



## Micromobility and the Future of Transport: A Revolution on Two Wheels

Recommendations for urban planners and policy makers



White Paper - May 2025, Malta www.micromobi.eu



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## Micromobility - what's that?

As urban trips are on average just 5 km long, there is a lot of potential for shifting trips to micromobility: smaller and greener vehicles. Micromobility includes small human or electric-powered transport modes for short urban journeys, from active modes like walking and cycling to skateboards, electric bicycles, kick scooters, wheelchairs, and mobility scooters.

To promote micromobility, there is the need for safe infrastructure and improved road safety: the number one concern for vulnerable road users using micromobility. This is particularly the case in cities and countries with a high car dependence, such as Malta, Cyprus and Sicily (Italy). Cities in these - and similar - countries can learn from positive examples, such as the sustainable mobility transition in Ljubljana (Slovenia). This was the premise of creating our MICROMOBI project: promoting micromobility in cities at the start of this transition to sustainable mobility.

The purpose of this white paper is to inform policy makers about the potential of promoting micromobility in their city or country, and how to overcome existing challenges. Promoting micromobility can help to create happier, healthier cities – and isn't that what everyone wants?

#### **About the MICROMOBI project**

The Erasmus+ MICROMOBI project, co-funded by the EU, brings together organisations from four European countries: Friends of the Earth Malta (Malta), Friends of the Earth Cyprus (Cyprus), Promimpresa (Palermo, Sicily, Italy), and Ljubljanska kolesarska mreža (Ljubljana Cycling Network - LKM) (Ljubljana, Slovenia), with the aim of developing skills and raising awareness on the topic of micromobility.

Through this project we contribute to more environmentally friendly cities and the fight against climate change, while highlighting the importance of safe infrastructure in cities to promote micromobility. These findings and recommendations are found in more detail in our MICROMOBI Toolkit (Micromobi consortium, 2025).









# What are the main benefits of micromobility?

#### **Fast and convenient**

Micromobility is convenient. Because of their small size, micromobility modes of transport make it easy to pass through busy city streets. A bicycle or kick scooter can easily be stored inside a building or in a dedicated parking area.

#### Improving accessibility for all

Micromobility can improve accessibility for all, including people using wheelchairs, mobility scooters and parents with pushchairs. More attention and investment in human focused modes of transport creates the opportunity to improve our infrastructure, including wider footpaths, ramps for easy access, safe crossings and a connected network.

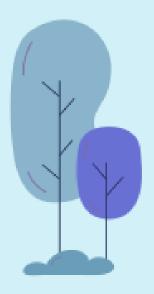
#### **Healthier lifestyles**

Micromobility is healthy, because it promotes physical activity and social interactions. When city streets are safe and comfortable to walk, cycle or scoot, people are more likely to meet the daily recommended 30 minutes of physical activity, and there is more chance for social interaction with other people, which has been proven to improve mental health and create a positive urban environment.

#### Clean modes of transport

Micromobility is eco-friendly. It reduces noise and air pollution, and has a much smaller carbon footprint than private cars. Micromobility is a form of climate action, being part of the solution, instead of the pollution.





#### **Multimodal connectivity**

Micromobility devices are suitable for short urban trips and are crucial to provide connections with public transport, to connect from home to the nearest bus or train station, or ferry landing site, and to complete your trip to reach your final destination. To enable such micromobility connections, there is a need for safe and comfortable pavements for walking, safe and shaded places to wait for public transport, safe and connected paths for the use of bicycles, scooters and other wheeled micromobility.



#### Reduced traffic and improved use of public space

Micromobility reduces traffic congestion. It is an alternative to the private car for short trips. Most trips in urban areas are less than 5 kilometres, which takes less than 20 minutes by bicycle. Micromobility modes also require much less space than private cars, both for moving on the road and for parking spaces. Public spaces without cars improve the quality of life, offering benefits such as improved air quality and opportunities for economic, social, cultural and environmental development.

#### Offering affordable transport options

Micromobility is cost effective. These modes of transport are generally more affordable than owning and maintaining a car, making them accessible to a wider range of people.



To learn more about the benefits of micromobility and how to overcome challenges, download our

## 'Micromobility Made Easy: An Urban Transition Toolkit'.

filled with inspiring examples, good and bad practices to learn from, and recommendations for urban planners and policy makers on www.micromobi.eu.

# What are the main barriers for micromobility?

#### **Road safety concerns**

Micromobility users are vulnerable road users. They are at disproportionate risk of injuries and casualties, particularly when sharing the road with motorised vehicles at high speeds. As a result, concern about road safety is the number one barrier for (prospective) micromobility users. However, micromobility modes can also be the cause of traffic crashes, with e-kick scooters being a particularly controversial feature in cities (Gössling, 2020), particularly when they are ridden or parked on pavements and in pedestrian zones. Night-time riding, double riding, drug or alcohol-impaired riding, riding in traffic lanes or on sidewalks and encountering poorly maintained road surfaces all contribute to elevated crash and injury risk (Yannis et al., 2024).

#### Lack of infrastructure

In many cities, there is a lack of protected infrastructure for micromobility users and connectivity issues between common origins and destinations. Physical and architectural barriers can hinder the free movement of users (Henriksson et al., 2020). Lack of legibility of the route, difficult crossings, one-way street systems and lack of wayfinding signage can make it hard for micromobility to find the most safe and direct route. A lack of dedicated parking spaces for micromobility can cause issues with incorrect parking (e.g. on pavements, in front of entrances), as well as concerns around theft for micromobility users.

