Pratlong, F. (2021). Introducing the “15-minute city”: Sustainability, resilience and place identity in future post-pandemic cities. *Smart Cities (Basel)*, 4(1), 93–111. <https://doi.org/10.3390/smartcities4010006>

Moudr´a, K., Matowicki, M., Pˇribyl, O., & Foltýnova, H. B. (2019). Potential of a travel mode change in smart cities: A review. In 2019 smart city symposium prague (SCSP) (pp. 1–7). IEEE.

Norton, P. D. (2008). *Fighting traffic: The dawn of the motor age in the American city*. The MIT Press. ISBN 9780262516129. <https://mitpress.mit.edu>

OECD, Lobbying and influence. Lobbying | OECD (<https://www.oecd.org/en/topics/lobbying.html>)

Padeiro, M., Louro, A, Da Costa, N.M. (2019). Transit-oriented development and gentrification: a systematic review, 733-754.

Rachel Aicher, Fiona Napier, and Russell Pickard (2010). *An Introductory Guide to Successful Advocacy*; Open Society Foundations [OSI AdvocacyR1.PF.indd](#) (<https://www.opensocietyfoundations.org/uploads/99ce7dec-9e89-40b1-ad88-7db45b4d68a5/guide-to-successful-advocacy-20100101.pdf>)

Ratner, K. A., Goetz, A. R. (2013). The reshaping of land use and urban form in Denver through transit-oriented development, *Cities*, 30, 31–46.

Rupprecht Consult (Ed). (2019). *Guidelines for Developing and Implementing a Sustainable Urban Mobility Plan, Second Edition*. European Commission, Brussels.

Rutgers (2021). Developing an Advocacy Strategy, July 2021. [Developing-an-Advocacy-Strategy.pdf](https://rutgers.international/wp-content/uploads/2021/08/Developing-an-Advocacy-Strategy.pdf) (<https://rutgers.international/wp-content/uploads/2021/08/Developing-an-Advocacy-Strategy.pdf>)

Tiran, J., Goluža, M., Grigsby, J., Iturralde Farrus, B., Lemmerer, H., Leth, U., Frey, H., Lorenz, F., Müller, J., Stein, T., Gebhardt, V., & Vith, T. (2023). Literature review on superblocks' effects on urban realm (Deliverable D2.1). Wien.

Transport for London (2023). Congestion Charge marks 20 years of keeping London moving sustainably, 17 February 2023, [Congestion Charge marks 20 years of keeping London moving sustainably - Transport for London](#)

United Nations SIAP (2017). Advocacy Strategy: Identify Decision makers' Key Interests; Regional Training Course on Agricultural Cost of Production Statistics, Communication and Advocacy for Statistics 26–30 June 2017, Daejeon, Republic of Korea; Statistical Institute for Asia and the Pacific; https://www.unsiap.or.jp/sites/default/files/pdf/e-learning_el_material_5_agri_1706_cost_kor_material6_2_part3_identifying_decision_makers.pdf

Verplanken, B. & Roy, D. (2016). Empowering interventions to promote sustainable lifestyles: Testing habit discontinuity hypothesis in a field experiment. *Journal of Environmental Psychology*, 45, 127-134.

Zimbabwe, S., Anderson, A. (2011). Planning for TOD at The Regional Scale, Guidebook from The Center for Transit-Oriented Development (CTOD) – TOD204, <https://ctod.org/ctod-research.php>.