#### Lack of modal shift

Car culture dominates urban mobility in many cities, where private vehicles are prioritised over other modes of transport. This focus on cars has led to urban planning that often neglects micromobility options like bicycles and scooters, which offer more sustainable and efficient alternatives for short trips. Unfortunately, many cities lack effective policies to support the required modal shift to sustainable mobility, resulting in inadequate infrastructure and limited adoption of micromobility. The situation is perpetuated through inexistent or inefficient policies, such as the lack of dedicated walking and cycling policies, or the inadequate adoption or implementation of transport plans such as Sustainable Urban Mobility Plans (SUMP), which are mandatory for EU cities with at least 100.000 inhabitants.

#### Operators leaving or pushed out

Micromobility operators, such as e-scooter and bike sharing companies, are increasingly being pushed out or choosing to leave certain markets due to a combination of regulatory challenges and economic pressures. Many cities have implemented strict regulations to address issues around road safety and the use of public space, which limits the operating space for these companies and has increased their running costs. The lack of consistent and supportive policies, such as investment in safe, segregated infrastructure, has made it difficult for micromobility operators to provide these services.

## How to promote micromobility?

To promote micromobility, the safety, convenience, and feasibility of micromobility needs to be increased, in combination with policies to reduce and restrict car use (Piatkowski et al., 2019). Achieving modal shift towards active and public transport, to transition to sustainable mobility in cities, only occurs when there is a combination of 'carrots', 'sticks' and 'sermons':

'Carrots'	'Sticks'	'Sermons'
Positive and negative	Rules & regulations,	Education and
incentives, such as:	such as:	information, such as:
Subsidies	Land use planning	<ul> <li>Awareness campaigns</li> </ul>
Tax relief	Infrastructure	<ul> <li>Service provision</li> </ul>
Road taxes	Parking management	<ul> <li>Educational activities</li> </ul>
Paid parking	Low emission zones	Public events
Congestion charging	Presumed liability	Promotional activities

#### Make it safe & direct:

- Create safe infrastructure: establish a dedicated and well-connected micromobility network, with segregated paths where vehicle speed is greater than 30 km/h or where the volume of motorised vehicles is high.
- Establish and enforce a micromobility parking policy and designate parking areas for micromobility.
- Reduce speeds: Implement a 30 km/h (or lower) speed limit in areas with high
  micromobility use and establish low speed limits for micromobility vehicles in
  pedestrian or shared zones, e.g. ~ 6-10 km/h. Implement traffic calming measures
  and create shared spaces where vulnerable road users are prioritised.
- Restrict private car access and reduce vehicle speeds; prioritise micromobility traffic flows through solutions such as 'filtered permeability' and 'contraflows'.
- Implement and enforce road safety measures, such as limiting speed, providing training to road users, enforcing rules against impaired driving and riding, and protecting vulnerable road users through presumed liability, also makes micromobility use safer.
- Recommend helmet use, particularly to young or inexperienced users, but do not
  make it mandatory by law, as this has been shown to discourage micromobility, and
  shared mobility in particular. Safe infrastructure makes micromobility safer for all.

#### Make it attractive & cool:

- Exposure and experience are key to forming new mobility habits.
- Organise educational and promotional activities, such as 'safe routes to school', mobility challenges, 'cycle/scoot to work' schemes, and cycling events.
- Educate micromobility users about road safety rules and how to safely participate in traffic, other road users on how to behave around vulnerable road users and promote their safety, as well as (micro)mobility planners and policy-makers on how to prioritise road safety for vulnerable road users.
- Create awareness raising campaigns on the benefits of sustainable mobility, green travel and the need to shift away from private car use. Innovative awareness campaigns and actions can include social media campaigns, workshops, group rides, and walking or bicycle buses to school or events.
- Use visual tools to promote micromobility such as videos, street banners, and adverts on micromobility vehicles.

#### Make it happen:

- Promote the creation, adoption and implementation of Sustainable Urban Mobility
  Plans (SUMP) by the city administration to create a clear transport vision for the
  city, improve accessibility, and provide high-quality and sustainable mobility to and
  within the urban area.
- Promote the creation, adoption and implementation of Green Travel Plans for local companies and organisations by encouraging sustainable mobility choices made by their staff and visitors, reducing private car usage, promoting public transport use, walking, cycling and other sustainable and healthier modes of transport instead as well as sustainable logistics such as the use of (electric) cargo bikes.
- Create coherence with existing urban and transport planning policies (e.g. SUMP documents), revising, aligning and implementing these, and coordinate between departments.
- Adopt a legal framework to protect vulnerable road users, e.g. presumed liability and the new transport hierarchy.
- Adopt design standards and guidelines for infrastructure to ensure safety, quality and cohesion, including for traffic calming measures.
- Provide signage and information about sustainable transport options.
- Ensure there is real public participation, including the opportunity for users and potential users of micromobility to participate in discussions and decisions.
- Create spaces for events and partnerships that bring together entities promoting micromobility, for capacity building, knowledge sharing and community engagement.
- Budget for micromobility campaigns, actions, events and promotions.





#### Download our

#### 'Micromobility Made Easy: An Urban Transition Toolkit':

- how to promote micromobility
- good and bad practices
- lessons learned from Ljubljana

#### References

Gössling, S., 2020. Integrating e-scooters in urban transportation: Problems, policies, and the prospect of system change. Transportation Research Part D: Transport and Environment. Volume 79, February 2020, 102230. https://doi.org/10.1016/j.trd.2020.102230

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